

Rowan-  
Cabarrus  
COMMUNITY COLLEGE



# Catalog

& STUDENT HANDBOOK



2019-2020



# Rowan-Cabarrus Community College

## Directory

### General College Information

Phone: 704-216-RCCC (7222)

Hours of Access:

Mon. – Thurs.: 8:00 a.m. – 6:00 p.m.

Fri. 8:00 a.m. – 5:00 p.m.

An automated attendant is available after hours. See the college website for campus directory of specific Rowan-Cabarrus phone listings.

### College Mailing Address:

Rowan-Cabarrus Community College  
P.O. Box 1595  
Salisbury, N.C. 28145

### College Package Delivery:

(Unless specified otherwise)

Rowan-Cabarrus Community College  
1531 Trinity Church Rd.  
Concord, NC 28027

### College Internet Address:

[www.rccc.edu](http://www.rccc.edu)

### Locations:

#### North Campus

1333 Jake Alexander Boulevard, Salisbury, N.C. 28146

#### South Campus

1531 Trinity Church Road, Concord, N.C. 28027

#### Cabarrus Business and Technology Center

660 Concord Parkway Drive, Concord, N.C. 28027

#### North Carolina Research Campus

399 Biotechnology Lane, Kannapolis, N.C. 28081

#### College Station

489 N. Cannon Blvd., Kannapolis, N.C. 28081

*All Campus Locations are Tobacco Free.*

# Rowan-Cabarrus Community College

## Table of Contents

Academic Calendar .....	4
General Information .....	5
History of the College.....	8
Program/Services Overview .....	9
Admissions and Enrollment .....	13
General Admission Information .....	14
Admission of High School Students .....	16
General Admission Information for Corporate and Continuing Education.....	17
Tuition and Fees.....	19
Financial Aid & Veterans Benefits.....	21
College Policies and Procedures .....	23
Academic Policies and Procedures.....	24
Standards Governing Student Enrollment .....	35
Disciplinary Actions & Sanctions .....	39
Campus Safety Information.....	42
Programs of Study.....	45
Course Descriptions .....	405
Faculty and Staff.....	625

Rowan-Cabarrus Community College does not discriminate on the basis of race, sex, color, national origin, religion or disability in its employment opportunities, admission policies, programs, services or activities. Rowan-Cabarrus is an Equal Opportunity Employer.

# Academic Calendar

## Fall Semester 2019

Aug. 19	M	Fall Term Begins (16-Week and 1st 8-Week Terms Begin)
Sept. 2	M	Labor Day Holiday*
Sept. 3	T	Student Break Day
Sept 4	W	14-Week Term Begins
Oct. 21	M	Second 8-Week Term Begins
Nov. 11	M	Veterans Day Holiday*
Nov. 27	W	Student & Faculty Break Day
Nov. 28-29	TH-F	Thanksgiving Holidays*
Dec. 16	F	Fall Term Ends

## Spring Semester 2020

Jan. 1	W	New Year's Holiday*
Jan. 10	F	Spring Term Begins (16-Week and 1st 8-Week Terms Begin)
Jan. 20	M	Martin Luther King, Jr. Holiday*
Jan. 22	T	Student & Faculty Break Day
Jan. 27	M	14-Week Term Begins
Mar. 9-13	M-F	Spring Break*
Mar. 16	M	Second 8-Week Term Begins
Apr. 10	F	Spring Holiday*
May 11	M	Spring Term Ends
May 15	F	Graduation

## Summer Semester 2020

May 18	M	Summer Term Begins (8-Week and 4-Week Terms Begin)
May 25	M	Memorial Day Holiday*
May 26	T	Student Break Day
June 17	W	Second 4-Week Term Begins
June 1-2	W,TH	Student Break Days
July 3	F	4th of July Holiday*
July 17	TH	Summer Term Ends

## Disclaimer Statements for Calendars

\*Rowan-Cabarrus is closed on holidays listed above.

The calendar is subject to change. For the most current version, consult the online calendar at: [www.rccc.edu/academic-calendar](http://www.rccc.edu/academic-calendar)

College Course Advisement and Registration are available during standard hours of operation.

Spring Break Days will be used as make-up days for inclement weather, if necessary.



# General Information





# General Information

Rowan-Cabarrus Community College reserves the right to change its regulations, policies, fees and programs without notice.

## Equal Opportunity/Affirmative Action

Rowan-Cabarrus Community College is an equal opportunity institution. All programs, activities and facilities are available to all on a non-discriminatory basis, without regard to race, color, religion, gender, sexual orientation, age, handicap, or national origin. The College provides access, equal opportunity and reasonable accommodation in services, programs, activities, education and employment for individuals with disabilities. Reasonable accommodations will be provided to individuals with disabilities upon request, in advance of the event.

## Open Door Policy

Rowan-Cabarrus Community College has an open-door admission policy for applicants who are high school graduates, are at least 18 years of age or whose admission eligibility conforms to North Carolina law and North Carolina Community College system directives. The Board of Trustees reserves the right to amend the local admissions policy within the parameters permitted by the state of North Carolina and the State Board of Community College Code. Admission to the College is open without regard to race, creed, disability, national origin, gender, sexual orientation or age to any student who meets the age or graduation requirements.

Some degree programs have specific requirements for admission. Information about specific requirements can be found on the college website, or by contacting the Navigation Station at 704-216-7222.

## Tuition

The North Carolina Legislature and the North Carolina State Board of Community Colleges set tuition for college degree programs. Tuition rates are subject to change without notice. College fees are established by the Rowan-Cabarrus Community College Board of Trustees and are subject to change without notice.

Tuition/Registration Fees for corporate and continuing education courses vary.

## Accreditation

Rowan-Cabarrus Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees, diplomas and certificates. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Rowan-Cabarrus Community College. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/president/accreditation](http://www.rccc.edu/president/accreditation)

## Consumer Information

In compliance with federal law, consumer information is located on the college website: [www.rccc.edu/president/consumer-information/](http://www.rccc.edu/president/consumer-information/)

## Board of Trustees

Carl M. Short, Jr., Chair	Patricia G. Fulcher
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## Administration

Dr. Carol S. Spalding.....	College President
Jonathan Chamberlain ..	Chief Officer, College Environment
Nekita Eubanks .....	Interim Chief Human Resources Officer
Ken Ingle.....	Chief Officer, Information Services/CIO
Craig Lamb .....	Vice-President of Corporate and Continuing Education
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Dr. Michael Quillen....	Vice-President of Academic Programs
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Dr. Wendy Barnhardt.....	Dean of Health and Education
Dr. Van Madray.....	Dean of Business, Engineering Technologies and Public Services
Dr. Carol Scherczinger .....	Dean of Arts and Sciences



# 2018-2023 Rowan-Cabarrus Strategic Plan

## Statement of Purpose

Rowan-Cabarrus Community College is an open door, comprehensive learning-centered institution of public higher education serving the citizens of Rowan and Cabarrus counties. The College, a member of the North Carolina Community College System, offers affordable occupational and educational programs leading to Associate in Arts Degree, Associate in Engineering, Associate in Science Degree, Associate in Fine Arts Degree, Associate in General Education Degree, and Associate in Applied Science Degrees. Diplomas and certificates are awarded for other occupational, adult and continuing education programs.

The primary focus of the College is workforce development, meeting the educational needs of the individual and changing requirements of the workplace. Reflecting its commitment to student learning outcomes, the College strives to inspire its students to increase their knowledge, develop occupational and technical proficiencies, respond to lifelong learning opportunities, and expand their awareness as responsible citizens in a democratic society.

## Rowan-Cabarrus Mission

Rowan-Cabarrus improves lives and builds community through public higher education and workforce development.

## Vision Statement

Building sustainable futures through the power of learning.

## Values

We are committed to our college and our community through our values:

- Excellence and innovation in education and workforce development;
- Continuous improvement through lifelong learning and achievement;
- Trust, integrity, inclusiveness, and mutual respect;
- Exemplary service through teamwork;
- Responsiveness, resiliency, sustainability, accountability;
- Leadership, partnership and global citizenship.

## Strategic Goals

1. **LEARN:** How can Rowan-Cabarrus Community College increase the community's educational attainment that leads individuals, families and the region to prosperity, sustainability and success?
  - 1.1 Achieve high-quality learning for every student.
  - 1.2 Prepare students for career success and continued higher education.
  - 1.3 Employ technology and resources that support learning.
  - 1.4 Ensure timely student completion.
2. **ENGAGE:** How can Rowan-Cabarrus Community College best prepare students to be responsible and productive citizens?
  - 2.1 Provide holistic advising, resources and support services to optimize the student experience.
  - 2.2 Establish Rowan-Cabarrus Community College as the first choice for higher education.
  - 2.3 Increase student participation in co-curricular and extra-curricular activities to produce well-rounded leaders.
  - 2.4 Partner with students for life.
3. **INNOVATE:** How can Rowan-Cabarrus Community College serve the Community of the Future?
  - 3.1 Expand institutional capacity for creating transformation.
  - 3.2 Develop world-class faculty and staff.
  - 3.3 Pioneer solutions by anticipating institutional opportunities.
4. **LEAD:** How can Rowan-Cabarrus Community College be a catalyst for change?
  - 4.1 Convene critical and strategic conversations about the future of our communities.
  - 4.2 Be the leading advocate for community college education.
  - 4.3 Strive for continuous improvement by challenging the status quo.

# History of the College

The need for a technical education center was recognized in 1960, when Salisbury-Rowan community leaders, working through the chamber of commerce, conducted a survey of manpower requirements in the area. Results of the survey provided the basis for their request that the State Board of Education establish an industrial education center in Rowan County. The people of Rowan County gave strong support to the idea by approving a \$500,000 bond issue to purchase land and finance construction of the first building. When the center first opened its doors in 1963, it offered seven pre-employment education programs and a variety of short courses for adults.

In 1964, the school was designated Rowan Technical Institute under the provisions of the Community College-Technical Institute Act. This made it possible to expand the school's curricula.

In 1979, the General Assembly passed a bill which recognized the synonymous nature of the terms "institute" and "college." After appropriate action by the Board of Trustees and the Rowan County Commissioners, the North Carolina State Board of Education officially approved the name of Rowan Technical College.

In 1988, the trustees of the college voted to change the name of the institution to Rowan-Cabarrus Community College to more accurately reflect the comprehensive nature of its programs and the service area. The college became the first multi-campus institution in the state in 1991 with the opening of the South Campus.

The College has experienced considerable growth since 1963, and now enrolls an average of 20,000 citizens annually. Today, Rowan-Cabarrus Community College prepares individuals for careers in approximately 50 programs of study in business, health and public services, and industrial and engineering technologies. The College also offers the Associate in Arts, Associate in Fine Arts and Associate in Science degree programs for those students who intend to transfer to a four-year college or university.

Rowan-Cabarrus serves the residents of Cabarrus and Rowan counties at five campus locations: North Campus, South Campus, College Station, the Cabarrus Business and Technology Center, and the North Carolina Research Campus.

2010 was a banner year for Rowan-Cabarrus, as it not only opened its 62,000-square-foot classroom and laboratory building at the North Carolina Research Campus, but also its first completely new facility on the North Campus in more than 30 years. The 38,000-square-foot classroom building was LEED Gold certified, a leader in its own right as the first LEED Gold building in Rowan or Cabarrus counties and the fourth in the N.C. Community College system.

In November 2010, Rowan County citizens approved a \$12 million bond referendum for capital improvement projects on the North Campus as a commitment to keep facilities updated to provide the highest quality and relevant instruction and training.

A newly renovated building opened at the North Campus in 2016, creating an attractive new facade visible from Interstate 85 and providing space for many of the College's health care programs.

Between 2016 and 2019, the College continued its commitment to innovation and leading-edge facilities and instruction:

- With new occupational therapy assistant and physical therapist assistant programs, in addition to its highly regarded dental assisting and nursing programs, Rowan-Cabarrus remains a leader in regional workforce training for in-demand health care jobs.
- A new mechatronics engineering technology program offers training for advanced technology jobs requiring a combination of electrical, mechanical and computer skills to work on complex systems found in advanced manufacturing environments.
- Partnering with the City of Kannapolis, Rowan-Cabarrus opened the College Station building with increased space and cutting-edge equipment for the largest cosmetology program in the state.
- As the largest provider of public safety training in North Carolina, the College expanded its fire and emergency services facility, constructing a burn building for hands-on instruction and breaking ground on a five-story tower to provide training in dealing with specific high-risk situations.
- Thanks to a Cabarrus County bond referendum and a unique multifaceted partnership with the county, the City of Kannapolis and Castle & Cooke North Carolina, the College continued to look to the future with an eye on high-tech, advanced technology training. A state-of-the-art Advanced Technology Center was built on three acres of N.C. Research Campus land generously donated by David Murdock. Opening in the fall of 2019, the 55,000-square-foot facility is intended to serve as a flagship to attract employers to the region and allow the College to offer training for high-tech, advanced technology careers for many years to come.

Year after year, Rowan-Cabarrus continues to navigate forward, from being named a Top 10 Digital College four years in a row to prestigious honors in 2019 as Dr. Carol Spalding was named N.C. Community College President of the Year and the College took home the Distinguished Partnership of the Year Award for its collaboration with the City of Kannapolis and Castle & Cooke North Carolina.

With the mission of changing lives and improving the communities it serves, Rowan-Community College attracts more students and talented faculty each year, creating new opportunities and establishing the College as a regional leader in higher education and workforce development.



# Program/Services Overview



# Programs and Services Overview

## Business, Engineering, Health, Public Services and Technical Programs: (A.A.S. or Associate in Applied Sciences)

The North Carolina Community College System (NCCCS) has offered two-year degree, diploma and certificate programs for individuals whose career goals are to immediately enter the workforce in their chosen profession or trade. The program offerings in the Associate in Applied Sciences provide education and training in current and emerging careers in our regional service area and beyond. Some of the A.A.S. programs have established articulation agreements with private and public universities that accept some courses toward an undergraduate degree.

## Transfer Programs:

Rowan-Cabarrus offers three transfer program areas: Associate of Arts (A.A.), Associate of Engineering (A.E.), Associate of Fine Arts (A.F.A.), and Associate of Science (A.S.). The transfer programs offer degree completing students the opportunity to transfer 60 - 61 credit hours to the University of North Carolina system member institutions. See Comprehensive Articulation Agreement section.

Transferring to private universities or to colleges and universities outside of North Carolina requires additional research and planning by students while enrolled at Rowan-Cabarrus to ensure the best possible credit transition.

## Associate in General Education:

The Associate in General Education (A.G.E.) is a degree program designed for students who want additional flexibility in designing a degree program to meet their educational and academic needs. The A.G.E. is not a transfer degree option, but senior institutions may receive some individual courses if a student is interested in transferring. Pre-health students are assigned in this major until formally admitted to a health program.

## Comprehensive Articulation Agreement:

The current Comprehensive Articulation Agreement became effective in 2014. This agreement addresses the transfer of credits between institutions in the North Carolina Community College System and from that system to constituent institutions of the University of North Carolina. Community college graduates of the A.A. and A.S. programs who have completed the general education transfer core will be considered to have fulfilled the institution wide, lower division general education requirements of receiving institution.

## Career and Academic Advising Centers:

Career and academic advisors are available on both North and South Campuses to assist students. Advisors are dedicated to providing quality career exploration and academic planning in an environment that is welcoming, professional, and supportive. Academic advising is a cooperative effort between the student and the advisor. The Advising Center is committed to the mission of making of difference in the lives of students by collaboratively developing comprehensive strategies that empower students to realize individual success. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/advocacyservices](http://www.rccc.edu/advocacyservices)

## Adult Studies:

An important function of the College is to provide educational programs on the pre-college level. Pre-college Studies offer adults the opportunity for meaningful social and occupational growth through Adult Basic Education (ABE), High School Equivalency Program (HSE, formerly GED) and English as a Second Language (ESL) program. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/precollege](http://www.rccc.edu/precollege).

## Career and College Promise Program:

The Career and College Promise Program (CCP) allows qualified high school students to earn college credits toward a transfer degree or a technical education degree. The program has specific admission criteria and specific courses for program completion. High school students who are interested in this opportunity must consult with their high school counselor or, if in an approved homeschool, the student and principal may consult with the manager of marketing and enrollment. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/highschool](http://www.rccc.edu/highschool).

## Corporate and Continuing Education Programs:

At Rowan-Cabarrus Community College, Corporate and Continuing Education programs support the philosophy that learning is a lifelong activity. This division offers courses for professional and job skills development and personal enrichment courses of general interest at convenient times and locations. The Corporate and Continuing Education Division supports individual, organizational, and economic development by providing career-focused, educational programs and services to citizens and employers of Rowan and Cabarrus counties. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/corporatecontinuing](http://www.rccc.edu/corporatecontinuing).



## English as a Second Language (E.S.L.):

English as a Second Language is offered as a Pre-College program. Please refer to the Basic Skills section. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/precollege/about-ell-program/](http://www.rccc.edu/precollege/about-ell-program/).

## Admissions & Student Success:

Prospective students to college or continuing education courses can receive information about admissions, registration, general advising assistance, transcripts, financial aid, career counseling, academic counseling, veterans' benefits and graduation through the Navigation Stations at North or South Campus. To speak with a Success Navigator in Admissions, schedule a campus tour, or learn more about the college through New Student Orientation, please visit the Rowan-Cabarrus website: [www.rccc.edu/admissions/](http://www.rccc.edu/admissions/) or [www.rccc.edu/navstation/](http://www.rccc.edu/navstation/).

## Financial Aid/Veteran's Administration Benefits

Rowan-Cabarrus offers many types of financial assistance including federal and state grants, federal work study and institutional scholarships. Initially, students should complete the federal financial aid application at: [www.fafsa.gov](http://www.fafsa.gov) to be considered for financial assistance.

Veteran's benefits are available for qualified veterans and/or their designated family member. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/financialaid/](http://www.rccc.edu/financialaid/) or [www.rccc.edu/vets/](http://www.rccc.edu/vets/)

## Library:

The library provides our students with library, audiovisual, Internet and instructional resources and services necessary to support the educational programs of the college. They also provide resources to meet the various needs, interests, and aptitudes of the students enrolled in lifelong learning. General use computers are available in the library with open lab hours for students. Libraries are available at North, South and NCRC, but students may access library resources from any general computer with Internet access. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/lrc](http://www.rccc.edu/lrc).

## Navigation Station:

The Navigation Station is more than a place... it's a philosophy. You come to Rowan-Cabarrus Community College to learn and not to run from office to office taking care of the administrative details of your education. The College brings together a host of student services under one roof so that you can get back to the business of being a student!

Stop here for everything you need from general information and academic advising to register and pay for your classes. We can help you every step of the way, from filing financial aid forms and understanding your payment options, to registering for classes, requesting a transcript, or completing an application for graduation. You can make an appointment with an academic advisor and find out about your holds and how to remove them. If you are having a life event and need to speak to someone, we have staff who are ready to listen and assist you.

The Navigation Station offers extended hours at both our North and South Campuses to meet your needs. Start at the Navigation Station on-campus or online to start your success at Rowan-Cabarrus. [www.rccc.edu/navstation](http://www.rccc.edu/navstation)

## Small Business Center:

The mission of the Small Business Center (SBC) is to increase the success rate and number of viable small businesses in the community by providing education, counseling, a resource library, and special programs. The SBC offers free two-hour seminars on topics such as business start-up, funding, business plans, marketing, sales, green operations, social media and online ventures. More in-depth training and skill building includes courses in basic accounting, QuickBooks and business plan writing. For additional information, please visit the Rowan-Cabarrus website at: [www.rccc.edu/sbc](http://www.rccc.edu/sbc).

## Student Government Association/ Student Life:

Student Life is a critical component of the student experience. Student Life at Rowan-Cabarrus continues to flourish with record participation in clubs and activities. Student Life extends beyond the campuses as well. The student life calendar includes service projects, blood drives, legislative visits, leadership conferences and more. Online publications, social media platforms, and charter bus excursions are available to Rowan-Cabarrus students. The Student Government Association continues to be the official voice through which students' opinions and actions may be carried out. Chartered student organizations allow for student membership in clubs of academic and social interest. For additional information on ways to get involved, please visit the Rowan-Cabarrus website: [www.rccc.edu/studentlife/](http://www.rccc.edu/studentlife/) or [www.rccc.edu/sga](http://www.rccc.edu/sga).

**Student Wellness Center:**

The mission of the Student Wellness Center is to provide support to students in the areas of personal, academic, and crisis as well as accessibility to the food/resource pantry on campus and referrals to relevant community resources in an effort to promote the academic success of students. The Student Assistance Program is an extension of the Student Wellness Center and offers three free professional counseling sessions off campus per year as well as access to a free legal consultation and free financial advising off campus per year. Information about available services as well as self-help resources can be found on the Rowan-Cabarrus website: [www.rccc.edu/wellness](http://www.rccc.edu/wellness).

**Testing Centers:**

The Testing Centers at North and South Campus provide comprehensive testing services, including placement, allied health admissions, High School Equivalency (HSE), credit for prior learning (CLEP and DSST), academic course, and industry specific certification testing. The Testing Centers serve as remote test sites and provide proctoring services for other educational institutions. Rowan-Cabarrus is also an authorized test site for Pearson-VUE.

For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/testing](http://www.rccc.edu/testing).

**Tutoring Centers:**

Tutoring services for students are available on North and South Campuses. Students can receive assistance in English, writing, reading, mathematics, business technology courses, most science classes, including biotechnology, and foreign languages. Online Tutoring in numerous subjects is available to Rowan Cabarrus students. This service is available 24/7 from any computer with Internet access.

For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/tutoring](http://www.rccc.edu/tutoring).



# Admissions and Enrollment



# General Admission Information

The College and other institutions in the North Carolina Community College System operate under an Open Door policy. In accordance with the State Board of Community College Code, Title 23, Chapter 2(c), Section .0300, the College shall maintain an open-door admissions policy, which accepts applicants who have graduated from high school, hold a GED or adult high school diploma, or are at least 18 years of age. The College also enrolls high school students who are qualified to participate in college courses through the Career and College Promise Program or selected continuing education training courses. The Rowan-Cabarrus Board of Trustees reserves the right to establish local admission policies as authorized within the parameters established by the State Board of Community College Code.

Rowan-Cabarrus offers education and training to meet the needs of the community. There may be specific admission criteria for individual programs. Please contact your Success Navigator in Admissions to learn there are any specific admissions criteria for your program of interest.

Individuals seeking accommodations related to enrollment, please refer to the section for Special Students.

## College Degree, Diploma and Certificate Program Admission

The college degree, diploma, or certificate programs are taught at a level beyond high school. Therefore, a high school diploma or recognized equivalent is usually the minimal preparation; however, a prospective student may demonstrate their academic readiness through the college placement inventory. If you have not completed high school, the College provides adult studies (HSE) programs through pre-college studies.

In order to assure that your educational experience will be successful; advisors will assist in determining your present academic preparedness for the program you have chosen. The College uses placement tests, academic records, occupational experience and/or other indicators to determine the student's preparedness and potential for success.

If you have not successfully completed all the high school courses needed to succeed in the program of your choice, Rowan-Cabarrus will provide advising, guidance or courses to become academically ready. In certain A.A.S. programs, students are enrolled on a space-available basis because laboratory space is limited. Applicants to these programs are encouraged to contact the Enrollment and Admissions department as soon as possible.

High school seniors should apply early in their senior year. New students are admitted prior to the start of each

semester. Qualified students are accepted during each semester's registration, if space is available.

The Basic Law Enforcement Training program and all health programs contain additional admission requirements that must be met before the student is admitted to the program. All admission requirements are listed in the special admission section of the catalog and the online catalog updates.

## Transition Courses

Transition courses (designed to improve reading, writing, spelling and mathematics) are taught in small classes. Usually, students who take transition courses will be advised if they can take one or two of their regular program courses at the same time. Academic advisors will assist you in developing your educational plan for two or more semesters to meet your goal.

Transition classes are considered non-credit courses and are not included in the grade point average; however, tuition and fees are charged at the same rate as a credit course.

## Online/Hybrid Formats

Rowan-Cabarrus Community College offers over 250 online courses, enabling students to earn online degrees, diplomas, and certificates. Our network of courses allows students to participate in learning outside of the traditional classroom. Our goal is to provide students greater flexibility in scheduling classes while providing Rowan-Cabarrus faculty with new and innovative approaches to teaching. Rowan-Cabarrus offers several methods of distance education, providing students a variety of scheduling choices and approaches to learning. Online courses are available across a variety of disciplines including accounting, education, English, math, Spanish, and many more.

The College offers a variety of courses with some components delivered online. An online class is offered 100 percent online with no on-campus class time. Hybrid courses combine online learning with face-to-face instruction. All hybrid courses will meet on-campus on specified days (specific meeting dates will be provided by the instructor). The remaining instruction and course content will be delivered as an internet course.

Students are required to meet academic and skill prerequisites prior to registering for an online course.

## Enrolling is Easy at Rowan-Cabarrus:

- **Complete Residency Determination Service Process:** Due to the implementing of Session Law 2013-360, the state of North Carolina has introduced the Residency Determination Service (RDS), in coordination with other NC community colleges and universities, as the centralized service for determining residency for students. This service



enables a student to use one residency determination for admissions applications to multiple NC public colleges and universities and to demonstrate residency for state aid programs consideration at all public and private NC colleges and universities.

- **Apply for Admission:** Apply online through College Foundation of North Carolina (CFNC). It takes a minimum of two business days to process your application, depending on the date you apply.
- **Returning Students:** Returning curriculum students are defined as having taken a curriculum level course and received a letter grade of A, B, C, D, F or W. Complete the online reactivation form on the college's website and enter the RCN number that was issued from the RDS process. It takes a minimum of two business days to process your application, depending on the date you apply.
- By electronically completing and submitting the college application, the student accepts the responsibility to be aware of and follow codes of conduct, behavior standards and all program specific rules, policies and procedures.
- **Official Transcripts\*** Contact the guidance office or registrar's office of your high school and any colleges you have attended and request an official copy of your transcript be sent to:  
 Student Services/Records Office  
 Rowan-Cabarrus Community College  
 P.O. Box 1595  
 Salisbury, North Carolina 28145-1595
  - o An official transcript is in a sealed envelope, has an embossed seal or original signature, and is usually mailed directly to Rowan-Cabarrus from the institution or may be sent electronically from the institution or transcript service to Rowan-Cabarrus. The graduation date will be posted on all high school transcripts. Public high school graduates are encouraged to request an electronic copy from the College Foundation of North Carolina (CFNC).
  - o Home-school graduates should send a final transcript, verifying your graduation, as well as a copy of the letter from the North Carolina Department of Non-Public Instruction acknowledging your home school. Correspondence/online school diplomas will be accepted if they are regionally accredited or accredited by the Distance Education and Training Council (DETC). Any other correspondence/online school diplomas will be reviewed on a case-by-case basis.

## Residency:

Due to the implementing of Session Law 2013-360, the state of North Carolina has introduced the Residency Determination Service (RDS), in coordination with other NC community colleges and universities, as the centralized service for determining residency for students. This service enables a student to use one residency determination for admissions applications to multiple NC public colleges and universities and to demonstrate residency for state aid programs consideration at all public and private NC colleges and universities. The residency application is available online: <https://ncresidency.cfnc.org/residencyInfo/home>

Appeals related to residency must be submitted to the NC Residency Determination Service. You can find more information related to the Residency Appeals Process online: <https://ncresidency.cfnc.org/residencyInfo/home>

## Out-of-State Student

A student who is determined to be a nonresident of North Carolina is subject to a significantly higher tuition charge than a resident. An initial residency decision is made at the point of application to the NC Residency Determination Service. A student who is determined to be a nonresident based on information provided to RDS may submit an appeal for possible reclassification through RDS. Additional information regarding the appeals process is available online: <https://ncresidency.cfnc.org/residencyInfo/home>

Tuition rates are subject to change by action of the North Carolina General Assembly.

## International Admissions

[www.rccc.edu/admissions/admission-requirements-for-international-students](http://www.rccc.edu/admissions/admission-requirements-for-international-students)

Rowan-Cabarrus Community College provides educational opportunities for individuals who may not be citizens or residents of our regional service area. This school is authorized under Federal law to enroll non-immigrant students. Non-immigrant students will be accepted to begin classes in the fall semester only. To be considered for admission, an international student must present the following information to admissions:

- A completed application, received no later than June 15 of the admission year.
- Forward a certified copy of his/her official high school diploma, transcript from all high schools and post-secondary institutions the student has attended, and official U.S. educational evaluation of the documents. All transcripts from schools outside the United States must be evaluated by a reputable evaluation service. A list may be obtained in Student Services.



- Original financial documents are required along with a statement of financial support from the student's sponsor, and a statement from the sponsor's bank that there are sufficient funds, \$20,500 U.S. dollars, to support the student. If there is no sponsor, an original and official document that shows the student has on deposit sufficient funds to support his/her tenure as a student (\$20,500/year U.S. dollars).
- A minimum score of 500 on the Test of English as a Foreign Language (TOEFL) or a minimum score of 173 on the computerized version, or a minimum Internet Based Test (IBT) score of Reading 17, Listening 17, Speaking 16, and Writing 16. If any single score falls below the minimum, the IBT will not be considered. All scores must be received as official documents. No copies of scores will be accepted. TOEFL test scores must be within two years of the date of admission.
- After all required documentation has been received by deadline, and after approval by the Office of Admissions & Onboarding (The Executive Director of Student Success Services), the applicant may be issued his/her I-20.
- After applicant has received the appropriate visa allowing him/her to enter the U.S., he/she must present evidence of medical insurance coverage prior to registration.

NOTE: Rowan-Cabarrus does not have scholarship or loan funds for international students available at this time. The college does not provide dormitory facilities.

## State Authorization

Admission of applicants residing outside of North Carolina is dependent on the college's ability to secure authorization from the state in which the applicant is currently residing. For more information, please visit the college website [www.rccc.edu/distance/state-authorization](http://www.rccc.edu/distance/state-authorization)

# Admission of High School Students through Career and College Promise

## College Transfer and Career Technical Pathways

Currently enrolled high school students who wish to take college courses through Rowan-Cabarrus may participate in the Career and College Promise Program. To participate in this program the high school student must complete the online Career and College Promise application and meet with their high school counselor. Students must select one of the College Transfer Pathways or may select a Career Technical Certificate Pathway.

To qualify for a College Transfer Pathway, a student must have a 2.8 or higher unweighted grade point average or demonstrate college readiness in English, mathematics and reading using an approved assessment. They must also continue to make progress towards high school graduation.

To qualify for a Career Technical Certificate Pathway, a student must have a 2.8 or higher unweighted grade point average or the recommendation from a high school principle or designee.

Career and College Promise Program students are subject to the same criteria for academic probation as traditional college students.

For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/highschool](http://www.rccc.edu/highschool)

## Early College at Rowan-Cabarrus

Early College is an educational partnership between Rowan-Cabarrus and school districts in Rowan and Cabarrus counties. This partnership provides high school students an opportunity to earn both high school and college credits during four years of enrollment in an early college program. By earning enough credits, a graduating high school senior could exit high school with an associate degree and be ready for workforce employment or transfer to a four-year college or university. The student must enroll as a high school freshman to pursue this opportunity. College tuition for early college students is waived. Early College programs are administered by the local educational agency (school district), but housed on the college campus. To learn more information about early college opportunities in Rowan County, Cabarrus County or Kannapolis City Schools, please contact these school districts.

## Registration

The traditional college curriculum operates on the semester system and uses an online class scheduling tool known as WebAdvisor. All students enrolled in programs may register using WebAdvisor. Find registration dates on the College website: [www.rccc.edu/recordsregistration/registration-dates](http://www.rccc.edu/recordsregistration/registration-dates). Students should meet with an advisor prior to registering for classes to assure students have developed the educational plan for their program of study. Registration is completed by paying the required tuition and fees for the courses scheduled. Please refer to the section on tuition and fees.

## Schedule Changes

Students may make changes to their course schedule at any time during the scheduled registration dates. Once the semester begins, students who are registered for credit courses as of the first day of any semester can make schedule changes as follows; 1) the first two days of fall and spring semesters; and 2) the first day of summer term. Schedule changes may be made by the student using the WebAdvisor or Navigate tool or by visiting the Career & Advising Center or seeing a faculty/program advisor.

# General Admission Information for Corporate and Continuing Education

[www.rccc.edu/corporatecontinuing](http://www.rccc.edu/corporatecontinuing)

Corporate and Continuing Education offers coursework in the following areas: Adult Basic Education, English as a Second Language, S.O.A.R., Human Resources Development (HRD), personal enrichment and workforce development. Below are the general requirements for admission and registration to each area in Corporate and Continuing Education. Individuals seeking accommodations should refer to the Special Students section.

## Adult Basic Skills

Adult Education is aimed at supporting students who are seeking education in basics skills such as reading and math or help preparing for the High School Equivalency (HSE) tests that are needed to obtain a North Carolina Equivalency Diploma. Incoming students must be at least 18 years old.

Minors (age 16 or 17) may be enrolled on a space available basis only and with prior approval by an administrator. People seeking admission to enter the Adult Basic Education program can register online at [www.rccc.edu/precollege/hse-registration-form](http://www.rccc.edu/precollege/hse-registration-form) or contact the Navigation Station (704-216-7222) to get specific enrollment information. Those under age 18 must receive and complete an enrollment packet before meeting with the Executive Director, College and Career Readiness for approval to begin coursework.

## Adult High School (AHS):

The Adult High School program is offered cooperatively with the local public school systems to offer adults an opportunity to earn an Adult High School (AHS) diploma through a curriculum of instruction that aligns with adult education and literacy activities and other core programs and one-stop partners. The curriculum includes the development of career pathways which provide access to employment and training services for students in the Adult High School program. Course and graduation requirements are in alignment with the standards established by the State Board of Education, the local education agency, and the local community college. The AHS diploma is issued in cooperation between the local boards of education and the community college. Adult High School records and transcripts are maintained and issued by the community college where the AHS diploma was awarded.

## English as a Second Language (ESL):

English as a Second Language classes are designed especially for adults whose native language is not English and who want to improve their English. Instruction is offered in listening, speaking, reading and writing. ESL classes are provided on campus, in the community and in workplace settings.

## S.O.A.R. (Skills, Opportunity, Awareness and Readiness):

S.O.A.R. is specifically designed to meet the needs of adults with intellectual disabilities. Students in this program must be at least 17 years old. The focus of the program is on helping the individual become more independent and self-directed by acquiring basic literacy and life skills needed to function successfully in daily living.

Classes are built around the student's strengths and goals. The curriculum covers functional academics, community living, health and safety, leisure activities and humanities. Students have computers and other technology available. They take part in campus and community activities.

**Eligibility Criteria:** To be eligible to participate in the S.O.A.R. program, an individual must be 17 or older, and (a) high school graduate (O.C.S.) or (b) must complete an Intake interview and assessment. Students must be able to be tested, adhere to the college Code of Conduct, and be able to perform activities of daily living (or be accompanied by an approved one-on-one assistant).

Classes are offered at no cost to the student and are currently held at the North Campus in Rowan County and at the South Campus in Cabarrus County and at other off-campus locations. Admission and enrollment in this program are limited.

[www.rccc.edu/precollege/about-the-soar-program/](http://www.rccc.edu/precollege/about-the-soar-program/)

## R3 Career Services/Human Resources Development:

If you need to receive further training to successfully enter the workforce or to apply for a different job, the R3 Career Services program (Human Resources Development program) provides short-term pre-employment training and career coaching designed for the unemployed or underemployed adult. Training includes:

- Learning how to find a job
- Building skills necessary for obtaining employment
- Exploring various career options
- Learning basic computer skills, including computerized job searching
- Improving reading, math, and locating information skills
- Earning a career readiness certification

Tuition for these classes will be waived for the unemployed or underemployed student.

The R3 team also assists individuals with exploration of funding resources for all training through partner programs and the Continuing Education Scholarship.

For additional information, please contact R3 Career Services at 704-216-7201 or [r3@rccc.edu](mailto:r3@rccc.edu).

## Personal Enrichment:

Personal enrichment courses are offered throughout the year in all areas of interest ranging from computer skills courses to physical fitness and wellness courses. Most of these courses have no admission criteria. People interested in taking these courses may register by contacting the Navigation Station for additional information about the dates, times, locations and costs associated with these courses. Registration and payment is available online through WebAdvisor. For additional information, please visit the Rowan-Cabarrus website: [www.rccc.edu/enrichment](http://www.rccc.edu/enrichment)

## Workforce Development Courses

Corporate and Continuing Education offers a wide variety of workforce development courses to individuals and to employers for their incumbent workforce. Many of these courses provide not only continuing education credit, but also certification at local, state or national levels. Some examples of courses in this area are: CPR, Certified Nursing Assistant, EMT, Fire Safety, Law Enforcement certification and recertification, leadership development, customer service, project management, and Lean/Six Sigma.

Courses are offered throughout the year. Some courses have prerequisite training or certification that must be met before enrollment. Please contact the Navigation Station for the most current information related to the specific course or visit the Rowan-Cabarrus website: [www.rccc.edu/corporatecontinuing](http://www.rccc.edu/corporatecontinuing)

Tuition and fees for these courses are variable.



# Tuition and Fees

All students, both college degree and continuing education, are able to pay tuition and fees through WebAdvisor.

## Tuition, Fees and Related Costs – Curriculum Courses

Tuition and fees are set by the North Carolina State Board of Community Colleges and the General Assembly (NCGA) and are subject to change. Any changes will be announced by the NCGA in July of each year and will be effective beginning each fall semester. Tuition and fees are due at each registration period by the payment date listed for each registration period. Please visit the college website for payment due dates: [www.rccc.edu/recordsregistration/tuition-and-fees](http://www.rccc.edu/recordsregistration/tuition-and-fees).

### Tuition

Because the state helps pay the tuition of North Carolina residents out of tax dollars, tuition for North Carolina residents is \$76.00 per credit hour, up to and including 16 credit hours. There will be a maximum charge of \$1,216.00 per semester. Tuition for non-resident students is charged at the rate of \$268.00 per credit hour with a maximum charge of \$4,288.00 per semester. The College accepts American Express, Discover, MasterCard, VISA credit cards for registration payment. For current tuition rate information, please refer to the website: [www.rccc.edu/recordsregistration/tuition-and-fees](http://www.rccc.edu/recordsregistration/tuition-and-fees)

#### 2019-2020 Tuition Rates

North Carolina Residents:		Non-Resident Students:	
Credit Hour	Tuition	Credit Hour	Tuition
1	\$ 76.00	1	\$ 268.00
2	\$ 152.00	2	\$ 536.00
3	\$ 228.00	3	\$ 804.00
4	\$ 304.00	4	\$1,072.00
5	\$ 380.00	5	\$1,340.00
6	\$ 456.00	6	\$1,608.00
7	\$ 532.00	7	\$1,876.00
8	\$ 608.00	8	\$2,144.00
9	\$ 684.00	9	\$2,412.00
10	\$ 760.00	10	\$2,680.00
11	\$ 836.00	11	\$2,948.00
12	\$ 912.00	12	\$3,216.00
13	\$ 988.00	13	\$3,484.00
14	\$1,064.00	14	\$3,752.00
15	\$1,140.00	15	\$4,020.00
16	\$1,216.00	16	\$4,288.00

Tuition rates are subject to change by action of the General Assembly. Decisions regarding this change may not be in effect prior to publication of this catalog.

A resident student is generally defined as one whose legal residence has been in North Carolina for at least 12 months before enrollment or re-enrollment in the college.

### Senior Citizens (age 65 and older)

Effective summer 2018, the North Carolina Community College System established policies that permits senior citizens to audit courses without payment of tuition. For additional information, refer to the College Website.

### Student Fees

includes North Carolina State Board Code and Rowan-Cabarrus Community College Procedures require that all fees charged to students be approved annually by the Board of Trustees. All student fees provided below have been approved. Current fees are published on the College's website and are set per academic year and are subject to change.

#### REQUIRED STUDENT FEES

##### Campus Access Fee

All students pay a campus access flat fee per semester/term which supports parking, security systems, student accident insurance, remote notification and public safety infrastructure, and other enhancements of access to college facilities. This fee is refundable only if the student completely drops all courses by the refund deadline as published in the Academic Calendar.

##### Graduation Fee

Curriculum students will pay a fee each semester, regardless of participation in the ceremony. This fee offsets the costs of degree, diploma, or certificate production, as well as the cap and gown for the ceremony. This fee is non-refundable.

##### Student Activity Fee

Students at Rowan-Cabarrus are required to pay an activity fee for fall spring and summer semesters, regardless of the number of credit hours enrolled. This fee covers student activities coordinated by the SGA. Accident insurance, covering hours in school, is required of all students and is included in the Student Activity Fee. All enrolled students of Rowan-Cabarrus are eligible. Students are covered while participating in scheduled, sponsored and supervised activities of Rowan-Cabarrus.

##### Technology Fee

Students at Rowan-Cabarrus Community College pay a technology fee for each of the fall and spring semesters, and summer term. Technology fees cover the cost of instructional supplies, materials, computers and other technology support. Technology fees are charged on a pro-rate basis depending on the number of credit hours for which the student is enrolled.

##### Required Curriculum Student Type (Health Programs) Fees

Rowan-Cabarrus health programs have other required fees that are incurred at the time of registration. Such fees could include cost for test preparation, liability insurance, testing fees, uniforms, pinning fees, lab fees, and more. Students receive a list of these fees at the respective Program Information Session.

## OTHER POTENTIAL STUDENT FEES

### ART/Photography Fee

Students choosing to enroll in ART 261 – Photography I will be charged a material fee to cover expenses including, but not limited to, film, printing paper, chemistry, and facility rental.

### Ceramics Fee

Students choosing to enroll in ART 283 and ART 284 will be charged a fee to cover the cost of facility usage and materials.

### Lab Fee

Curriculum students will pay a lab fee for courses that have an associated lab.

### Official Transcript Fee

Rowan-Cabarrus Community College has authorized the National Student Clearinghouse to provide transcript ordering via the web. Students may pay through this services when ordering with any major credit or debit card.

### Professional Liability Insurance

Cosmetology, Early Childhood Education, Dental, Nursing, Radiography, Occupational Therapy Assistant and Physical Therapy students are required to purchase student professional liability insurance. Students in Continuing Education courses which require patient care or direct client service are also required to have professional liability insurance. The Rowan-Cabarrus Cashiers' Office can provide additional information about this fee.

### Retest Fee

Students choosing to retest will pay a fee to cover the cost of the test. The cost will vary depending on the test or inventory type.

## Textbooks and Supplies

The cost of textbooks and supplies varies with the program of study. These items may be purchased from the online bookstore. The online bookstore accepts MasterCard and VISA credit cards for payment of textbooks and other merchandise.

### Electronic Textbook (eText) Fee

Some courses have an e-Text fee attached to the course at the time of registration. The fee is mandatory and includes the e-Text and digital learning materials. The eText automatically delivers to the student's Blackboard account at the beginning of the course.

## Tuition Refund Policy

Tuition, as well as the refund policy, are set by the North Carolina State Board of Community Colleges and the General Assembly, and are subject to change. The tuition refund policy states:

- A 100 percent refund shall be made if the student officially withdraws prior to the first day of class(es) of the academic semester or term as noted in the academic calendar.
- A student is eligible for a 100 percent refund if the class in which the student is officially registered is cancelled due to insufficient enrollment.
- A 75 percent refund shall be made if the student officially withdraws from the class(es) prior to or on the official 10 percent point of the semester.
- For classes beginning at times other than the first week (seven calendar days) of the semester a 100 percent refund shall be made if the student officially withdraws prior to the first day of the class. from the class prior to the first class meeting (REMOVE) A 75 percent refund shall be made if the student officially withdraws from the class prior to or on the 10 percent point of the class.

Official withdrawal for a refund involves completing the proper online withdrawal drop form ([www.rccc.edu/recordsregistration/online-drop-form](http://www.rccc.edu/recordsregistration/online-drop-form)) prior to or on the "10 percent" point of the semester. Students must request a refund in writing prior to or no later than the "10 percent" date of the semester.

Students who do not plan to attend must drop/withdraw by submitting the Online Withdrawal Form. Any student registered for any class as of the first day of the semester, will be responsible for 25% of tuition, unless the instructor has reported you as never entering the class.

Any student enrolled who is in the military reserve or National Guard who may be called to Active Duty that makes it impossible for them to complete their course requirements, will be granted a full refund for military purposes. The student must provide official deployment documentation before reporting to or upon their return from service, to the Director of Registration & Records for a refund to be considered.

See the Academic Calendar on the College website for the “10 percent” date of each semester. Refund information is available online under the academic calendar.

## Financial Aid and Veterans Benefits

### Financial Aid

Many students seek some form of financial aid to help meet their college expenses. Students seeking college degrees, diplomas and most certificates may qualify for state or federal assistance. Individuals taking continuing education coursework, certain curriculum certificate programs, and special credit majors (undeclared or non-degree seeking) are not eligible to receive state or federal grants, or alternative loans.

Financial aid programs are available in the form of scholarships, grants, and work-study programs. Financial Aid can provide you with specific information. You can qualify for financial aid if you are:

- Accepted for admission in an eligible programs as a student; and
- Demonstrate eligibility by completion of the online FAFSA (Free Application for Federal Student Aid) form: <https://fafsa.ed.gov>

Rowan-Cabarrus Community College's school code for the FAFSA is 005754 for all campuses. Check the Rowan-Cabarrus website for additional and detailed information: [www.rccc.edu/financialaid](http://www.rccc.edu/financialaid).

The college serves as a referral agency for:  
Veterans Benefits  
Social Security  
Vocational Rehabilitation  
Department of Social Services

The college serves as a disbursing or coordinating agency for:

Federal Work-Study  
Federal Supplemental Educational Opportunity Grants (SEOG)  
Federal Pell Grant  
North Carolina Education Lottery Grant  
North Carolina Community College Grant  
Alternative loans

### Scholarships

Various scholarship opportunities are available through Rowan-Cabarrus Community College. Check the Rowan-Cabarrus website - often for updated scholarship information: [www.rccc.edu/paying-for-college](http://www.rccc.edu/paying-for-college). Most scholarship applications are available in the spring of each year for the following fall semester.

The Financial Aid office can provide you with information on other types of aid that may be available. In addition to scholarships and grants, many Rowan-Cabarrus Community College students are employed through the



federal college work-study programs on a part-time basis in offices, labs, libraries, or other campus locations. Work-study compensation counts as part of your financial aid package.

Applications for financial aid are accepted throughout the year, and assistance will be given as funds are available. Students must meet Satisfactory Academic Progress (SAP). Check the website: [www.rccc.edu/financialaid](http://www.rccc.edu/financialaid) for the specific requirements regarding Satisfactory Academic Progress.

For more information on financial aid, contact Financial Aid at 704-216-RCCC (7222).

## Financial Aid and Scholarship Refunds

Students that have funds remaining after tuition, books, and fees charges are paid receive the remaining balance usually within in 6-8 weeks of the beginning of the semester. Every curriculum student will receive a BankMobile packet in the mail. Refunds are delivered via the option selected when activating BankMobile. Select your refund preference and make your refund selection online by visiting [refundselection.com](http://refundselection.com). Once your refund preference is selected, funds are sent from Rowan-Cabarrus to BankMobile who then disburses the refunds according to your selection. If you want the fastest access to your money, simply choose to have your refunds deposited directly into your Vibe account—a fully functioning FDIC Insured checking account. (Please note: In order to receive a refund, *you must select your refund preference as soon as your code arrives in the mail.*)

## Textbook Purchases

Students with financial aid or scholarship awards may purchase textbooks and supplies through the on-line bookstore. Rental options are not available for financial aid and scholarship recipients.

## U. S. Department of Veterans Affairs Benefits

Rowan-Cabarrus Community College programs are approved by the North Carolina State Approving Agency for the enrollment of persons eligible for education assistance benefits from the U.S. Department of Veterans Affairs (VA). Entitled veterans, eligible spouses, and dependent children who have applied, met all admission requirements, been fully accepted, and have registered for classes, may be CERTIFIED to the U.S. DVA Atlanta, Georgia office as enrolled and in pursuit of an approved program of education.

It is the responsibility of the veteran to request from the last high school and all colleges attended that an official transcript(s) be sent directly from the school to Rowan-Cabarrus Community College. Students can only be certified for benefits for one semester, unless all transcripts have been received and evaluated. Students may be certified only for the classes required for completion in their approved program of study.

Veterans receive educational benefits on the following basis:

- Arts and Sciences Courses - Credit Hours per Week
- Occupational Courses - Credit Hours per Week
- Tele-Course, Hybrid or Internet courses may change your eligible credit hour certification.

Check the Rowan-Cabarrus Community College website [www.rccc.edu/financialaid/about-veterans-affairs](http://www.rccc.edu/financialaid/about-veterans-affairs) for additional information.

## Grades and Progress Reports

Records of progress are kept by this institution on veteran and non-veteran students alike. Progress records are furnished to the students, veterans, and non-veterans alike at the end of each scheduled school term through WebAdvisor.

Rowan-Cabarrus is a Service-member Opportunity College (SOC). Students who may have transferable credit are encouraged to submit their documents to the Rowan-Cabarrus Records and Registration area of Student Services. Refer to the catalog section on Academic Policies and Procedures.



# College Policies and Procedures





# Academic Policies and Procedures

## Annual Notice to Students of their Rights under FERPA.

The Family Educational Rights and Privacy Act of 1974 (FERPA) is a federal law that governs the maintenance of student records. This act, with which the College intends to comply fully, protects the privacy of educational records, establishes the right for students enrolled to inspect records kept by the College about the student and the right to correct inaccuracies in the records.

FERPA affords students four primary rights:

- The right to inspect and review your educational records;
- The right to request amendment to your record if you believe it is inaccurate;
- The right to provide written consent before Rowan-Cabarrus discloses personally identifiable information from your educational records;
- The right of notification of FERPA rights at least annually. ([www.rccc.edu/ferpa](http://www.rccc.edu/ferpa))

Rowan-Cabarrus recognizes its responsibilities to students in maintaining accurate and confidential student records. We also recognize parents may wish to access student grades, financial records, academic records, and other records. The College is, however, limited to the information we can share by the Family Educational Rights and Privacy Act (FERPA) that protects and governs the release of certain student records.

When a student, regardless of age, enters (in attendance the first day of classes), an institution, all rights to inspect and review the education record transfer from the parent to the student under FERPA. Student's educational records are confidential and only shared by a College official with other RCCC administrators or lending agencies that have a legitimate need to know this information. With a student's permission, the College will share such information as academic records, account/billing information, and/or financial aid information, with whomever the student may choose to designate.

### How do you, the student, permit release of your educational records?

Rowan-Cabarrus wants to assure that you the student have a clear understanding when requesting we release any information pertaining to your educational record. In that effort, any student who permits the College to release his/her student record information must complete and submit the Consent for Release of Information form to a member of the Student Advocacy Services department or the Records Office for consultation.

## What are Educational Records?

Educational records include, but not limited to the following:

- Rowan-Cabarrus Student ID#, SS#;
- Gender, race or ethnicity;
- Residence status;
- Class schedule;
- Academic Record – Transcript, Grades/GPA and academic standing;
- Test scores;
- Financial records – Financial Aid, Student account or billing;
- Disciplinary records; and
- Employment records of student workers

## Directory Information

FERPA does allow that Rowan-Cabarrus officials may disclose appropriately designated “directory information” without student written consent. Directory information is information contained in a student's education record and generally considered to cause no harm or an invasion of privacy if released. Rowan-Cabarrus officials declare the following items as directory information and can be made available to the public. Students may request to withhold directory information, except where it is required on campus, by notifying the Director of Records and Registration in writing within the first five days after student enrollment that such information is to be made unavailable.

- Student's name
- Address
- Telephone listing
- Field of study
- Dates of attendance
- Degrees, diplomas or certificates awarded
- Scholastic Honors

## Academic Load - Students

A full-time student is one who is enrolled in 12 or more credit hours of course work per semester. Average full-time enrollment for most students will vary between 15 and 18 hours of credit. Students who wish to carry more than 21 credit hours must have prior approval from the vice president of enrollment and the student experience unless their curriculum requirements, as stated in the catalog, require more than 21 hours in a particular semester. Course schedules and course loads should be carefully planned through consultation with a program advisor. Note: The NC General Assembly has set tuition and registration fees on a “per credit hour” basis with a maximum charge for 16 credit hours. Please see Tuition and Fees section of this catalog for further details.

## Attendance Requirements

All students must attend class during the first week of classes or forfeit their seat in the course. A student is expected to attend every class for which he/she is scheduled and to arrive on time. Instructors will keep an accurate record of class attendance. The student is responsible for contacting his/her instructor when unavoidable absences occur, and for maintaining contact every few days during any necessary extended absence. Students are responsible for withdrawing from any class, if they find they will be unable to complete an academic term. The student must complete and submit the online withdrawal form located at [www.rccc.edu/recordsregistration/online-drop-form](http://www.rccc.edu/recordsregistration/online-drop-form) when officially withdrawing from a class after the "10 percent" point of the academic semester/term.

Instructional time missed is a serious deterrent to learning. A student is responsible for fulfilling the requirements of the course by attending all classes (including shops, labs, and clinics) and completing course assignments. Instructors will withdraw students who are accumulating absences and are not communicating with the faculty regarding academic progress in the course.

Distance education students are expected to login to their distance education courses during the first week of classes and submit an assignment as required. Please refer to the Distance Education website for more information. Any student who does not enter or login to their distance education course by the 10% point will be reported as a no show and will be required to register for the course during another semester.

Some programs and courses at Rowan-Cabarrus Community College may have more stringent attendance requirements due to the nature of a course or program. These requirements are stated in the program description or course syllabus. Students will be informed in writing during the first class meeting of specific attendance requirements. Class attendance is calculated from the first officially scheduled class meeting (includes the drop/add period) through the last scheduled meeting.

## Class Schedules

Rowan-Cabarrus Community College schedules most traditional seated classes between 8 a.m. and 10 p.m., Monday through Thursday; and between 8 a.m. and 5 p.m. on Friday. Saturday classes may also be offered. Credit courses are offered during the day and during the evening hours from 6 p.m. to 10 p.m. The purpose of offering credit courses both day and evening is to provide flexibility in scheduling and optimum availability of courses. Schedule and course information are published by the college the prior to each semester and are available on the college's website at: [www.rccc.edu](http://www.rccc.edu). Non-credit Occupational Extension and Personal Enrichment/Personal Interest courses are also offered both day and evening.

## Program Faculty Advisors

Each student enrolled in a program has access to a program faculty advisor or advising group who assists the student in planning course schedules. The student may seek assistance from any program advisor in his/her particular program of study (major). The program advisor assists the student in evaluating his/her academic progress and suggests improvements or schedule changes. Program advisors and students are strongly encouraged to develop an educational plan of work prior to registration. Use WebAdvisor/Self-Serve to document your educational plan from beginning to completion of your degree, diploma or certificate.

## Withdrawal Policy

If a student withdraws from a class after the end of the drop/add period and before the 65 percent point in the class, he/she will receive a grade of "W." A Grade of "W" will appear on the student's transcript, but will not be considered as hours attempted in the accumulated Grade-Point Average. If a student does not withdraw before the 65 percent point in the class, the student will receive a grade of "F" or the grade earned.

Once a student has enrolled in class and has paid fees, that student remains a member of the class unless:

**Student Withdrawal** - The student officially withdraws from the course by completing the necessary printed or web form available at the following website address: [www.rccc.edu/recordsregistration/withdrawal-policy-process/](http://www.rccc.edu/recordsregistration/withdrawal-policy-process/)

**Faculty Withdrawal** - An instructor may withdraw the student if the student has not attended courses for two consecutive weeks (or 12.5 percent of course duration), of scheduled course meetings during a 16 week semester whereby the student has not attempted intentional, ongoing communication with the instructor in person, via telephone, or campus email, to discuss the circumstances of the ongoing absence and plan their efforts to complete missed assignments.

**Administrative Withdrawal** - Administrative withdrawal may be implemented as part of mediated resolution to violations of the Campus Code of Conduct and appropriate documentation may appear on the student's official transcript, as needed.

**Medical Withdrawal** - Students may request a medical withdrawal based on injury, illness, or psychological/psychiatric disorder. A Medical Withdrawal will be granted for all courses in the enrolled semester. Medical Withdrawals will not be granted for individual course(s). A Medical Withdrawal request must be made within 30 days of last date of class attendance, and prior to future enrollment.

**Military Withdrawal** - A student may withdraw from courses due to call for Active Duty for military purposes. The student must provide official deployment documentation before reporting to or upon their return from service, to the Director of Registration & Records.

Rowan-Cabarrus Community College reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure when necessary.

## Grading

Rowan-Cabarrus Community College operates on a grade-point system, and each student's academic standing is established by a grade point average (GPA) which is determined by numerical values assigned to each grade. At the end of each semester, students will access final grades via WebAdvisor based on the following scale. Health programs and developmental studies courses are graded on a variation of this scale.

Grade	Grade Explanation	Quality Points
A	90-100 Excellent	4 quality points per semester hour
B	80-89 Good	3 quality points per semester hour
C	70-79 Average	2 quality points per semester hour
D	60-69	1 quality point per semester hour
F	<60 Failing	0 quality points
I	Incomplete	0 quality points
W	Withdrawn	0 quality points
AU	Audit	0 quality points
SR	Senior Audit	0 quality points
CE	Credit by Exam	0 quality points
P	Passing, Developmental	0 quality points
R	Repeat, Developmental	0 quality points
CC	Course Completed	0 quality points

\*Students enrolled in Associate Degree Nursing, Practical Nursing programs, Dental Assisting, Occupational Therapy Assistant, Physical Therapist Assistant, and Radiography should refer to the specific program webpage for the numerical grade required in related courses. Each program will list the required minimum

grade for admission to and continuation in the program. All health program students should refer to the specific program handbook regarding the minimum grade to be earned for program progression.

In transition studies courses, a grade of 80 or above is required for satisfactory completion. The North Carolina Community College System has established this minimum standard for satisfactory completion of developmental courses. Students earning numerical grades below 80 will receive the grade of "R" (Repeat) and must register again for the course. Transition studies courses are noncredit courses and are not included in the Grade-Point Average (GPA).

## Grade Appeal Procedure

Visit the College website for information regarding grade appeal requests: [www.rccc.edu/civility/grade-appeal-request/](http://www.rccc.edu/civility/grade-appeal-request/). Students must issue the request for appeal within 5 business days of receiving a grade or forfeit the right to appeal.

## Grade of Incomplete (I)

A grade of Incomplete (I) may be assigned by the instructor for any student whose coursework is of passing quality which represents a significant amount of the requirements for a final grade, but is incomplete due to recent illness, accident, or recent death in the immediate family. Students, who need additional time to complete the objectives of a course due to either of these unusual circumstances beyond the student's control, should contact the Instructor and request a grade of incomplete. All incomplete work must be submitted and graded by the last day of the following semester/term.

The grade of "I" is computed in the Grade-Point Average as "0" quality points. However, when a student completes the provisions necessary for the removal of an "I," the "I" will be removed from the student's record and replaced with the grade earned. The GPA will then be recomputed using the grade earned. If course requirements are not met by the deadline given, the grade of "I" will automatically be changed to a grade of "F." The student must register again for the course.

Any student who has a grade of "I" in any course at the end of the term will not be considered for Scholastic Honors for that semester/term. To avoid jeopardizing this honorable mention, students should not delay completing all course objectives by the deadline agreed upon by the instructor and student.



## Grade-Point Average (GPA)

The GPA for one semester is obtained by the following method: The quality points for each course are found by multiplying the appropriate grade point value for the grade earned by the semester hour credits assigned to the course. The total grade points for all courses in the grading period are added. Dividing the total of the grade points by the total of the semester credit hours gives the grade-point average for the semester.

Example:

Course	Grade	Credit Hours	Grade Points	
BIO 168	A	4	=	16
ENG 111	B	3	=	9
PSY 150	B	3	=	9
ACA 122	C	2	=	6
MAT 161	D	3	=	3
TOTAL		15		TOTAL 43
GPA $43 / 15 = 2.86$				

Grade of "A" earned on a three-semester hour credit course equals 12 grade points.

## Cumulative Grade-Point Average

The cumulative GPA is determined by using the total grade points in two or more semesters divided by the total course credits attempted in two or more semesters.

## Academic Standards

Students must maintain satisfactory academic standards. Academic evaluation of student performance occurs at the end of each semester. This evaluation may be neither arbitrary nor capricious and must be consistent with previously announced criteria. Minimum satisfactory academic performance is defined as maintaining a cumulative Grade-Point Average (GPA) of at least 2.0 (a grade of "C").

## Advising Students Who Experience Academic Difficulty

Instructors are responsible for keeping students informed regularly about their progress in individual courses, with specific responsibility to expedite the reporting of student performance at each measurement point (chapter tests, mid-terms, finals, etc.). Instructors and advisors are responsible for assisting students who are experiencing academic difficulty. Advice to help students improve performance may include, but is not limited to, completing transition education courses or subcomponents of transition programs, carrying a reduced course load, special tutoring, or repeating selected courses. Semester grade reports are sent to all students. The faculty advisor and student should arrange a conference with an academic advisor-counselor whenever the nature of a student's academic difficulty is beyond the scope of the instructor or faculty advisor's ability to assist. Failure to maintain satisfactory academic standards will result in academic probation and can result in academic suspension.

## Academic Probation

A student who fails to maintain satisfactory academic standards at the end of any term will automatically be placed on academic probation for the next term, and each term GPA will be monitored until a an overall 2.0 GPA is achieved. A student placed on academic probation will not be allowed to register for classes until the student has (a) participated in an Academic Probation Workshop or (b) met with a Student Services Career and Academic advisor or member of the Student Wellness Center. Either of these establishes corrective conditions to help the student achieve satisfactory performance while continuing probationary enrollment. The hold on registration would then be lifted and documentation of the corrective actions is recorded and maintained by the counseling and career services team. A student on academic probation who continuously fails to achieve satisfactory academic standards for three consecutive semesters is subject to academic suspension and will not be allowed to register for the next term. The Assistant Director of Student Support Services in the Division of Student Success or his or her designee must approve re-enrollment following the academic suspension period. At each level of academic probation, a member of the wellness center or advising staff will explain the probationary period and requirements to students. All students enrolled in college credit courses are subject to maintaining the college's satisfactory academic progress policies.

## Academic Suspension

At the end of each semester the advising staff, from the direction of the Assistant Director of Student Support Services in the Division of Student Success, will review the cases of all students on academic probation who failed to achieve satisfactory academic standards within the stated time. After one semester of academic suspension, a student may apply for readmission to the program from which he or she has been academically suspended if the sequence of course offerings make readmission possible. The Assistant Director of Student Support Services (or designee) must determine approval for reenrollment.

## Academic Appeals Committee

The Assistant Director of Student Support Services in the Division of Student Success refers appeals of academic suspension to the academic appeals committee no later than five days after receipt. If the academic appeals committee reverses suspension, the student will be afforded the option to register for courses in the applicable term.

## Scholastic Honors

The following scholastic honors lists are posted each semester on the Rowan-Cabarrus website:

[www.rccc.edu/studentssuccess/scholastic-honors](http://www.rccc.edu/studentssuccess/scholastic-honors).

Scholastic Honors are defined as below:

### President's List

A full-time student achieving a grade-point average of 4.0 for the semester will be recognized on the President's List. To be eligible for the President's List, the student must be a full-time student enrolled in a minimum of 12 credit hours.

### Dean's List

A full-time student obtaining a grade-point average of 3.5 or above for the semester will be recognized on the Dean's List. To be eligible for the Dean's List, the student must be a full-time student enrolled in a minimum of 12 credit hours.

### Honors List

A student obtaining a grade-point average of 3.0 or above for the semester will be recognized on the Honor's List. To be eligible for the Honor's List, the student must be enrolled in a minimum of six credit hours.

Note: Since transition courses are non-credit courses, they are not included in the total hours required for Scholastic Honors.

## Course Residency Requirement

A minimum of 25 percent of the total number of credit hours required for graduation in a particular program must be taken at Rowan-Cabarrus Community College. No more than 75 percent of required credit hours can be accepted for transfer credit.

## Course Substitution

Rowan-Cabarrus expects that students will complete courses required for his/her program of study by enrolling in the courses required for completion. If a student wishes to request a substitution using a course previously taken at Rowan-Cabarrus Community College or another institution, it should be discussed with the program chair upon entering their program of study. The submission of a course substitution is at the discretion of the program chair prior to enrollment. If approved, completed documentation will be submitted to the Office of Student Records for review and validation.

## Course Repeat Rule

Students may repeat a course for which they received credit one time, regardless of the grade received, unless specified in the curriculum. Although both grades will appear on the student's record, only the higher grade will be counted toward the cumulative grade-point average.

For students receiving Veteran's Benefits, approval is required prior to repeating any course for which a final grade of "F" was received. This can only be done once per course. If a passing grade of "D" or better was received, the course cannot be repeated for Veteran's Benefits. Courses for which a grade of "W" was received, may be repeated for Veteran's Benefits, providing the cumulative GPA indicates overall satisfactory progress to date. Approvals will be communicated through the campus Veteran's Benefits officer.

## Auditing Courses

An audit is the completion of a course for which no assessment is made or grade awarded. Students who wish to audit courses must register and pay tuition and fees associated with those courses. Financial Aid cannot pay for any audited course.

Audits must be declared at the time of registration. Students must obtain approval from the instructor of the class no later than the "10 percent" point of the course.

Students auditing courses receive no academic credit but are encouraged to attend class, participate in discussions, and take examinations. Normal attendance policies will apply. Students withdrawing during the semester will be given a grade of "W." Audited coursework will not be considered for transfer credit toward any other Rowan-Cabarrus program. Audited courses are not eligible for transfer credit to another institution.

## Senior Citizens Audit (Age 65 and older)

Effective Summer 2018, the North Carolina Community College System established policies that permits senior citizens to audit courses without payment of tuition. Senior Citizens are not permitted to take the seat of a curriculum student, therefore, may only register on the last day of registration.

## Tests and Final Examinations

Tests and quizzes (oral and written), including comprehensive final exams, are given by the instructor in accordance with the approved course syllabus.

## Transfer of Credits - College Coursework

Transcripts from other regionally accredited institutions may be evaluated for transfer credit. Awarding of credits earned at a non-regionally accredited institution will be reviewed on a case-by-case basis.

Any student who wishes to have transfer credit evaluated by Rowan-Cabarrus Community College should request an official transcript from the transferring institution be sent to the Records Office. Courses submitted for transfer credit must be equivalent to offerings at Rowan-Cabarrus. The appropriate program chair and the academic vice president may make exceptions to the transfer of credits policy. Only courses with grades of a “C” or higher will be accepted for transfer. Quality points do not transfer. No more than 75 percent of required credit hours can be accepted for transfer credit. Only students who have applied and been accepted in to a Program of Study at Rowan-Cabarrus will receive an official evaluation of transfer credit.

Credit may also be awarded for appropriate scores on subject areas of the College Level Examination Program (CLEP), the Dantes Subject Standardized Tests (DSST), or the Advanced Placement (AP) Program. Official test results should be submitted to the Admissions Office.

Students receiving an Associate in Arts, Associate in Science, or Associate in Fine Arts degree from Rowan-Cabarrus will find those credits transferable to most colleges and universities. Students receiving an Associate in Applied Science degree will find their credits transferable to most private colleges in our area. Students should consult the receiving institution to determine the credits that will transfer from the program in which they are enrolled. A student may obtain general information about cooperative programs from the admissions office, and is responsible for seeking specifics and complete requirements from the school that awards the degree.

Rowan-Cabarrus is a Service-members Opportunity College (SOC) which means members of the military may receive academic credit for education and training completed while in service. Veterans may also receive credit for coursework completed while in the military which is applicable to the major selected at the college. Veterans must provide a transcript evaluated by ACE (American Council of Education) for award of the appropriate credit. Students should provide the necessary documents to the student services, records and registration area for evaluation.

Upon completion of evaluation of any transfer credit, notification will be sent to the student Rowan-Cabarrus email account.

## Reverse Transfer

The Reverse Transfer Program is a collaborative effort between North Carolina’s Community Colleges and the University of North Carolina’s 16 constituent institutions.

Students who transfer to a North Carolina university from one of the 58 North Carolina community colleges are given the opportunity to combine the credits earned at the university with credit already earned at the community college to determine if the associate degree requirements have been met.

Eligible students will be asked to participate when they transfer to one of the participating universities through their student services account. There is no cost to the student for sending information and awarding of the degree.

For more information, see the state website:  
[www.northcarolina.edu/reversetransfer](http://www.northcarolina.edu/reversetransfer)

## Credit by Professional Certificates

An enrolling student may request that professional certification with appropriate documentation be evaluated for full or partial course credit within his/her program of study. A student, who believes they may be eligible to receive such credit, should notify the program chair during the admissions process; however, a professional certification can be submitted at any time during the student’s enrollment at the College. Professional certifications should be current. Program chairs can provide the student with information regarding time limits in order for credits to be awarded for a particular program of study.

Upon receipt of the original documentation of certification from the student, the program chair will evaluate for possible credit. Additional criteria may be required along with the certification to receive full course credit. For each area of certification, the program chair will determine the Rowan-Cabarrus Community College course equivalencies and submit appropriate Credit by Professional Certification paperwork to the department dean and the academic vice president, who have final approval.

Once approved, the credit will be added to the student’s permanent record. No more than 75 percent of required credit hours for a program can be accepted for through transfer credit, which includes credit by professional certification.

Programs of Study accepting appropriate Professional Certification:

- Air Conditioning, Heating and Refrigeration
- Automotive Systems Technology
- Computer Information Technology
- Construction Management
- Cosmetology
- Electrical/Electronic Technology
- Machining Technology
- Medical Office Administration
- Office Systems Technology
- Welding Technology
- Emergency Management
- Emergency Medical Science

Please check the College website for updates and revisions to the technical programs of study that accept professional certification for full or partial credit. Examples of Professional Certification are ASE certificates or CPS credentials.



## Credit by Examination

Students enrolling at the College who believe they are proficient in a subject due to Continuing Education Units (CEUs), life experiences or professional certifications may request credit by examination. The examination may be written, oral, a performance test, or a combination of these.

To seek credit by examination, a student should obtain guidance from his/her faculty advisor, approval from the program head of the course in question, and must be registered for the course for which credit by examination is sought.

The instructor (or designee) must administer the examination for credit during the first eight class days of fall or spring semester and within the first three days of summer term. Tuition and Fees for credit by examination are the same as for regular enrollment. For examinations completed satisfactorily with a grade of "C" or better, the instructor then completes a credit by examination form and submits it to the director of records to award a grade of "CE". A student who is unsuccessful with the examination may not request a second attempt, but may remain in the course through completion of the semester. The decision of the examining faculty is final.

Credits earned by examination will be entered on the student's permanent record, but quality points will not be awarded for such credit. Credits earned by examination may be used to satisfy graduation requirements but cannot be used to satisfy the policy stating 25 percent of the credits required for graduation must be taken at Rowan-Cabarrus Community College. Hours earned by credit by examination will not be used to satisfy VA or Pell Grant requirements. Hours earned by credit by examination are not transferable to other colleges. For further information, contact the program chair of your area of study or student services.

Students receiving financial aid, scholarships or third party payment of tuition are responsible for checking with the financial aid office before requesting credit by examination.

## Advanced Placement for High School Courses

The North Carolina High School to Community College Articulation Agreement provides a seamless process that joins secondary and postsecondary Career and Technical Education programs of study. The College collaborates with the Rowan and Cabarrus County high schools and Kannapolis City Schools in an effort to award advanced placement credit based on high school achievement. Details concerning specific requirements are available from counselors at the high schools.

## Degree, Diploma, and Certificate Requirements

Students who successfully complete the Arts, Fine Arts or Science programs will earn the Associate in Arts, Associate in Fine Arts in Visual Arts or the Associate in Science Degree. Students who successfully complete a two-year technical education program will earn the Associate in Applied Science Degree. The Diploma is awarded to student who satisfactorily completed in a one-year vocation program. Various programs offer certificates that can often be completed in one semester.

A student is eligible for graduation when he/she has satisfied the specific requirements of the college and the program for when completed a minimum of 25 percent of required hours in residence at Rowan-Cabarrus Community College, and has earned a program grade point average of at least 2.0. Students accepted into programs with competitive entrance requirements may have to meet other graduation criteria.

Students who are continuously enrolled may graduate under the catalog for which they initially enrolled or may use the current catalog. See Maintaining an Active Record, [www.rccc.edu/recordsregistration/maintaining-an-active-record/](http://www.rccc.edu/recordsregistration/maintaining-an-active-record/). A student's record will be made inactive if they do not enroll for two consecutive terms (summer is not included in this evaluation). A student with an inactive record will need to reapply for admission in order to enroll for classes. At this time, the student's catalog year and graduation requirements will be updated based off the active catalog for the semester the student returns.

## Graduation Events

The College has an annual Graduation Fair at the end of Spring Semester. Graduates planning to participate in the Graduation Commencement Ceremony are encouraged to attend the [www.rccc.edu/recordsregistration/graduation-fair-tickets-cap-gown-tassel](http://www.rccc.edu/recordsregistration/graduation-fair-tickets-cap-gown-tassel) to pick up tickets, cap, gown and tassel. Commencement is held at the end of the Spring Semester. The specific dates for graduation activities are listed in the academic calendar.

## Graduation Honors

Students who graduate with a degree or diploma and complete with a Program grade-point average of 3.5 through 3.99 will graduate "With Honors."

Students who graduate with a degree or diploma and complete with a Program grade-point average of 4.0 in will graduate "With High Honors."

These designations are printed on the student's degree and diploma. Students who earn Honors or High Honors will be provided with a gold tassel to wear at the graduation ceremony. The following criteria are taken into consideration when determining Graduation Honors:

1. At least 25% of the total number of credit hours required in the student program must be completed at Rowan-Cabarrus
2. All courses required in the student program must be completed with a grade of "C" or higher

## Outstanding Student Awards

These awards are given to the graduates who have distinguished themselves by being most outstanding in terms of scholastic achievement, performance, and maturity of purpose during their program of instruction at Rowan-Cabarrus Community College.

## High School to Community College Articulation Agreement

The North Carolina High School to Community College Articulation Agreement is an agreement between the North Carolina Department of Public Instruction and the North Carolina Community College System. The articulation agreement provides a process that joins secondary and postsecondary Career and Technical Education (CTE) programs of student. The student can receive college credit for number of courses taken while in high school (articulated course list: [www.ncperkins.org/mod/page/view.php?id=38](http://www.ncperkins.org/mod/page/view.php?id=38) ). For more information, high school students should see their counselor.

Rowan-Cabarrus Community College collaborates with Rowan and Cabarrus County high schools and Kannapolis City Schools in an effort to award advanced placement within the guidelines of the Articulation Agreement and based on the student's high school achievement. Credit is awarded for only courses offered at Rowan-Cabarrus. Students who believe he/she may be eligible to receive credit will need to self-identify by contacting the Registrar's Office after they have enrolled in the College.

## Student Records

The Student Records and Registration department is responsible for maintaining student records by recording each student's achievements into permanent educational records. These records, such as grades, grade-point average, and courses completed, are used to award degrees, certificates and diplomas. Student records, such as transcripts, are available for students to demonstrate their successes to potential employers or other institutions of higher learning. For that reason, students are encouraged to understand their program of study and encouraged to review his/her record each semester, prior to registration, to assure program requirements are being met.

## Transcript Request Policy

In accordance with the Family Educational Rights and Privacy Act of 1974 (FERPA), students and former students needing official copies of their academic transcript must make request electronically. Rowan-Cabarrus Community College has authorized the National Student Clearinghouse to provide transcript ordering via the web. This service provides twenty-four-hour access to online transcript ordering through a secure website. This process is completely secure and can be delivered to your intended recipient electronically or by US Mail. For detailed information, refer to the College website at [www.rccc.edu/recordsregistration/transcript-request-policy](http://www.rccc.edu/recordsregistration/transcript-request-policy)

## Office of Accessibility

### Policies Regarding Students with Disabilities

The Office of Accessibility at Rowan-Cabarrus is offered to assist students with disabilities in achieving their educational and vocational goals and to comply with section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990. The College's goal is to make Rowan-Cabarrus accessible for all students. In order to minimize the effects of a student's disability on his/her classroom performance, a reasonable adjustment or accommodation is provided as long as an accommodation or an adjustment does not alter a published course competency or course standard. Services are provided based on documentation provided to an Office of Accessibility Counselor by the student and the individual's particular need and circumstance.

It is the mission of the Office of Accessibility for students with disabilities to have equal access to learning at Rowan Cabarrus Community College. Believing that students with disabilities can better advocate for their own needs with greater success, the Office of Accessibility strives to empower students at every step.

### Request for Assistance or Accommodation

Students seeking assistance or accommodation are responsible for making their disability known to the Office of Accessibility counselors in student success services. Students may elect to disclose a disability at any time. Rowan-Cabarrus may not seek out and identify students with disabilities. Office of Accessibility provides support services in curriculum, continuing education and pre-college courses. Because disability accommodations are not automatic and often require specific arrangements, students seeking disability accommodations should make contact with the Office of Accessibility for any additional information as soon as possible. Approved accommodations cannot be retroactive.

Students are encouraged to contact the Office of Accessibility as soon as possible. Requests for accommodations should be made at least three weeks prior to the first day of class for which the accommodations are requested. Approved accommodations are not retroactive.

All attempts will be made, but without minimal advance notice, Rowan-Cabarrus cannot assure that all appropriate accommodations can be accomplished prior to the first class.

## Required Documentation

Students seeking assistance or accommodation must provide documentation from an appropriate professional. Required documentation includes the results of medical, psychological, educational and/or emotional diagnostic tests or evaluations that verify both the need for accommodation, and the specific type of accommodation requested. Specific documentation guidelines are available through disability services.

Documentation will be considered confidential and will be maintained by disability services. Disability documentation is not a part of the academic record. This information will be considered confidential and is to be shared within the institution on a need-to-know basis only. Disability records may be destroyed five years after the student's last enrollment.

For students with learning or other non-apparent disabilities, documentation should be current, which is generally considered no older than three years. Students who provide documentation showing a history of disability may be granted accommodations for one semester in order to allow the student an opportunity to update older documentation; however, accommodation beyond one semester will be dependent upon the student providing current documentation.

Rowan-Cabarrus may also require an updated evaluation or assessment of disability.

## Accommodation Plan

Upon a student's request for accommodation and a review of appropriate documentation, the student and an Office of Accessibility counselor will develop an accommodation plan in consultation with faculty as appropriate or necessary. The plan will outline specific accommodations or adjustments. These may include physical, testing, instructional, academic support and/or equipment accommodations. Requested accommodations must be supported by documentation.

The accommodation plan may include a pre-determined schedule of meetings to monitor progress with an Office of Accessibility counselor. A copy will remain on file with the Office of Accessibility.

The accommodation plan must be reviewed and/

or updated with each semester registration. Accommodations are not automatic and must be requested in advance. Accommodations will not be granted retroactively.

Students are expected to maintain contact with disability services as to the implementation and effectiveness of specific accommodations. Students should immediately report any concern regarding their accommodation plan to disability services.

Rowan-Cabarrus does not provide services of a personal nature outside of the classroom. Arrangements for personal services are the student's responsibility.

All students are expected to comply with college policies and regulations as outlined in the Rowan-Cabarrus Catalog/Student Handbook.

## Accessible Services, Materials and Equipment

### Instructor Notification

Instructor notification is not automatic and must be initiated by the student. Following class registration, the student must request an accommodation notification form through disability services. The student will then deliver the accommodation notification to each course instructor. The student must obtain the instructor's signature, provide a copy for the instructor, and return the completed form to disability services. Accommodation will not be in effect until the completed form is returned. Instructors teaching online courses maybe notified by email from disability services.

### Classroom Notes

Students with specific functional limitations may request assistance with classroom notes. A determination of the method for obtaining classroom notes is based on disability documentation, course format and the course instructor's recommendation.

Classroom notes will generally be obtained by the utilization of a digital recorder or a volunteer classmate. Carbonless duplication paper is available upon request through the Office of Accessibility as well as a photocopy machine. Students are responsible for providing and operating the digital recorder and batteries.

When presenting an accommodation notification form, the student informs the instructor notes will be needed and asks for assistance to identify a volunteer. In the event that either the volunteer system or digital recorder is not successful, student or instructor should immediately contact disability services.

A volunteer note-taker or digital recorder does not excuse poor class attendance. Students receiving class notes accommodation should not expect notes for days missed unless special arrangements are made in advance.



Based on the inability to access reasonable and appropriate classroom notes using a digital recorder or volunteer, a student may be eligible for a staff note-taker/scribe. This accommodation will be determined on an individual basis. The student should contact and inform disability services regarding the cancellation of staff note-taker/scribe services. The staff note-taker/scribe will wait 15 minutes following the scheduled class start time. The staff note-taker/scribe will not remain in the classroom when the student is absent. If the student fails to arrive by the second class, the staff note-taker/scribe will assume that the student will be absent for the remaining classes. The student will be expected to obtain missed notes in the same manner as other students.

## Alternative Testing

Testing accommodations, based on disability documentation, may include extended time, reduced distraction environment, test scribe, test reader, computer use for written exams, enlarged print or use of a calculator.

The student is expected to make arrangements, at least two class days in advance, through the course instructor and office of accessibility. Actual test accommodations may be provided through disability services or the testing center based on the specific arrangements made by the student and course instructor. The instructor will be notified if the student is absent at the scheduled time.

## Accessible Materials

Students whose documentation supports an accommodation for printed material in an alternate format should contact the Office of Accessibility as soon as possible following registration. Availability of alternate format material may be limited and may require extended turnaround time, so students are encouraged to make a request for textbooks or other class-related materials well in advance. In converting printed text into an alternate form, disability services will try to honor the student's preference. However, depending on the time of the request, the availability of materials, the volume of materials, and the expected time for return, adjustments may be necessary. Such adjustment may include the student using appropriate assistive technology (CCTV or scan/reader computer software) available on campus.

Requests for accessible materials will be processed in the order in which they are received.

## Interpreters

Interpretation and transliteration services will be arranged for qualifying deaf and hard-of-hearing students for scheduled classes, labs, scheduled student activities, and appointments. Every attempt will be made to honor a student's communication preference; however, other arrangements may be made depending on the time of advanced notice and availability of interpreters.

Students must request services in advance to assure that services can be arranged. Students are asked to provide a three-week advance notice for scheduled classes and a one-week notice for scheduled activities or appointments.

Students who request interpreter services and plan to be absent or find that services are not needed must cancel arrangements immediately through the Office of Accessibility.

In the event of an unreported absence, the interpreter will wait 15 minutes following the scheduled class start time. The interpreter will not remain in the classroom when the student is absent. If the student fails to arrive by the second class, the interpreter will assume that the student will be absent for the remaining classes. The student will be expected to obtain materials in the same manner as other students.

If a student has three unreported absences in a given class, interpreter services may be terminated until the student meets with disability services. The student will be notified in writing.

Students should report any concern or problem involving an interpreter to disability services.

## Adaptive Equipment

Various adaptive equipment or software for on-campus use can be made available to qualified students as a part of a specific classroom accommodation plan. However, any prescriptive or personal devices, including those for home use, are the responsibility of the student.

As a part of the accommodation plan, the qualified student will be able to sign out equipment from the Office of Accessibility. Other equipment, such as software or modified keyboards, will be available in the assigned classroom or LRC as requested.

Every attempt will be made to provide appropriate training to enable the student effective utilization specific equipment or software. Such training will require active student participation, advance notice, and additional time on campus.

## Personal Services

### Personal Attendants

Students are responsible for providing for their own personal health and hygiene needs along with their mobility needs within the classroom and around campus.

Due to regulations and space limitations, personal attendants generally may not attend class with the registered student unless the accommodation is supported by disability documentation as a health/safety issue and is included in the student's accommodation plan.

### Attendance

The Office of Accessibility does not have a role in determining course attendance policies. Students are expected to attend scheduled classes regardless of their disability. Students may request that instructors be informed as to the legitimacy of disability-related absences, but such notification will not excuse or alter the course attendance policy.

Students anticipating absences should notify the course instructor in advance. Students are also responsible for all missed assignments and material.

### Tutoring Services

Tutorial services are scheduled in specific content areas campus-wide through academic programs as appropriate. Qualified students are encouraged to request accommodations in order to utilize those services.

Students are responsible for individual tutoring or individual instruction outside of the scheduled activities offered through academic programs.

### Parking

Accessible parking is available in accordance with state and federal regulations. Students are required to follow all appropriate regulations and to have a North Carolina-issued permit visible when parked in an accessible or handicapped space.

Accessible parking is available on a first-come, first-served basis.

Any student wishing to address accessible parking issues should contact disability services.

### Grievance Process

Students who experience a problem and/or feel unfairly treated should attempt to resolve the problem informally with the Office of Accessibility.

Concerns regarding a specific accommodation will be resolved with the involvement of the student and the appropriate instructor, program head, academic dean, academic vice president, and vice president of enrollment and the student experience. See the website for additional information: [www.rccc.edu/civility/student-grievance/](http://www.rccc.edu/civility/student-grievance/)

### Program Evaluation and Development

In consultation with faculty and staff, the Rowan-Cabarrus counseling staff will be responsible for evaluating services at Rowan-Cabarrus for students with disabilities and recommending changes in policies, procedures and services as appropriate.

The Rowan-Cabarrus counseling staff will provide guidance and support to both faculty and staff in providing services for students with disabilities.

The Rowan-Cabarrus counseling staff will provide in-service training and information to Rowan-Cabarrus faculty and staff as appropriate. Professional consultants in the area of services for students with disabilities may be utilized in specific cases and in staff development efforts.

For additional information and resources regarding disabilities for students in higher education, please see the following links:

[www.ahead.org/affiliates/north-carolina](http://www.ahead.org/affiliates/north-carolina)  
[www.ada.gov/](http://www.ada.gov/)  
[www.edpubs.gov/](http://www.edpubs.gov/)  
[www.disabilityresourcesnv.org/](http://www.disabilityresourcesnv.org/)

### Sex Offenders

Persons who are registered sex offenders are required by state and federal law to disclose to local law enforcement their interest in attending college, verifying the dates, times and locations of the coursework of interest. Offenders may or may not be permitted to enroll and register for courses pending approval of the local law enforcement agency. Offenders who fail to comply with the state and federal law will forfeit their educational opportunity with Rowan-Cabarrus even if otherwise qualified.

## Special Credit Students

Some students wish to register for credit courses, but do not intend to complete a degree, diploma, or certificate program. For instance, students who would like to take courses at Rowan-Cabarrus at the College over the summer. These students are registered as special credit students - no major declared. Tuition and fees are the same as for regularly enrolled program students. If these students later wish to apply credits earned toward a degree or diploma, they must declare a program/major at student services. A change in status must be submitted when the student has earned 18 semester hours (including a college-level English and math course) as a special credit student. If not already established, at the time a program is declared the student must meet all the regular admission requirements for the program of choice.

## Undocumented Persons

Individuals who are not documented are eligible to take most courses in Continuing Education, and any course in Adult Basic Education and ESL without any restrictions. Enrollment in college credit courses is limited by the following guidelines from the NC Legislature:

- Must pay out of state tuition for the coursework selected.
- Must register at the last hour assuming space is available. Documented students have first priority for seat availability in all curricula.

Federal law prohibits states from granting professional licenses to students that without legal resident status in the United States. Therefore, admission of undocumented persons to programs leading to a professional license are not permitted.

Undocumented students who are public high schools students enrolled in approved college credit programs through Career and College Promise programs are not subject to this NC statute.

### Deferred Action for Childhood Arrival students (DACA):

Students must be under the age of 35, residents of the U.S. for at least five years, have a high school diploma from public, private or home school, a GED or Adult high school diploma, and have entered the U.S. at age 15 or younger.

- Not eligible for In-state tuition rate.
- May register for classes at any time during the registration period.

Federal law prohibits states from granting professional licenses to students who do not have legal residence in the United States. Therefore, admissions to programs leading to a professional license are not permitted.

# Standards Governing Student Enrollment

## General Overview:

Students are both members of the external community, which includes Rowan-Cabarrus Community College, as well as members of the internal academic community of the college itself. As citizens of the external community, students are subject to all civil laws, the enforcement of which is the responsibility of civil authorities. As members of the academic community, students are subject to Rowan-Cabarrus Community College regulations and obligations. College students, as adults, are expected to exercise mature and responsible self-discipline, to behave with courtesy and integrity and to maintain appropriate academic standards as well as appropriate conduct standards. Failure to maintain required standards can lead to conditional enrollment or curtailment of enrollment. These standards and enrollment constraints are described in the following paragraphs:

## Student Agreement Regarding Internet Usage

Upon signing the college application, the student accepts and agrees to abide by the policy and responsibilities specified in Student Internet Acceptable Use Policy. Further, with this educational opportunity also comes responsibility, and the student concurs that:

- It is my responsibility to not reproduce or redistribute software and/or software keys licensed to Rowan-Cabarrus Community College.
- It is my responsibility to know and observe the acceptable use policies of external networks accessed via the Rowan-Cabarrus Internet connection.
- It is my responsibility to ensure that the performance of the Rowan-Cabarrus network is not degraded and that authorized users are not deprived of Internet and/or network resources or access by my activities. It is my responsibility to avoid the knowing or inadvertent spread of computer viruses.
- It is my responsibility to ensure that all copyright laws, including licensing restrictions, are honored. I understand that ownership of text, music, software, and other media is proprietary and, therefore, is protected to the full extent of the law and must be respected.
- It is my responsibility to not intentionally interfere with the normal operation of computer networks or illegally gain access (i.e., hack) to the networks and the information contained within the network resources or attached equipment.
- It is my responsibility to ensure that use of the network and Internet is consistent with student behavior and conduct guidelines and is not for personal financial gain.



- I understand and agree that Rowan-Cabarrus may inspect, monitor or disclose Internet, electronic mail, and/or network activities when required by and constituted by law when there is substantiated reason to believe that violations of any federal, state or local law or any violation of Rowan-Cabarrus Community College policies or procedures have taken place.
- It is my responsibility not to view, download, save, receive, or send material(s) related to or including:
  - Offensive content of any kind, including obscene material
  - Discrimination based on race, gender, national origin, age, marital status, sexual orientation, religion, or disability
  - Threatening or violent content or behavior
  - Illegal activities
  - Gambling
  - Personal financial gain
  - Forwarding email chain letters
  - Spamming email accounts from Rowan-Cabarrus email services or company machines
  - Dispersing corporate data to Rowan-Cabarrus customers or clients without authorization
  - Personal use that states or implies Rowan-Cabarrus sponsorship or endorsement of its message

Rowan-Cabarrus has the right to review any materials stored on any system provided by the college and to edit and remove any materials. I hereby waive any right which I may otherwise have in and to such materials.

## Student Agreement Regarding Testing Center Usage

Upon signing the college application, the student accepts and agrees to abide by the Student Testing Center Terms for Testing. Further, with this educational opportunity also comes responsibility, and the student concurs that:

- A valid photo ID is required for testing. Acceptable forms of ID include, but are not limited to; driver's license, student ID, passport, military ID, or other form of state or government issued identification.
- Students must know course name and number, instructor's name, and course type.

Students acknowledge that the Testing Centers are equipped with video surveillance equipment and they are being monitored and recorded while engaged in testing activities.

- Book bags, large purses, and coats are not permitted within the testing rooms. Students should not bring these items to the Testing Center. If the items are brought and will not fit in the secured locker, students can leave them in the Proctor area; however, the Testing Center staff is not responsible for security of these items.
- No electronic devices (cell phones, tablets, smart watches, etc.) are permitted within the testing rooms. Students with these devices will be required to place them in a secured locker while testing.
- No notes, books, or other supplemental materials will be permitted unless specifically stated on the instructor's "Conditions of Testing" form.

- No discussion or disruptive behavior of any type will be permitted in the Testing Centers.
- All tests will be taken in one sitting and returned to the Examiner/Proctor before leaving the Testing Center.
- The Examiner/Proctor may consult the Testing Director or security if suspicious or questionable behavior is observed. The rules of student behavior and sanctions also apply to the Academic Testing Center.
- See the Examiner/Proctor and/or the Testing Director if you have questions regarding this agreement or a testing concern before receiving the test.

## Campus Code of Conduct

[www.rccc.edu/civility/code-of-conduct/](http://www.rccc.edu/civility/code-of-conduct/)

### Campus Behavior Standards

The college reserves the right to maintain a safe and orderly educational environment for students and staff. Therefore, when in the judgment of college officials, a student/patron's conduct disrupts or threatens to disrupt the college community, appropriate disciplinary actions will be taken to restore and protect the well-being of the college community. Students are expected to conduct themselves in accordance with generally accepted standards of scholarship and morality. Community patrons are expected to conduct themselves in accordance with the accepted standards of good citizenship in the state of North Carolina. The purpose of this code is not to restrict student or patron's rights, but to protect the rights of individuals in their academic pursuits on the campus.

### 1. Academic Dishonesty

(a). Academic Integrity: The college prohibits taking or acquiring possession of any academic material (test information, research papers, notes, etc.) from a member of the college staff or another student without permission; receiving or giving help during tests; submitting papers or reports presented as the student's original work that are not entirely the student's own; not giving credit for others' work.

(b). Network Files: Rowan-Cabarrus network files are provided to students for academic work. These files are not private and are subject to review for compliance with the college's acceptable use policy for technology, the Digital Millennium Copyright Act of 1998, and general copyright law.

### 2. Behavior

(a). Indecent Conduct: The college prohibits disorderly, lewd, or indecent conduct, including public physical or verbal action; language commonly considered offensive (not limited to, but including profanity) or distribution of obscene or libelous written or electronic material.

(b).Violence: The College prohibits mental, psychological or physical abuse of any person (including sex misconduct offenses) on college premises or at college-sponsored or college-supervised functions, including verbal or physical actions that threaten or endanger the health or safety of any such persons or which promote hatred or prejudice. This includes fighting and or other disruptive behaviors, which includes any action or threat of action that endangers the peace, safety or orderly function of the college, its facilities or persons engaged in the business of the college.

(c). Harassment: The college prohibits any act, comment, behavior, or clothing that is of a sexually suggestive, harassing, offensive, or intimidating nature. The college prohibits stalking, or behavior in any way interferes with another student's rights or an employee's performance or creates an intimidating, hostile or offensive environment. (This includes the display or navigation to pornography or other inappropriate websites and materials.) Harassment allegations that suggest discrimination based on gender will be resolved using the Sexual Misconduct Procedure.

(d). Disruption: The College prohibits any intentional obstruction or interruption of teaching, research, administration, disciplinary proceedings or other college activities, including public service functions, and other duly authorized activities on college premises or at college-sponsored activity sites.

(e). Failure to Comply: Refusal to adapt one's behavior to instructions of college officials is prohibited. If, in the opinion of college officials, clothing or behaviors (including gang colors, signs or symbols) are threatening, intimidating or offensive in nature, sanctions may be imposed immediately.

### 3. Use of College Property

(a). Purposeful Use of Campus Facilities: The College prohibits loitering without educational purpose or goal; therefore, individuals must be engaged in purposeful acts on campus that meet educational goals or in appropriate recreational and extracurricular activities.

(b) Use by Unattended Minors: The College prohibits minors under the age of sixteen (16) from being on the campus unattended. Minors are not allowed in classrooms, labs, shops, learning resource center or other instructional areas without college authorization. Parents and guardians whether enrolled in college or as a community patron, must remain with the minor child at all times. Violators will be asked to leave the premises. Early College, emancipated minors and dual-enrolled students are exempt from this requirement.

(c) Theft and Damage: The College prohibits theft of, misuse of, or harm to college property, or theft of or damage to property of a member of the college community or a campus visitor on college premises or at a college function.

(d) Occupation or Seizure: The College prohibits occupation or seizure in any manner of college property, a college facility, or any portion thereof for a use inconsistent with prescribed, customary or authorized use.

(e). Presence on College Premises: The College prohibits unauthorized entry upon the college premises; unauthorized entry into a college facility or a portion thereof which has been restricted in use; unauthorized presence in a college facility after closing hours; or furnishing false information to gain entry on the college premises or into a college facility.

(f). Assembly: The College prohibits participation in or conducting an informal or formal unauthorized gathering in a manner that threatens or causes injury to persons or property or that interferes with free access to, ingress or egress of college facilities, that is harmful, obstructive, or disruptive to the educational process or institutional functions of the college; or remaining at the scene of such an assembly after being asked to leave by a college official.

(g). Fire Alarms: The College prohibits setting off a fire alarm or using or tampering with any fire safety equipment on college premises or at college-sponsored activity sites, except with reasonable belief in the need for such alarm or equipment. In the event of a fire alarm sounding, students MUST evacuate the building, unless otherwise directed by a college official.

(h). Emergency Phones: The College prohibits the misuse of the emergency phones in college hallways in making false reports of emergencies, disturbances, physical injury or illness of students, employees or college visitors requiring attention of campus security or off-campus emergency personnel. Students activating the emergency phone are required to give their full-name, nature of the emergency, exact location of the emergency and stay "on the line" with the college official until released. Exception: If the individual activating the emergency phone believes they are in imminent danger from another person, they should provide as much information as possible before leaving the phone in the connected position.

## 4. Drugs, Alcohol and Other Substances

(a). Drugs and Alcohol: Substances referred to under this policy include all illegal drugs, alcoholic beverages and misused legal drugs (both prescription and over the counter). The College prohibits possession or use of alcoholic beverages on college premises or at college-sponsored or supervised functions (including off-campus functions) unless otherwise permitted by a college administrator. The College prohibits being in a state of intoxication on college premises or at college-sponsored or supervised functions (including off-campus functions) or in a college-owned vehicle. The College prohibits possession, use, sale or distribution of any controlled substance, illegal drugs, or drug paraphernalia except as expressly permitted by law. Any influence which may be attributed to the use of drugs or of alcoholic beverages shall not be in any way limit the responsibility of the individual for the conduct or consequences of his/her actions.

(b). Tobacco and Food: The College prohibits eating and/or drinking in classrooms, shops, and labs or other unauthorized areas, unless otherwise permitted by college officials. The College prohibits use of tobacco products on campus, in college owned vehicles or in properties rented for the purpose of college use.

## 5. Weapons

The College prohibits possession, storage, use or threat of use of firearms, weapons, ammunition, incendiary devices or explosives on college premises or in personal vehicles parked on college premises or at college-sponsored activity sites. This also includes unauthorized use of any instrument capable of inflicting serious bodily injury to any person. Possession or use of firearms or other weapons on college premises for instructional purposes must have the prior approval of the academic vice president.

North Carolina General Statute 14-269.22 makes it unlawful for any person to possess or carry, whether openly or concealed any gun, rifle, pistol or any other weapon of like kind as defined by the statute. That statute overrides the North Carolina concealed weapons act. Violation of this regulation will result in immediate and permanent expulsion, exclusion from college premises and arrest.

## 6. Use of Technology

(a) Damage and Destruction: Destruction of or harm to equipment, software, or data belonging to the College or to others is considered unacceptable usage and is subject to disciplinary action. This may include altering, downloading, or installing software on college computers, tampering with computer hardware or software configuration, improper access to the college's network, and disconnection of college computers or devices. Refer to the college Internet and network services policy.

(b) Electronic Devices: Unless otherwise permitted by college officials, the College prohibits use of electronic devices in classrooms, labs and other instructional, event, or support facilities. Such devices include, but are not limited to cell phones, texting devices, beepers, walkie-talkies, cameras, I-Pods, MP3 players or other electronic devices that may cause unnecessary disruption to the teaching/learning process. All electronic devices must be turned off in the classroom, labs or other instructional support areas. Cameras, camera phones or other visual recording devices may not be used in restrooms, locker rooms, changing facilities or other areas where personal privacy is a reasonable expectation.

## 7. Gambling and Gaming

The College prohibits gambling in any format on the campus. Rowan-Cabarrus also prohibits competitive, unstructured competitive gaming that fosters disruptive behavior. This includes participating on college premises or at college sponsored activity sites in an activity where making a set wager or playing for money or material is involved.

## 8. Forgery

The College prohibits forgery, alteration, duplication, or misuse of college documents, records, computers or instruments of identification with intent to deceive.

## 9. Financial Irresponsibility

The College prohibits failure to pay college-levied charges, fees or fines, failure to repay college-funded loans, the passing of worthless checks to college officials or any fraudulent action when transacting business with the college or third party agent contracted by the college to provide services for students (i.e. bookstore, food service, e-cashiering).

## 10. Disciplinary Probation

The College prohibits violation of the terms of disciplinary probation during the period of probation. Additional violations of any college regulation during the probationary period will result in immediate review for additional sanctions.

## 11. Violation of Rowan-Cabarrus Policy, Rule or Regulation

The College prohibits violation of any Rowan-Cabarrus policy, rule or regulation published in hard copy or available electronically on the Rowan-Cabarrus website: ([www.rccc.edu](http://www.rccc.edu)).

## 12. Violation of Law

The college prohibits violation of any federal, state or local law.



# Sexual Misconduct and Title IX

Rowan-Cabarrus Community College is committed to providing a safe and equitable learning environment for all students and employees. Sexual misconduct, including both sexual harassment and sexual violence, is a form of sexual discrimination prohibited by Rowan-Cabarrus and Title IX (Title IX of the Education Amendments of 1972).

Sexual misconduct may include, but is not limited to, sexual non-verbal gestures or noises; sexual comments; sex/gender-based harassment; sexual exploitation; stalking; non-consensual sexual touching; relationship violence (domestic and dating violence); and/or sexual violence.

If you have experienced sexual misconduct or sexual discrimination, you should report or seek assistance as soon as possible. We recognize that deciding whether to make a report and choosing how to proceed are personal decisions that may evolve over time. At the time a report is made, you do not have to decide whether to request a particular course of action. In addition, you do not need to be certain whether an incident is defined as sexual misconduct. Again, our goal is to provide a safe learning environment for all.

Rowan-Cabarrus encourages all individuals to report sexual misconduct promptly through any of the follow avenues:

Title IX Coordinator	Kathy Hall	704-216-3468
Deputy IX Coordinators	Lisa Shores	704-216-3693
	Nekita Eubanks	704-216-3778
	Steve Cathcart	704-216-3777

Online Reporting Form: [www.rccc.edu/civility/title-ix-sexual-misconduct/](http://www.rccc.edu/civility/title-ix-sexual-misconduct/)

Navigation Station	704-216-7222
Campus Security	704-216-7600
Director of Campus Safety and Security	704-216-7230
Any College Employee (Faculty or Staff)	Any College Employee (Faculty or Staff)

Students may also report anonymously through the Rowan-Cabarrus Director of Campus Security.

Students need to be aware that any Rowan-Cabarrus employee receiving information regarding sexual misconduct is expected to notify a Title IX Coordinator. Only those designated as a campus confidential resource are exempt from reporting. The following are designated as confidential resources on campus:

Misty Moler, Assistant Director of Student Support Services, Student Wellness Center (misty.moler@rccc.edu, 704-216-3623)  
 Joanne Rusnak, Office of Accessibility (joanne.rusnak@rccc.edu, 704-216-3613)  
 Holly Wagoner, Office of Accessibility (holly.wagoner@rccc.edu, 704-216-3639)

Rowan-Cabarrus prohibits any form of retaliation against the person filing a report or against anyone associated with the report. Any form of retaliation is considered a violation under Title IX and Campus Sexual Misconduct and Interpersonal Violence Procedure.

The Campus Code of Conduct and the Campus Sexual Misconduct and Interpersonal Violence Procedure apply to all students, employees and visitors engaged in college activities either on-campus or off-campus. Please refer the college website ([www.rccc.edu](http://www.rccc.edu)) to review.

Rowan-Cabarrus encourages all community members to assist in the reduction of sexual misconduct and relationships violence through exercising safe and creative intervention strategies rather than standing aside as passive bystander. Safe strategies include watching out for your friends and classmates; believing someone if they tell you that they have experienced sexual misconduct; reporting an incident you witness; and, if needed, calling 911 or campus security.

## Disciplinary Actions & Sanctions

Violation of the Campus Code of Conduct, or of Rowan-Cabarrus policies, or of North Carolina and federal laws while on campus or while off campus when participating in activities sponsored by Rowan-Cabarrus, subjects violators to appropriate sanctions. The Associate Chief Officer of Civility (or designee) to determine whether the charges are significant or whether they may be dropped or informally resolved will investigate charges that a student has violated behavior standards.

Charges that a student has violated an academic standard will be investigated by the appropriate dean to determine if the charges are significant, whether the charges will be dropped or informally resolved.

Charges that a community patron has violated the Campus Code of Conduct will be investigated by the director of campus safety and security (or designee) to determine if the charges are significant, inform the patron and appropriate administrative unit of any restrictions imposed and notify campus security of any additional action to be taken.

### Procedures for Disciplinary Actions:

This section describes the College disciplinary procedures in response to violations of the Campus Code of Conduct. The Associate Chief Officer of Civility (or Designee) is responsible for implementing student disciplinary procedures.

**Disposition of Disciplinary Cases:**

The following section outlines the procedure for handling student disciplinary cases in accordance with due process and justice.

**Charges:** Any member of the College community may file charges with the vice president of enrollment management and the student experience against any student for violation of the College regulations. The individual(s) making the charge must complete a charge form stating:

- The name(s) of the student(s) involved
- The alleged provision of the Campus Code of Conduct, college regulation, state or federal law that has been violated.
- The date, time and location of the incident
- The names of students or staff directly involved or who witnessed the infractions, and
- The actions taken by the complainant related to the incident.
- The desired solution(s).

The completed charge form (written or electronic) with the printed name and signature of the person filing the charge should be forwarded directly to the vice president of enrollment management and the student experience.

**Investigation and Decision:** Within five (5) business days after the charge is filed, the vice president (or dean) shall complete a preliminary investigation of the charge, and the schedule a meeting with the student(s) alleged to be in violation. After meeting with the student(s) to review the alleged infraction(s) one of the following actions will be taken:

- Drop the charge(s)
- Impose a sanction consistent with those listed below
- Refer the student(s) to a college office or community agency for services

**Notifications:** The decision of the vice president (or dean) shall be presented to the student in writing or mailed within five (5) business days. In instances where the student cannot be reached to schedule an appointment or where the student refuses to cooperate, the vice president (or dean) shall send a certified letter to the student's last known address providing the student with a list of charges, the decision, and instructions governing the appeals process.

**Immediate Interim Suspension:**

This procedure can be invoked by any college official for any student who has been involved in conduct that threatens the health or well-being of any member of the college community or disrupts the function or good order of the college or college premises. The college official must advise the student that failure to cease and desist will result in immediate interim suspension. If the student fails to cease and desist, the college official may invoke the interim suspension until disciplinary proceedings are completed. College officials may contact college security officers to have the student removed from campus. Once interim suspension has been invoked by a college official, a written report must be filed with the vice president of enrollment management and the student experience.

The report must detail the individual(s) involved and the nature of the infraction with supporting information. It must include other students or employees who observed the incident. The report must be filed immediately, but not more than two (2) working days after the incident. Incidents in the classroom should be reported to the program head and dean of the division by the instructor involved.

The vice president of enrollment management and the student experience will notify the student in writing of the interim suspension and the reasons for the suspension. The notice will include a description of disciplinary procedures including the time, date and location of any subsequent hearing. The procedural timeline outlined in a subsequent section will be followed by the college to resolve the pending matter.

Interim suspension may result in continued exclusion (beyond the incident date) from class and or other privileges including presence on college property or college sponsored activities until a final decision has been made concerning the alleged conduct violation.

**Verbal Warning (reprimand)**

A verbal communication given to the student or patron by a college agent to cease a behavior or action deemed inappropriate, or possibly a violation of the Campus Code of Conduct. The issuing college official should document the issuing of a verbal warning, including the incident and the student/patron name.

**Written Warning (reprimand)**

A written communication that gives official notice to the student/patron regarding the offense noted and that any subsequent offense of the Campus Code of Conduct will carry heavier penalties because of the prior infraction.

**Interim Suspension**

Exclusion from class or other privileges or activities as set forth in the notice, until a final decision has been made concerning the alleged violation.

**General Probation**

A minor disciplinary offense may result in a penalty that allows the student to show the willingness and capacity to observe the Campus Code of Conduct without further penalty. If a second penalty occurs during the probationary period, further action can be taken. The probationary period can be in effect for no more than 2 academic terms.

## Restrictive Probation

A major disciplinary offense or series of violations may result in a loss of good standing and a matter of official record (transcript notation) denoted by this sanction. Restrictive probation limits the student /patron's activity on the campus and within the college community. The student cannot be initiated into any local or national organization, receive any college award or recognitions, occupy a position of leadership or travel with any college student organization. Further, the college may restrict the student /patron's access to campus or use of campus services and facilities. Restrictive probation is for a period of not less than 2 academic terms. Any violation of Restrictive Probation orders may result in immediate suspension.

## Restitution

If an individual student or visitor to the campus damages, misuses, destroys or otherwise causes loss of property belonging to the college, college personnel, another student or a contract agent of the college, the College can seek monetary restitution for the damages.

## Loss of Academic Credit or Grade

Students in violation of the academic integrity section may be sanctioned by loss of academic credit, withholding grade reports, diplomas, degrees, or the opportunity to register or participate in graduation ceremonies.

When financial obligations to the College are not met, grade reports and transcripts may be withheld.

## Suspension

Exclusion from class(es) or all other privileges or activities of the college for a specified period. Reserved for offenses that warrant discipline more severe than probation or for repeated misconduct. Students receive this sanction must get specific written permission from the vice president before returning to campus.

## Expulsion

Dismissing a student or patron from campus for an indefinite period. Loss of student/patron status means that the individual will not be permitted on the college property, may not register for any course (basic skills, curriculum, or continuing education, occupational/corporate) and may not participate as a citizen in any college sponsored event. The individual may be readmitted to the college only with the approval of the vice president of enrollment management and the student experience or the academic vice president.

## Appeal of Disciplinary Sanctions

The disciplinary decision of the vice president of enrollment management and the student experience or academic dean must be presented to the student in writing within five (5) working days after the charge is investigated. If a disciplinary sanction is imposed, the student may appeal the decision as follows:

The student must submit the appeal in writing within five (5) working days to the associate vice president of enrollment management and the student experience. The appeal must include the student's reason for appeal, mitigating circumstances or evidence that needs to be considered. The associate vice president and respective dean will render a decision and will notify the student of the decision within five (5) working days of receipt of the appeal.

Further appeals of disciplinary sanctions must be made in writing within five (5) working days of receipt of the associate vice president decision. Appeals are made to the student appeals committee through the director of counseling, the student appeals committee consists of 2 faculty, 2 staff and 1 student who render a decision based on the written appeal submitted. The decision of the committee will be submitted in writing to the student within five (5) days. The decision of the student appeals committee is final except in the case of expulsion.

Final appeal regarding expulsion may be issued to the president within five (5) working days of receipt of the committee decision to support the disciplinary sanction of expulsion. The president may solicit evidence and information regarding the student case, appeal proceedings, recommendations of the student appeals committee and take any other steps deemed appropriate before rendering a decision as soon as possible but not more than ten (10) days from the date received. In the event that a suspension or expulsion is issued, campus security will be notified.

## Appeal of Financial Obligations to the College

Students who want to appeal disciplinary action related to violation of financial indebtedness to the college must do so through the chief financial officer of the college (or designee) until the matter is submitted to local and state legal authorities.



## Student Grievances

Any student may request a review of any college decision or action alleged to be discriminatory or have a negative effect on the student's enrollment status at Rowan-Cabarrus Community College. Students must follow the procedure noted below and may request consultation assistance from student services. A grievance must be presented within 30 days after the action or decision being in question. Processing at each step cannot exceed 30 working days; however, the time may be extended by agreement of both parties or by extenuating circumstances as decided by the administrator to whom the grievance is presented. If the administrator at each step does not meet processing time limitations, the grievant may then request higher administrative assistance in obtaining requested relief. If the grievant does not meet the stated time limitations, the process will be terminated and such grievance cannot be resubmitted.

The student shall first informally discuss the matter in question with the college employee most directly involved unless the issue is a claim of discriminatory harassment. In that case, the student may move directly to the employee's immediate administrator or student services counselor.

If the student is unable to resolve the matter in question through discussion with the college employee directly involved, the student may file a formal grievance form with the employee's immediate administrator. All such grievances shall be in writing and state the basic facts in the case.

If the matter is not resolved, the formal appeal may be processed through the employee's supervising administrators in succession until a satisfactory resolution is obtained or until the appeal reaches the appropriate vice president. The vice president's decision will be final except in the case of expulsion from the college that requires a final ruling by the president.

A student may at any stage of the process consult with the associate vice president for student services to obtain advice regarding the grievance procedure.

[www.rccc.edu/civility](http://www.rccc.edu/civility)

## Campus Safety Information

### Campus Communication & Safety Information

The following sections address the college procedures related to communication, inclement weather, safety and security

### Campus Identification Cards (IDs)

Campus ID cards are multifunctional cards providing access to LRC services and printing in addition to being a key component of campus safety. College students and employees are required to have Campus Identification Cards and be able to produce these on demand of any college security/safety officer or any college administrator. College IDs are produced in the College's Navigation Station (Customer Service) during the semester.

### College Communication Tools

Rowan-Cabarrus has several methods of communicating with students and employees: college website, college email accounts, WebAdvisor, Campus Connect messaging which includes text, email or phone message capabilities. Students and employees are responsible for providing current contact information (including emergency contacts) to insure that correct phone and mailing addresses are available to the college.

Rowan-Cabarrus Email Accounts are assigned to students and employees. The college email account is used for all written communication between service offices and students and employees, including notices of special events, registration, end of semester activities, and updates. College email addresses are assigned once the college application has been processed. For more information about your college email account, use the following website address: <http://email.rccc.edu/student/>.

Campus Connect messaging is a multi-functional system used by the college administration to notify students of college closing, safety concerns, and other time sensitive information. The phone numbers and emails used by this system are provided by the student or employee on the enrollment application or employment application. Students and employees are responsible for keeping their mailing address, phone number(s) and alternative email and other contact information current. Updates must be submitted to student services.

Campus Speaker Systems are available on South Campus and CBTC. These systems are used to make announcements related to drills, security concerns and safety issues.

WebAdvisor is a multifunctional tool for students and employees. Students use Web Advisor as a part of the Registration Tool. Students may search course offerings, register for class sections, drop/add classes sections, view/print your current schedule, make an address and/or phone number change, view grades at the end of each semester, print unofficial transcript and view financial accounts with the college. Employees also have WebAdvisor accounts that will be increasingly important as the college continues to grow.

## Safety and Security

The security department consists of professionally trained members of the respective county or municipal law enforcement or security agency. Security staff safeguards and serves our campus community. Security is responsible for the flow of traffic on campus, building security and enforcement of traffic and parking regulations. Uniformed law enforcement officers have the authority to arrest.

Emergency Instruction Documents are available in every classroom, conference room, office and student use space (i.e., LRC, Student Center). These provide basic information related to action students, faculty and staff could take during a campus emergency.

## Campus Emergency Responders

The Campus First Response Team is responsible for responding to all emergencies on campus. This group consists of the Campus Emergency Operations Administrator, Campus Building Safety Coordinators, Campus Security Officers and Campus Facilities Maintenance Staff. The team will manage all emergencies until public first responders arrive.

## Reporting Emergencies Occurring on Campus

Call 9-1-1 for life threatening emergencies and 704-216-7600 for non-life threatening urgent matters.

Emergency Call Stations are located on each floor in every building at all campus locations, as well as some parking lots and on some sidewalk areas on each campus. Emergency Call Stations are for the reporting of life-threatening situations, severe illnesses or injuries. These boxes are operational 24/7. College security and emergency response staff will respond to the Emergency Call Station location and locate the person(s) who activate the call box.

Security personnel are on campus to serve and protect employees and students. We urge you to report any suspicious persons or anything out of the ordinary in the buildings or parking lots to a security officer or the switchboard. Upon request, security personnel will escort you to your vehicle for added protection.

[www.rccc.edu/safety](http://www.rccc.edu/safety)

Monthly crime logs are provided by Campus Security and Safety and posted on the RCCC website: [www.rccc.edu/safety/safety-security-crime-log](http://www.rccc.edu/safety/safety-security-crime-log)

## Campus Sex Crimes Prevention Disclosure:

The “Campus Sex Crimes Prevention Act” is a federal law that requires institutions of higher education to issue a statement, in addition to other disclosures required under the act, advising the campus community where law enforcement agency information provided by a state concerning registered sex offenders may be obtained. It also requires sex offenders already required to register in a state to provide notice, as required under state law, of each institution of higher education in that state at which the person is employed, carries on a vacation, or is a student.

Information regarding individuals on the registered sex offenders’ list can be obtained from the local sheriff’s office.

Rowan County Sheriff’s Office:  
[www.rowancountync.gov/485/Sheriffs-Office](http://www.rowancountync.gov/485/Sheriffs-Office)

Rowan-Cabarrus Community College’s South Campus and Concord Business and Technology Center (CBTC) are located in Cabarrus County.

Cabarrus County Sheriff’s Office:  
<http://www.cabarruslaw.us/>

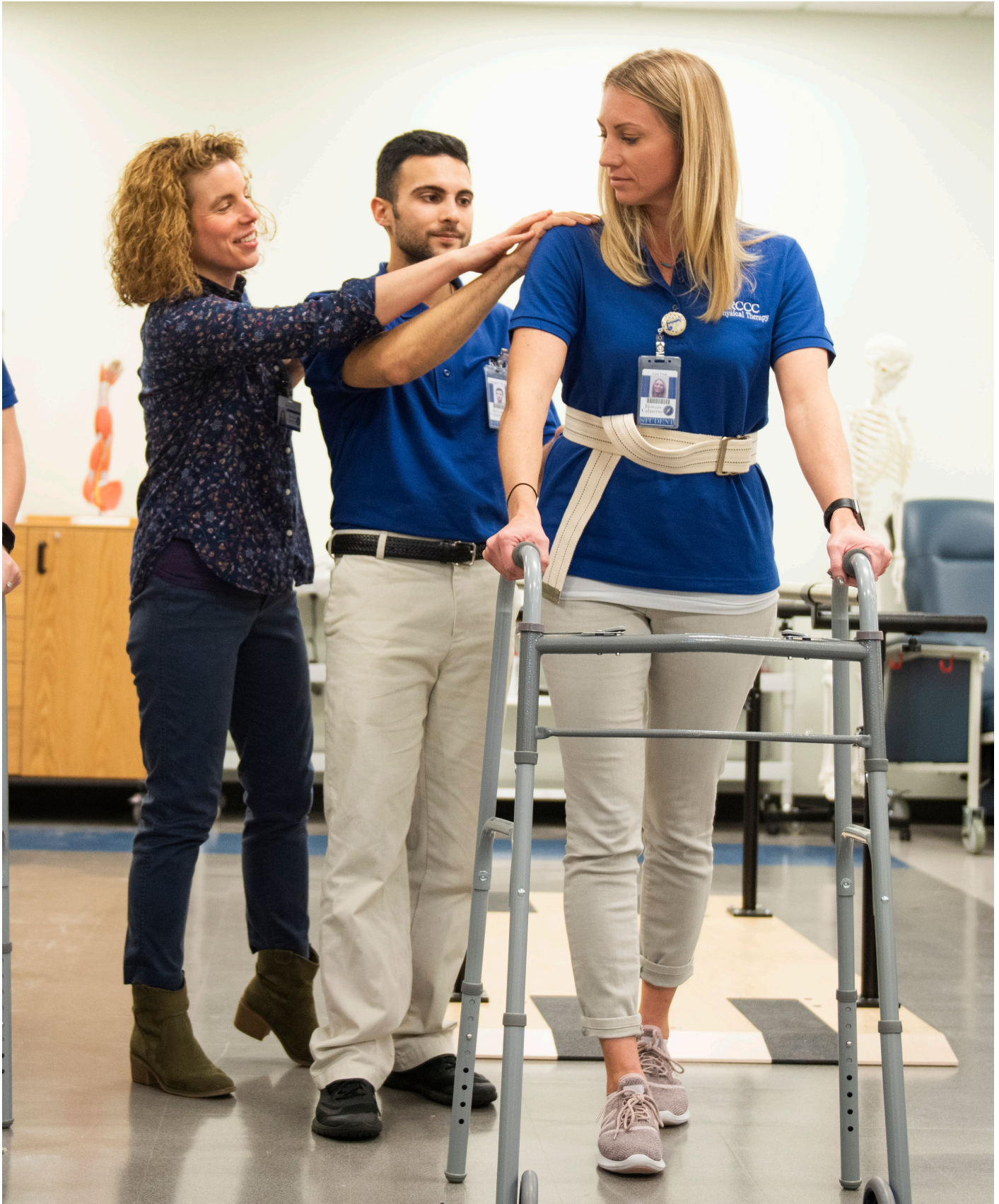
North Carolina Public Safety: [www.ncdps.gov](http://www.ncdps.gov)

This website provides access to search offender information about the offense committed; the county the offense was committed, the date of admission to a correctional facility, and the offender’s status and release date.





# Programs of Study



## Humanities and Fine Arts Electives for Associate in Applied Science and Diploma Programs

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ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
ART 121	<u>Two-Dimensional Design</u>	3
ART 131	<u>Drawing I</u>	3
ART 132	<u>Drawing II</u>	3
ART 240	<u>Painting I</u>	3
ART 241	<u>Painting II</u>	3
ART 244	<u>Watercolor</u>	3
ART 261	<u>Photography I</u>	3
ART 262	<u>Photography II</u>	3
ART 266	<u>Videography I</u>	3
ART 281	<u>Sculpture I</u>	3
ART 283	<u>Ceramics I</u>	3
ART 288	<u>Studio</u>	3
DRA 111	<u>Theatre Appreciation</u>	3
DRA 126	<u>Storytelling</u>	3
DRA 130	<u>Acting I</u>	3
ENG 125	<u>Creative Writing I</u>	3
• ENG 131	<u>Introduction to Literature</u>	3
• ENG 231	<u>American Literature I</u>	3
• ENG 232	<u>American Literature II</u>	3
• ENG 241	<u>British Literature I</u>	3
• ENG 242	<u>British Literature II</u>	3
• ENG 261	<u>World Literature I</u>	3
• ENG 262	<u>World Literature II</u>	3
• ENG 272	<u>Southern Literature</u>	3
• ENG 273	<u>African-American Literature</u>	3
• ENG 274	<u>Literature by Women</u>	3
HUM 110	<u>Technology and Society</u>	3
HUM 115	<u>Critical Thinking</u>	3
HUM 120	<u>Cultural Studies</u>	3
HUM 121	<u>The Nature of America</u>	3
HUM 122	<u>Southern Culture</u>	3
HUM 130	<u>Myth in Human Culture</u>	3
HUM 160	<u>Introduction to Film</u>	3
HUM 170	<u>The Holocaust</u>	3
HUM 212	<u>Humanities II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 210	<u>History of Rock Music</u>	3
PHI 210	<u>History of Philosophy</u>	3
PHI 221	<u>Western Philosophy II</u>	3
PHI 230	<u>Introduction to Logic</u>	3
PHI 240	<u>Introduction to Ethics</u>	3



## Social and Behavioral Science Electives for Associate in Applied Science and Diploma Programs

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ANT 210	<u>General Anthropology.</u>	3
ANT 220	<u>Cultural Anthropology.</u>	3
ANT 230	<u>Physical Anthropology.</u>	3
ANT 230A	<u>Physical Anthropology Lab</u>	1
ANT 240	<u>Archaeology.</u>	3
ANT 240A	<u>Archaeology Field Lab</u>	2
ECO 151	<u>Survey of Economics</u>	3
ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
GEO 111	<u>World Regional Geography.</u>	3
GEO 112	<u>Cultural Geography.</u>	3
GEO 130	<u>General Physical Geography.</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 122	<u>Western Civilization II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
HIS 162	<u>Women and History.</u>	3
HIS 163	<u>The World Since 1945</u>	3
HIS 221	<u>African-American History.</u>	3
HIS 226	<u>The Civil War</u>	3
HIS 236	<u>North Carolina History.</u>	3
POL 120	<u>American Government</u>	3
POL 130	<u>State &amp; Local Government</u>	3
POL 220	<u>International Relations</u>	3
PSY 110	<u>Life Span Development</u>	3
PSY 118	<u>Interpersonal Psychology.</u>	3
PSY 150	<u>General Psychology.</u>	3
PSY 211	<u>Psychology of Adjustment</u>	3
PSY 237	<u>Social Psychology.</u>	3
PSY 239	<u>Psychology of Personality.</u>	3
PSY 241	<u>Developmental Psychology.</u>	3
PSY 243	<u>Child Psychology.</u>	3
PSY 246	<u>Adolescent Psychology.</u>	3
PSY 249	<u>Psychology of Aging</u>	3
PSY 259	<u>Human Sexuality.</u>	3
PSY 263	<u>Educational Psychology.</u>	3
PSY 275	<u>Health Psychology.</u>	3
PSY 281	<u>Abnormal Psychology.</u>	3
SOC 210	<u>Introduction to Sociology.</u>	3
SOC 213	<u>Sociology of the Family.</u>	3
SOC 220	<u>Social Problems</u>	3
SOC 230	<u>Race and Ethnic Relations</u>	3
SOC 234	<u>Sociology of Gender</u>	3



SOC 240	<u>Social Psychology</u>	3
SOC 242	<u>Sociology of Deviance</u>	3
SOC 250	<u>Sociology of Religion</u>	3
REL 110	<u>World Religions</u>	3
REL 211	<u>Introduction to Old Testament</u>	3
REL 212	<u>Introduction to New Testament</u>	3

ENG courses denoted with the • symbol require a prerequisite or corequisite of ENG 112, ENG 113 or ENG 114. Automotive Systems Technology (A60160), Computer-Integrated Machining Diploma (D50210), Cosmetology (A55140), and Radiography (A45700) do not require ENG 112, ENG 113 or ENG 114 in their program of study. Therefore, these ENG courses will not satisfy the Humanities and Fine Arts requirement for these programs. Early Childhood Education (A55220) does not accept any ENG courses for the Humanities and Fine Arts requirement.

## Accounting and Finance (25800) CIP 52.0304

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### Description

The Accounting and Finance curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting and finance profession. Accountants and finance professionals assemble and analyze, process, and communicate essential information about financial operations.

Course work may include accounting, finance, ethics, business law, computer applications, financial planning, insurance, marketing, real estate, selling, and taxation. Related skills are developed through the study of communications, computer applications, financial analysis, critical thinking skills, and ethics.

Graduates should qualify for entry-level accounting and finance positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies.

### Awards

- Associate in Applied Science Degree (A25800)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/02/26/associate-in-applied-science-degree-a25800/>)
- CPA Exam Diploma (D25800FT)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/02/26/cpa-exam-diploma-d25800ft/>)
- Diploma (D25800) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/30/diploma-d25800/>)
- Government Certificate (C25800GT)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/11/30/government-certificate-c25800gt-2/>)
- Insurance Certificate (C25800IN)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/08/30/insurance-certificate-c25800in/>)
- Services Certificate (C25800FS)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/08/25/services-certificate-c25800fs/>)
- Tax Certificate (C25800XT) (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/tax-certificate-c25800xt/>)

### Contact Information

The Accounting and Finance (25800) CIP 52.0304 program is in the RCCC Department of Business, Engineering Technologies and Public Services ([industrialengineering/](http://industrialengineering/)). For additional information regarding this program, contact the chair, Garland Fulp ([garland.fulp@rccc.edu](mailto:garland.fulp@rccc.edu) (<mailto:garland.fulp@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

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## Martha Cranford

Instructor in Academic Programs[+]

✉ martha.cranford@rccc.edu  
(mailto:martha.cranford@rccc.edu)

☎ (704) 216-3754

📍 North

## Pamela Vest

Instructor in Academic Programs[+]

✉ pamela.vest@rccc.edu  
(mailto:pamela.vest@rccc.edu)

## Chad Nichols

Instructor in Academic Programs[+]

✉ chad.nichols@rccc.edu  
(mailto:chad.nichols@rccc.edu)

☎ (704) 216-3836

📍 North

## Nasrin Nazemzadeh

Instructor in Academic Programs[+]

✉ nasrin.nazemzadeh@rccc.edu  
(mailto:nasrin.nazemzadeh@rccc.edu)

☎ (704) 216-3899

📍 South

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).



## Accounting and Finance (25800) CIP 52.0304

### Associate in Applied Science Degree (A25800)

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#### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• ACC 120	<u>Principles of Financial Accounting</u>	4
• BUS 115	<u>Business Law I</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4

**Total SHC 16-17**

#### First Year Spring

• ACC 121	<u>Principles of Managerial Accounting</u>	4
• ACC 129	<u>Individual Income Taxes</u>	3
• ACC 150	<u>Accounting Software Applications</u>	2
• ACC 220	<u>Intermediate Accounting I</u>	4

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3

**Total SHC 16**

#### Second Year Fall

ACC 221	<u>Intermediate Accounting II</u>	4
ACC 225	<u>Cost Accounting</u>	3
— —	Major Electives	3

Take one of the following finance courses.

BUS 125	<u>Personal Finance</u>	3
BUS 225	<u>Business Finance</u>	3

Take one of the following social/behavioral sciences courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

**Total SHC 16**

#### Second Year Spring

•	ACC 149	<u>Intro to ACC Spreadsheets</u>	2
—	—	<u>Humanities/Fine Arts Elective</u>	3
—	—	Major Electives	8

Take one of the following economics courses.

•	ECO 251	<u>Principles of Microeconomics</u>	3
•	ECO 252	<u>Principles of Macroeconomics</u>	3

**Total SHC 16**

## Major Electives

Take 11 SHC from the following courses. This may include up to 3 SHC from the WBL course/combination of courses.

ACC 132	<u>NC Business Taxes</u>	2
ACC 140	<u>Payroll Accounting</u>	2
ACC 175	<u>Hotel and Restaurant Accounting</u>	4
ACC 215	<u>Ethics in Accounting</u>	3
ACC 227	<u>Practices in Accounting</u>	3
ACC 240	<u>Gov &amp; Not-For-Profit Acct</u>	3
ACC 250	<u>Advanced Accounting</u>	3
ACC 268	<u>Information Systems &amp; Internal Controls</u>	3
ACC 269	<u>Auditing &amp; Assurance Services</u>	3
BAF 143	<u>Financial Planning</u>	3
BUS 125	<u>Personal Finance</u>	3
BUS 137	<u>Principles of Management</u>	3
BUS 147	<u>Business Insurance</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 225	<u>Business Finance</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 260	<u>Business Communication</u>	3
CTS 130	<u>Spreadsheet</u>	3
DBA 110	<u>Database Concepts</u>	3
ECM 210	<u>Introduction to E-Commerce</u>	3
INS 121	<u>Life Insurance</u>	3
INS 122	<u>Accident and Health Insurance</u>	3
INS 125	<u>Risk Management</u>	3
INS 127	<u>Claims Adjusting</u>	3
INS 128	<u>Med Sup/Long-Term/Estate Plan</u>	3
INT 110	<u>International Business</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64-65*

## Accounting and Finance (25800) CIP 52.0304 CPA Exam Diploma (D25800FT)

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### First Year Fall

• ACC 120	<u>Principles of Financial Accounting</u>	4
• BUS 115	<u>Business Law I</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>10</b>

### First Year Spring

• ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 129	<u>Individual Income Taxes</u>	3
ACC 220	<u>Intermediate Accounting I</u>	4
ACC 269	<u>Auditing &amp; Assurance Services</u>	3
<b>Total SHC</b>		<b>14</b>

Note ACC 220 will be taught in the first 8-week term and ACC 269 will be taught in the second 8-week term.

### Second Year Fall

ACC 221	<u>Intermediate Accounting II</u>	4
ACC 225	<u>Cost Accounting</u>	3
ACC 240	<u>Gov &amp; Not-For-Profit Acct</u>	3
ACC 250	<u>Advanced Accounting</u>	3

Take one of the following social/behavioral sciences courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

**Total SHC 16**

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 40*

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Accounting and Finance (25800) CIP 52.0304 Diploma (D25800)

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### First Year Fall

• ACC 120	<u>Principles of Financial Accounting</u>	4
• BUS 115	<u>Business Law I</u>	3
BUS 137	<u>Principles of Management</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>16</b>

### First Year Spring

• ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 129	<u>Individual Income Taxes</u>	3
ACC 140	<u>Payroll Accounting</u>	2
ACC 149	<u>Intro to ACC Spreadsheets</u>	2
ACC 150	<u>Accounting Software Applications</u>	2
ACC 220	<u>Intermediate Accounting I</u>	4
<b>Total SHC</b>		<b>17</b>

### Second Year Fall

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3

Take one of the following social/behavioral sciences courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 39*

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Accounting and Finance (25800) CIP 52.0304

### Government Certificate (C25800GT)

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#### First Year Fall

ACC 120	<u>Principles of Financial Accounting</u>	4
ACC 132	<u>NC Business Taxes</u>	2
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 220	<u>Intermediate Accounting I</u>	4
<b>Total SHC</b>		<b>8</b>

#### First Year Summer

ACC 240	<u>Gov &amp; Not-For-Profit Acct</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Accounting and Finance (25800) CIP 52.0304 Insurance Certificate (C25800IN)

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### First Year Fall

INS	121	<u>Life Insurance</u>	3
INS	122	<u>Accident and Health Insurance</u>	3
<b>Total SHC</b>			<b>6</b>

### First Year Spring

INS	125	<u>Risk Management</u>	3
INS	127	<u>Claims Adjusting</u>	3
INS	128	<u>Med Sup/Long-Term/Estate Plan</u>	3
<b>Total SHC</b>			<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Accounting and Finance (25800) CIP 52.0304

### Services Certificate (C25800FS)

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#### First Year Fall

ACC 120	<u>Principles of Financial Accounting</u>	4
BUS 125	<u>Personal Finance</u>	3
<b>Total SHC</b>		<b>7</b>

#### First Year Spring

BAF 143	<u>Financial Planning</u>	3
BUS 147	<u>Business Insurance</u>	3
BUS 225	<u>Business Finance</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Accounting and Finance (25800) CIP 52.0304

### Tax Certificate (C25800XT)

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#### First Year Fall

ACC 120	<u>Principles of Financial Accounting</u>	4
ACC 129	<u>Individual Income Taxes</u>	3
ACC 132	<u>NC Business Taxes</u>	2
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 140	<u>Payroll Accounting</u>	2
ACC 150	<u>Accounting Software Applications</u>	2
<b>Total SHC</b>		<b>8</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Accounting and Finance \(25800\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Advertising and Graphic Design (30100) CIP 50.0402

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### Description

The Advertising and Graphic Design curriculum is designed to provide students with knowledge and skills necessary for employment in the graphic design profession which emphasizes design, advertising, illustration, and digital and multimedia preparation of printed and electronic promotional materials.

Students will be trained in the development of concept and design for promotional materials such as newspaper and magazine advertisements, posters, folders, letterheads, corporate symbols, brochures, booklets, preparation of art for printing, lettering and typography, photography, and electronic media.

Graduates should qualify for employment opportunities with graphic design studios, advertising agencies, printing companies, department stores, a wide variety of manufacturing industries, newspapers, and businesses with in-house graphics operations.

### Awards

- Associate in Applied Science Degree (A30100) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/10/associate-in-applied-science-degree-a30100/>)
- CCPP Certificate (C30100PB) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/12/ccpp-certificate-c30100p/>)
- Certificate (C30100) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/12/advertising-and-graphic-design-certificate-c30100/>)

### Additional Information

The Associate in Fine Arts in Visual Arts degree program and the Advertising and Graphic Design degree program share facilities and equipment. Most of the Graphic Design (GRD) courses are taught in the iMac Digital Studio using the osX platform. The Adobe Creative Cloud Design Suite is also used.

Jenn Selby serves as the Director of Philanthropy and the Arts with Jonathan Hoffman as the chair for both the Advertising and Graphic Design Associate in Applied Science degree program and the Associate in Fine Arts in Visual Arts transfer degree program. Students may contact the chair Jonathan Hoffman or the Lead Faculty for Advertising and Graphic Design, Aaron Tallman for additional information regarding this program.

- Fine and Applied Arts Programs Website (<https://www.rccc.edu/finearts/>)
- Associate in Fine Arts in Visual Arts degree (<https://legacy.rccc.edu/catalog-2019-2020/2018/11/29/associate-in-fine-arts-visual-arts-10600-2/>)
- Advertising and Graphic Design AAS Ed Plan (<http://legacy.rccc.edu/catalog-2019-2020/wp-content/uploads/sites/81/2018/09/Advertising-and-Graphic-Design-A30100-2019-2020.pdf>)
- Advertising and Graphic Design Certificate Ed Plan (<http://legacy.rccc.edu/catalog-2019-2020/wp-content/uploads/sites/81/2018/09/Advertising-and-Graphic-Design-Certificate-C30100-2019-2020.pdf>)

### Contact Information

The Advertising and Graphic Design (30100) CIP 50.0402 program is in the RCCC Department of Arts and Sciences (/liberalarts/). For additional information regarding this program, contact the instructor, Aaron Tallman ([Aaron.Tallman@rccc.edu](mailto:Aaron.Tallman@rccc.edu)) (<mailto:Aaron.Tallman@rccc.edu>).










### Program Advising



## Advising Details

*Students seeking advising during the summer term should contact the program chair.*

## Program Advisors

<b>Jenn Selby</b>  Director in Philanthropy and the Arts[+]	 jenn.selby@rccc.edu (mailto:jenn.selby@rccc.edu)
	 (704) 216-3820
	 North
<b>Aaron Tallman</b>  Instructor in Academic Programs[+]	 aaron.tallman@rccc.edu (mailto:aaron.tallman@rccc.edu)
	 (704) 216-7209
	 North
<b>Jonathan Hoffman</b>  Chair in Academic Programs[+]	 jonathan.hoffman@rccc.edu (mailto:jonathan.hoffman@rccc.edu)
	 (704) 216-3819
	 North

This entry was posted in [Advertising and Graphic Design \(30100\)](#), [Arts and Sciences](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Advertising and Graphic Design (30100) CIP 50.0402

### Associate in Applied Science Degree (A30100)

## Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

### First Year Fall

- ART 131      Drawing I      3
- GRD 110      Typography I      3
- GRD 151      Computer Design Basics      3

Take one of the following Design courses.

- ART 121      Two-Dimensional Design      3
- GRD 141      Graphic Design I      4

Take one of the following Humanities/Fine Arts courses.

- ART 111      Art Appreciation      3
- ART 114      Art History Survey I      3
- ART 115      Art History Survey II      3
- ENG 231      American Literature I      3
- ENG 241      British Literature I      3
- MUS 110      Music Appreciation      3
- MUS 112      Introduction to Jazz      3
- PHI 240      Introduction to Ethics      3

**Total SHC    15-16**

Note      ART 111, ART 114, or ART 115 are recommended for the Humanities and Fine Arts course requirement.

### First Year Spring

- ENG 111      Writing and Inquiry      3
- GRD 131      Illustration I      2
- GRD 142      Graphic Design II      4
- GRD 152      Computer Design Tech I      3

Take one of the following natural sciences/math courses. If AST 151 is selected, AST-151A must also be taken. If CHM 131 is selected, CHM 131A must also be taken.

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your natural sciences/math course, you must also have credit for or take concurrently MAT 171.

- AST 151      General Astronomy I      3
- AST 151A      General Astronomy I Lab      1
- BIO 110      Principles of Biology      4
- BIO 111      General Biology I      4
- CHM 131      Introduction to Chemistry      3
- CHM 131A      Introduction to Chemistry Lab      1
- CHM 151      General Chemistry I      4
- MAT 143      Quantitative Literacy      3

MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
PHY 151	<u>College Physics I</u>	4
<b>Total SHC</b>		<b>15-16</b>

## First Year Summer

Take one of the following Social/Behavioral Sciences courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

Take one of the following communication courses.

COM 140	<u>Introduction to Intercultural Communication</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

## Second Year Fall

• GRD 241	<u>Graphic Design III</u>	4
GRD 265	<u>Digital Print Production</u>	3
— —	Major Electives	8
<b>Total SHC</b>		<b>15</b>

## Second Year Spring

• GRD 280	<u>Portfolio Design</u>	4
— —	Major Electives	9
<b>Total SHC</b>		<b>13</b>

## Major Electives

Select 17 semester hour credits from the following courses. BUS, CIS, CSC, MKT, and WEB courses are limited to 9 SHC for each prefix. WBL courses are limited to 3 SHC.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
ART 117	<u>Non-Western Art History</u>	3
ART 118	<u>Art by Women</u>	3
ART 122	<u>Three-Dimensional Design</u>	3
ART 132	<u>Drawing II</u>	3
ART 135	<u>Figure Drawing I</u>	3
ART 171	<u>Computer Art I</u>	3
ART 212	<u>Gallery Assistantship I</u>	3
ART 214	<u>Portfolio and Resume</u>	1
ART 215	<u>Visual Art Portfolio</u>	3
ART 231	<u>Printmaking I</u>	3
ART 232	<u>Printmaking II</u>	3
ART 235	<u>Figure Drawing II</u>	3

ART 240	<u>Painting I</u>	3
ART 241	<u>Painting II</u>	3
ART 244	<u>Watercolor</u>	3
ART 250	<u>Surface Design: Textiles</u>	3
ART 261	<u>Photography I</u>	3
ART 262	<u>Photography II</u>	3
ART 264	<u>Digital Photography I</u>	3
ART 265	<u>Digital Photography II</u>	3
ART 266	<u>Videography I</u>	3
ART 267	<u>Videography II</u>	3
ART 275	<u>Introduction to Graphic Design</u>	3
ART 281	<u>Sculpture I</u>	3
ART 282	<u>Sculpture II</u>	3
ART 283	<u>Ceramics I</u>	3
ART 284	<u>Ceramics II</u>	3
ART 288	<u>Studio</u>	3
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 260	<u>Business Communication</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 153	<u>C# Programming</u>	3
CSC 251	<u>Advanced JAVA Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
GRD 113	<u>History of Graphic Design</u>	3
GRD 117	<u>Design Career Exploration</u>	2
GRD 132	<u>Illustration II</u>	2
GRD 145	<u>Design Applications I</u>	1
GRD 170	<u>Exhibit Design</u>	3
GRD 230	<u>Technical Illustration</u>	2
GRD 260	<u>Digital Processes/Theory</u>	2
GRD 281	<u>Design of Advertising</u>	2
MKT 120	<u>Principles of Marketing</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
MKT 220	<u>Advertising and Sales Promotion</u>	3
MKT 223	<u>Customer Service</u>	3
MKT 225	<u>Marketing Research</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 131	<u>Work-Based Learning III</u>	1
WEB 110	<u>Internet/Web Fundamentals</u>	3



WEB 111	<u>Introduction to Web Graphics</u>	3
WEB 115	<u>Web Markup and Scripting</u>	3
WEB 187	<u>Programming for Mobile Devices</u>	3
WEB 225	<u>Content Management Systems</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64-66*

This entry was posted in [Advertising and Graphic Design \(30100\)](#), [Arts and Sciences](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Advertising and Graphic Design (30100) CIP 50.0402 Certificate (C30100)

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### Course Requirements

The following is a suggested program of study for completing this degree in one semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

ART 131	<u>Drawing I</u>	3
GRD 110	<u>Typography I</u>	3
GRD 141	<u>Graphic Design I</u>	4
GRD 151	<u>Computer Design Basics</u>	3
<b>Total SHC</b>		<b>13</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

This entry was posted in [Advertising and Graphic Design \(30100\)](#), [Arts and Sciences](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Advertising and Graphic Design (30100) CIP 50.0402

### CCPP Certificate (C30100PB)

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ART 131	<u>Drawing I</u>	3
GRD 110	<u>Typography I</u>	3
GRD 141	<u>Graphic Design I</u>	4
GRD 151	<u>Computer Design Basics</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

## Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Advertising and Graphic Design \(30100\)](#), [Arts and Sciences](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201

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### Description

The air conditioning, heating and refrigeration technology curriculum provides the basic knowledge to develop skills necessary to work with residential and light commercial systems.

Topics include mechanical refrigeration, heating and cooling theory, electricity, controls, and safety. The diploma program covers air conditioning, furnaces, heat pumps, tools and instruments. In addition, the AAS degree covers residential building codes, residential system sizing and advanced comfort systems.

Diploma graduates should be able to assist in the start up, preventive maintenance, service, repair and/or installation of residential and light commercial systems. AAS degree graduates should be able to demonstrate an understanding of system selection and balance and advanced systems.

### Awards

- Associate in Applied Science Degree (A35100)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/08/23/associate-in-applied-science-degree-a35100/>)
- Diploma (D35100) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/03/diploma-program-d35100/>)
- Basic Certificate (C35100BA) (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/air-conditioning-heating-refrigeration-basic-certificate-c35100ba/>)
- CCPP Basic Certificate (C35100PB)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/05/04/ccpp-basic-certificate-c35100pb/>)
- CCPP Intermediate Certificate (C35100PI)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/ccpp-intermediate-certificate-c35100pi/>)
- Comfort Cooling Certificate (C35100CC)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/ahr-comfort-cooling-certificate-c35100cc/>)
- Commercial Certificate (C35100CO)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/ahr-commercial-certificate-c35100co/>)
- HVAC Design Certificate (C35100HD)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/ahr-hvac-design-certificate-c35100hd/>)
- Heat Pump Certificate (C35100HP)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/08/30/ahr-heat-pump-certificate-c35100hp/>)
- Heating Certificate (C35100HC)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/heating-certificate-c35100hc/>)
- Refrigeration Certificate (C35100RF)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/08/30/ahr->

### Additional Information

Please view the AHR video.

- AHR Video (<https://www.youtube.com/watch?v=wZd9LYOAk8A&feature=youtu.be>)



## Contact Information
















The Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 program is in the RCCC Department of [Business, Engineering Technologies and Public Services \(/industrialengineering/\)](#). For additional information regarding this program, contact the chair, Joe Christie ([joe.christie@rccc.edu](mailto:joe.christie@rccc.edu) (<mailto:joe.christie@rccc.edu>)).

## Program Advising

### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

## Program Advisors

<b>Joe Christie</b> Chair in Academic Programs[+]	 <a href="mailto:joe.christie@rccc.edu">joe.christie@rccc.edu</a> ( <a href="mailto:joe.christie@rccc.edu">mailto:joe.christie@rccc.edu</a> )  (704) 216-3908  CBTC
<b>Jon Crockett</b> Instructor in Academic Programs[+]	 <a href="mailto:jon.crockett@rccc.edu">jon.crockett@rccc.edu</a> ( <a href="mailto:jon.crockett@rccc.edu">mailto:jon.crockett@rccc.edu</a> )  (704) 216-3909  CBTC
<b>Fred Loving</b> Instructor in Academic Programs[+]	 <a href="mailto:fred.loving@rccc.edu">fred.loving@rccc.edu</a> ( <a href="mailto:fred.loving@rccc.edu">mailto:fred.loving@rccc.edu</a> )  (704) 216-3912  CBTC
<b>Vixiene Keovilay</b> Instructor in Academic Programs[+]	 <a href="mailto:vixiene.keovilay@rccc.edu">vixiene.keovilay@rccc.edu</a> ( <a href="mailto:vixiene.keovilay@rccc.edu">mailto:vixiene.keovilay@rccc.edu</a> )  (704) 216-7128  CBTC
<b>Larry Newcomb</b> Instructional Support in Academic Programs[+]	 <a href="mailto:larry.newcomb@rccc.edu">larry.newcomb@rccc.edu</a> ( <a href="mailto:larry.newcomb@rccc.edu">mailto:larry.newcomb@rccc.edu</a> )  (704) 216-3857  CBTC

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 Associate in Applied Science Degree (A35100)

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### Course Requirements

The following is a suggested program of study for completing this degree in six semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• AHR 110	<u>Introduction to Refrigeration</u>	5
• AHR 112	<u>Heating Technology</u>	4
CST 131	<u>OSHA/Safety/Certification</u>	3
• ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

• AHR 114	<u>Heat Pump Technology</u>	4
• AHR 130	<u>HVAC Controls</u>	3
AHR 151	<u>HVAC Duct Systems I</u>	2
AHR 160	<u>Refrigerant Certification</u>	1
EGR 125	<u>Appl Software for Tech</u>	2
<b>Total SHC</b>		<b>12</b>

#### First Year Summer

• AHR 113	<u>Comfort Cooling</u>	4
• AHR 211	<u>Residential System Design</u>	3
<b>Total SHC</b>		<b>7</b>

#### Second Year Fall

• AHR 212	<u>Advanced Comfort Systems</u>	4
AHR 225	<u>Commercial System Design</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following natural sciences/mathematics courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
PHY 110	<u>Conceptual Physics</u>	3
<b>Total SHC</b>		<b>13</b>

#### Second Year Spring

• AHR 213	<u>HVACR Building Code</u>	2
AHR 215	<u>Commercial HVAC Controls</u>	2
AHR 245	<u>Chiller Systems</u>	2
— —	Major Elective	3

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>12</b>

## Second Year Summer

—	—	<u>Humanities/Fine Arts Elective</u>	3
—	—	<u>Social/Behavioral Sciences Elective</u>	3
—	—	Major Electives	2
<b>Total SHC</b>			<b>8</b>

## Major Electives

Select 5 semester hour credits from the following courses. This may include up to 5 SHC from WBL course/combination of courses.

AHR 115	<u>Refrigeration Systems</u>	2
AHR 120	<u>HVACR Maintenance</u>	2
AHR 152	<u>HVAC Duct Systems II</u>	2
AHR 235	<u>Refrigeration Design</u>	3
AHR 240	<u>Hydronic Heating</u>	2
AHR 255	<u>Indoor Air Quality</u>	2
AHR 263	<u>Energy Management</u>	2
ALT 120	<u>Renewable Energy Technologies</u>	3
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 125	<u>Personal Finance</u>	3
BUS 137	<u>Principles of Management</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
BUS 260	<u>Business Communication</u>	3
CMT 120	<u>Codes and Inspections</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CMT 214	<u>Planning and Scheduling</u>	3
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
CST 110	<u>Intro to Construction</u>	2
CST 241	<u>Planning/Estimating I</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2

ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 138	<u>DC Circuit Analysis</u>	4
ELC 139	<u>AC Circuit Analysis</u>	4
ELC 215	<u>Electrical Maintenance</u>	3
ELN 131	<u>Analog Electronics I</u>	4
ELN 132	<u>Analog Electronics II</u>	4
ELN 133	<u>Digital Electronics</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 232	<u>Introduction to Microprocessors</u>	4
ELN 234	<u>Communication Systems</u>	4
ISC 112	<u>Industrial Safety</u>	2
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety</u>	2
ISC 121	<u>Environmental Health &amp; Safety</u>	3
ISC 132	<u>Manufacturing Quality Control</u>	3
ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy</u>	3
REF 116	<u>Commercial Systems I</u>	4
REF 117	<u>Refrigeration Controls</u>	4
REF 260	<u>Commercial Systems II</u>	4
SST 140	<u>Green Building and Design Concepts</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3



WLD 143	<u>Welding Metallurgy.</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 67*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\).](#) [Business, Engineering Technologies and Public Services](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 Diploma (D35100)

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### First Year Fall

• AHR 110	<u>Introduction to Refrigeration</u>	5
• AHR 112	<u>Heating Technology</u>	4
CST 131	<u>OSHA/Safety/Certification</u>	3
• ELC 111	<u>Introduction to Electricity</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>18</b>

### First Year Spring

• AHR 114	<u>Heat Pump Technology</u>	4
AHR 130	<u>HVAC Controls</u>	3
AHR 151	<u>HVAC Duct Systems I</u>	2
AHR 160	<u>Refrigerant Certification</u>	1
AHR 213	<u>HVACR Building Code</u>	2
EGR 125	<u>Appl Software for Tech</u>	2
<b>Total SHC</b>		<b>14</b>

### First Year Summer

• AHR 113	<u>Comfort Cooling</u>	4
AHR 211	<u>Residential System Design</u>	3

Take three semester hour credits from the following general education courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
MAT 110	<u>Mathematical Measurement and Literacy</u>	3
PHY 110	<u>Conceptual Physics</u>	3
— —	<u>Humanities &amp; Fine Arts Elective</u>	3
— —	<u>Social &amp; Behavioral Science Elective</u>	3
<b>Total SHC</b>		<b>10</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 42*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 Basic Certificate (C35100BA)

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### First Year Fall

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
CST 131	<u>OSHA/Safety/Certification</u>	3
ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>15</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 Comfort Cooling Certificate (C35100CC)

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### First Year Fall

AHR 110	<u>Introduction to Refrigeration</u>	5
ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>8</b>

### First Year Spring

AHR 130	<u>HVAC Controls</u>	3
<b>Total SHC</b>		<b>3</b>

### First Year Summer

AHR 113	<u>Comfort Cooling</u>	4
AHR 211	<u>Residential System Design</u>	3
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 Commercial Certificate (C35100CO)

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### First Year Fall

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 225	<u>Commercial System Design</u>	3
ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>11</b>

### First Year Spring

AHR 160	<u>Refrigerant Certification</u>	1
AHR 213	<u>HVACR Building Code</u>	2
AHR 215	<u>Commercial HVAC Controls</u>	2
AHR 245	<u>Chiller Systems</u>	2
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology (35100) CIP 47.0201 HVAC Design Certificate (C35100HD)

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### First Year Fall

AHR 225	<u>Commercial System Design</u>	3
BPR 130	<u>Print Reading-Construction</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
<b>Total SHC</b>		<b>9</b>

### First Year Spring

AHR 213	<u>HVACR Building Code</u>	2
<b>Total SHC</b>		<b>2</b>

### First Year Summer

AHR 211	<u>Residential System Design</u>	3
AHR 255	<u>Indoor Air Quality</u>	2
<b>Total SHC</b>		<b>5</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology\_(35100)\_CIP 47.0201 Heat Pump Certificate (C35100HP)

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### First Year Fall

AHR 110	<u>Introduction to Refrigeration</u>	5
ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>8</b>

### First Year Spring

AHR 114	<u>Heat Pump Technology</u>	4
AHR 130	<u>HVAC Controls</u>	3
<b>Total SHC</b>		<b>7</b>

### First Year Summer

AHR 211	<u>Residential System Design</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology\_(35100)\_CIP 47.0201 Heating Certificate (C35100HC)

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### First Year Fall

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>12</b>

### First Year Spring

AHR 130	<u>HVAC Controls</u>	3
AHR 240	<u>Hydronic Heating</u>	2
<b>Total SHC</b>		<b>5</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Air Conditioning, Heating & Refrigeration Technology\_(35100)\_CIP 47.0201 Refrigeration Certificate (C35100RF)

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### First Year Fall

AHR 110	<u>Introduction to Refrigeration</u>	5
ELC 111	<u>Introduction to Electricity</u>	3
<b>Total SHC</b>		<b>8</b>

### First Year Spring

AHR 115	<u>Refrigeration Systems</u>	2
AHR 130	<u>HVAC Controls</u>	3
AHR 160	<u>Refrigerant Certification</u>	1
<b>Total SHC</b>		<b>6</b>

### First Year Summer

AHR 235	<u>Refrigeration Design</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology\_(35100)\_CIP 47.0201 CCPP Basic Certificate (C35100PB)

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### Courses

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
AHR 151	<u>HVAC Duct Systems I</u>	2
ELC 111	<u>Introduction to Electricity</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 14*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Air Conditioning, Heating & Refrigeration Technology\_(35100)\_CIP 47.0201 CCPP Intermediate Certificate (C35100PI)

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### Courses

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 113	<u>Comfort Cooling</u>	4
AHR 114	<u>Heat Pump Technology</u>	4
AHR 160	<u>Refrigerant Certification</u>	1
AHR 213	<u>HVACR Building Code</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Air Conditioning, Heating, and Refrigeration \(35100\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Associate Degree Nursing (45110) CIP 51.3801

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### Description

The associate degree nursing curriculum provides knowledge, skills and strategies to integrate safety and quality into nursing care, to practice in a dynamic environment and to meet individual needs which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice and the holistic individual. Content emphasizes the nurse as a member of the interdisciplinary team providing safe, individualized care while employing evidence-based practice, quality improvement and informatics.

Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN). Employment opportunities are vast within the global health care system and may include positions within acute, chronic, extended, industrial, and community health care facilities.

### Awards

- Associate in Applied Science Degree (A45110) Fall Admission (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/associate-in-applied-science-degree-a45110/>).
- Associate in Applied Science Degree (A45110) LPN to ADN (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/associate-in-applied-science-degree-a45110-lpn-to-adn/>).
- Associate in Applied Science Degree (A45110) Spring Admission (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/02/associate-in-applied-science-a45110-spring-admission/>).
- CCPP Therapeutic & Diagnostic Services/Nurse Aide-Nursing Diploma (D45970PU) CIP 51.3902 (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-therapeutic-diagnostic-servicesnurse-aide-nursing-diploma-d45970pu/>).

### Additional Information

Note 1 – Class sessions and clinical rotations in NUR courses will be scheduled during weekdays, evenings or weekends. Note 2 – For students enrolled in the Associate Degree Nursing or the Practical Nursing programs, numerical grades below 'B' in all required nursing courses are considered unsatisfactory attainment of course completion.

- Comprehensive List of Nursing Education Admission and Program Information (<https://www.rccc.edu/healtheducation/nursing-education-program-information/>).
- Nursing Education Programs Competency Standards (<https://www.rccc.edu/healtheducation/nursing-education-programs-competency-standards/>).

### Contact Information

The Associate Degree Nursing (45110) CIP 51.3801 program is in the RCCC Department of Health and Education (<http://healthpublicservices/>). For additional information regarding this program, contact the chair, Emily Fink ([emily.fink@rccc.edu](mailto:emily.fink@rccc.edu)) (<mailto:emily.fink@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

Students whose last name begins with A-C are assigned to Hope Yost; D-E are assigned to Samantha Neely; F-H are assigned to Carol Beaver; I-J are assigned to Maria Atkinson; K-M are assigned to Leigh Anne Walker; Q-S are assigned to Renee Hyde; T-V are assigned to Suzanne Rumble; W-X are assigned to Phyllis Buie; Y-Z are assigned to Emily Fink.

### Program Advisors

---

Renee Hyde



Instructor in Academic Programs[+]	✉ renee.hyde@rccc.edu (mailto:renee.hyde@rccc.edu)
	☎ (704) 216-3698
	📍 NCRC

<b>Hope Yost</b> Instructor in Academic Programs[+]	✉ hope.yost@rccc.edu (mailto:hope.yost@rccc.edu)
	☎ (704) 216-7228
	📍 NCRC

<b>Leigh-Anne Walker</b> Instructor in Academic Programs[+]	✉ leighanne.walker@rccc.edu (mailto:leighanne.walker@rccc.edu)
	☎ (704) 216-3715
	📍 NCRC

<b>Emily Fink</b> Chair in Academic Programs[+]	✉ emily.fink@rccc.edu (mailto:emily.fink@rccc.edu)
	☎ (704) 216-3716
	📍 NCRC

<b>Phyllis Buie</b> Instructor in Academic Programs[+]	✉ phyllis.buie1@rccc.edu (mailto:phyllis.buie1@rccc.edu)
	☎ (704) 216-3703
	📍 NCRC

<b>Cathy Chandler</b> Instructor in Academic Programs[+]	✉ cathy.chandler@rccc.edu (mailto:cathy.chandler@rccc.edu)
	☎ (704) 216-3530
	📍 NCRC

<b>Samantha Neely</b> Instructor in Corporate and Continuing Education[+]	✉ samantha.neely@rccc.edu (mailto:samantha.neely@rccc.edu)
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<b>Suzanne Rumble</b> Instructor in Academic Programs[+]	✉ suzanne.rumble@rccc.edu (mailto:suzanne.rumble@rccc.edu)
	☎ (704) 216-7288
	📍 NCRC

<b>Carol Beaver</b> Instructor in Academic Programs[+]	✉ carol.beaver@rccc.edu (mailto:carol.beaver@rccc.edu)
	☎ (704) 216-3646
	📍 NCRC

<b>Tim Fraley</b> Instructor in Academic Programs[+]	✉ tim.fraley@rccc.edu (mailto:tim.fraley@rccc.edu)
	☎ (704) 216-3559
	📍 NCRC

<b>Maria Atkinson</b> Instructor in Academic Programs[+]	✉ maria.atkinson@rccc.edu (mailto:maria.atkinson@rccc.edu)
	☎ (704) 216-3701

This entry was posted in [Associate Degree Nursing \(45110\)](#), [Health and Education](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Associate Degree Nursing (45110) CIP 51.3801

### Associate in Applied Science Degree (A45110) Fall Admission

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#### First Year Fall

BIO 168	<u>Anatomy and Physiology I</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
• NUR 111	<u>Introduction to Health Concepts</u>	8
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Spring

BIO 169	<u>Anatomy and Physiology II</u>	4
• NUR 112	<u>Health-Illness Concepts</u>	5
• NUR 113	<u>Family Health Concepts</u>	5
PSY 241	<u>Developmental Psychology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>20</b>

#### First Year Summer

• NUR 211	<u>Health Care Concepts</u>	5
<b>Total SHC</b>		<b>5</b>

#### Second Year Fall

• NUR 114	<u>Holistic Health Concepts</u>	5
• NUR 212	<u>Health System Concepts</u>	5

Take one of the following Microbiology courses.

BIO 175	<u>General Microbiology</u>	3
BIO 275	<u>Microbiology</u>	4
<b>Total SHC</b>		<b>13-14</b>

#### Second Year Spring

• NUR 213	<u>Complex Health Concepts</u>	10
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Take one of the following Humanities/Fine Arts courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
HUM 115	<u>Critical Thinking</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>13</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

## Note 1

For students enrolled in the Associate Degree Nursing or the Practical Nursing programs, numerical grades below 'B' in all required nursing courses are considered unsatisfactory attainment of course competencies.

## Note 2

Class sessions and clinical rotations in NUR courses may be scheduled during weekdays, evenings, or weekends.

This entry was posted in [Associate Degree Nursing \(45110\)](#), [Health and Education](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Associate Degree Nursing (45110) CIP 51.3801

### Associate in Applied Science Degree (A45110) Spring Admission

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#### First Year Spring

BIO 168	<u>Anatomy and Physiology I</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
• NUR 111	<u>Introduction to Health Concepts</u>	8
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Summer

BIO 169	<u>Anatomy and Physiology II</u>	4
PSY 241	<u>Developmental Psychology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>10</b>

#### First Year Fall

• NUR 112	<u>Health-Illness Concepts</u>	5
• NUR 113	<u>Family Health Concepts</u>	5
<b>Total SHC</b>		<b>10</b>

#### Second Year Spring

• NUR 114	<u>Holistic Health Concepts</u>	5
• NUR 212	<u>Health System Concepts</u>	5

Take one of the following Microbiology courses.

BIO 175	<u>General Microbiology</u>	3
BIO 275	<u>Microbiology</u>	4
<b>Total SHC</b>		<b>13-14</b>

#### Second Year Summer

• NUR 211	<u>Health Care Concepts</u>	5
<b>Total SHC</b>		<b>5</b>

#### Second Year Fall

• NUR 213	<u>Complex Health Concepts</u>	10
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Take one of the following Humanities/Fine Arts courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
HUM 115	<u>Critical Thinking</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3



The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

## Note 1

For students enrolled in the Associate Degree Nursing or the Practical Nursing programs, numerical grades below 80,'B' in all required nursing courses are considered unsatisfactory attainment of course competencies.

## Note 2

Class sessions and clinical rotations in NUR courses may be scheduled during weekdays, evenings, or weekends.

This entry was posted in [Associate Degree Nursing \(45110\)](#), [Health and Education](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Associate Degree Nursing (45110) CIP 51.3801

### Associate in Applied Science Degree (A45110) LPN to ADN

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#### First Year Spring

BIO 168	<u>Anatomy and Physiology I</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
• NUR 221	<u>LPN to ADN Concepts I</u>	9
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>19</b>

#### First Year Summer

BIO 169	<u>Anatomy and Physiology II</u>	4
PSY 241	<u>Developmental Psychology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>10</b>

#### First Year Fall

• NUR 223	<u>LPN to ADN Concepts II</u>	9
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Take one of the following Humanities/Fine Arts courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
HUM 115	<u>Critical Thinking</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3

Take one of the following Microbiology courses.

BIO 175	<u>General Microbiology</u>	3
BIO 275	<u>Microbiology</u>	4
<b>Total SHC</b>		<b>15-16</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 72*

#### LPN to ADN

Of the 72 SHC required for the degree, 28 SHC will be awarded: Students who successfully complete NUR 221 will be granted credit for NUR 111, NUR 112, NUR 113, and NUR 211 (23 SHC). Students who successfully complete NUR 223 will be granted credit for NUR 114 (5 SHC).

## Associate Degree Nursing (45110) CIP 51.3801

### CCPP Therapeutic & Diagnostic Services/Nurse Aide-Nursing Diploma (D45970PU) CIP 51.3902

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#### Courses

ACA 118	<u>College Study Skills</u>	2
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
HSC 120	<u>CPR</u>	1
HUM 115	<u>Critical Thinking</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
NAS 101	<u>Nurse Aide I</u>	6
NAS 102	<u>Nurse Aide II</u>	6
PSY 150	<u>General Psychology</u>	3
PSY 241	<u>Developmental Psychology</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 40*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Associate Degree Nursing \(45110\)](#), [Health and Education](#) and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Associate in Arts (10100) CIP 24.0101

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### Description

The Associate in Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. The degree program includes opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use. Academic advisors are available to assist students in selecting courses that best meet students' interests and the requirements of transfer institutions. Because course requirements vary among four-year institutions, students should obtain current catalogs from the schools they plan to attend.

Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA). The CAA enables North Carolina community college graduates of two-year associate in arts programs who are admitted to constituent institutions of The University of North Carolina to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

### Awards

- **Associate in Arts Degree (A10100)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/associate-in-arts-a10100/>)
- **CCPP College Transfer Pathway to Associate in Arts (P1012C)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/29/ccpp-college-transfer-pathway-to-associate-in-arts-p1012c/>)

### Contact Information







The Associate in Arts (10100) CIP 24.0101 program is in the RCCC Department of **Arts and Sciences (/liberalarts/)**. For additional information regarding this program, contact the dean, Carol Scherczinger ([carol.scherczinger@rccc.edu](mailto:carol.scherczinger@rccc.edu)) (<mailto:carol.scherczinger@rccc.edu>).

### Program Advising





























#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<b>Robert Abbate</b>  <small>Instructor in Academic Programs[+]</small>	 <a href="mailto:robert.abbate@rccc.edu">robert.abbate@rccc.edu</a> <a href="mailto:robert.abbate@rccc.edu">mailto:robert.abbate@rccc.edu</a>   (704) 216-3840   South
<b>Mark Beisler</b>  <small>Instructor in Academic Programs[+]</small>	 <a href="mailto:mark.beisler@rccc.edu">mark.beisler@rccc.edu</a> <a href="mailto:mark.beisler@rccc.edu">mailto:mark.beisler@rccc.edu</a>   (704) 216-3802   South

Teena Boone




<p>Instructor in Academic Programs[+]</p>	<div>  teena.boone@rccc.edu  (mailto:teena.boone@rccc.edu) </div> <div>  (704) 216-3707 </div> <div>  South </div>
<p><b>Lora Beth Johnson</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  lora.johnson@rccc.edu  (mailto:lora.johnson@rccc.edu) </div> <div>  (704) 216-3774 </div> <div>  South </div>
<p><b>Ginger Fox</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  ginger.fox@rccc.edu (mailto:ginger.fox@rccc.edu) </div> <div>  (704) 216-3842 </div> <div>  North </div>
<p><b>Duane Galloway</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  duane.galloway@rccc.edu  (mailto:duane.galloway@rccc.edu) </div> <div>  (704) 216-3817 </div> <div>  North </div>
<p><b>Adam Helmtoller</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  adam.helmtoller@rccc.edu  (mailto:adam.helmtoller@rccc.edu) </div> <div>  (704) 216-7166 </div> <div>  South </div>
<p><b>Caroll Hodgson</b></p> <p>Chair in Academic Programs[+]</p>	<div>  caroll.hodgson@rccc.edu  (mailto:caroll.hodgson@rccc.edu) </div> <div>  (704) 216-3805 </div> <div>  North </div>
<p><b>Shauna Moser</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  shauna.moser@rccc.edu  (mailto:shauna.moser@rccc.edu) </div> <div>  (704) 216-3847 </div> <div>  South </div>
<p><b>Jacquie Loupis</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  jacquelyn.loupis@rccc.edu  (mailto:jacquelyn.loupis@rccc.edu) </div> <div>  (704) 216-3894 </div> <div>  North </div>
<p><b>Jessalyn Coble</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  jessalyn.coble@rccc.edu  (mailto:jessalyn.coble@rccc.edu) </div>
<p><b>Chayree Thomas</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  chayree.thomas@rccc.edu  (mailto:chayree.thomas@rccc.edu) </div>
<p><b>Cassie Plott</b></p> <p>Instructor in Academic Programs[+]</p>	<div>  cassie.plott@rccc.edu  (mailto:cassie.plott@rccc.edu) </div> <div>  (704) 216-3729 </div>



 South
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## Dana Richards

Instructor in Academic Programs[+]

 dana.richards@rccc.edu (mailto:dana.richards@rccc.edu)
 (704) 216-3769
 North




## Robin Satterwhite

Chair in Academic Programs[+]

 robin.satterwhite@rccc.edu (mailto:robin.satterwhite@rccc.edu)
 (704) 216-3810
 North




## Sherylle Smith

Instructor in Academic Programs[+]

 sherylle.smith@rccc.edu (mailto:sherylle.smith@rccc.edu)
 (704) 216-3811
 South




## Stephanie Wensil

Instructor in Academic Programs[+]

 stephanie.wensil@rccc.edu (mailto:stephanie.wensil@rccc.edu)
 (704) 216-3813
 South




## Renita Peeler

Instructor in Academic Programs[+]

 renita.peeler@rccc.edu (mailto:renita.peeler@rccc.edu)
 (704) 216-7144
 NorthWeb




## Miriam Berrospi-Kish

Instructor in Academic Programs[+]

 miriam.berrospikish@rccc.edu (mailto:miriam.berrospikish@rccc.edu)
 (704) 216-7150
 CBTC




## Jenny Billings

Chair in Academic Programs[+]

 jenny.billings@rccc.edu (mailto:jenny.billings@rccc.edu)
 (704) 216-3797
 South




## Van Dempsey

Instructor in Academic Programs[+]


 van.dempsey@rccc.edu (mailto:van.dempsey@rccc.edu)
 (704) 216-3818
 North

## Denice Traina

Instructor in Academic Programs[+]

 denice.traina@rccc.edu (mailto:denice.traina@rccc.edu)
 (704) 216-3764
 North

## David Mason

 david.mason@rccc.edu (mailto:david.mason@rccc.edu)
---

Instructor in Academic Programs[+]	<div>📞 (704) 216-3549</div> <div>📍 South</div>
<b>Sallie Herrin</b> Instructor in Academic Programs[+]	<div>✉️ sallie.herrin@rccc.edu (mailto:sallie.herrin@rccc.edu)</div> <div>📞 (704) 216-3858</div> <div>📍 North</div>
<b>Holli Kempton</b> Discipline Chair in Academic Programs[+]	<div>✉️ holli.kempton@rccc.edu (mailto:holli.kempton@rccc.edu)</div> <div>📞 (704) 216-3589</div> <div>📍 CBTC</div>
<b>Jade Bittle</b> Instructor in Academic Programs[+]	<div>✉️ jade.bittle@rccc.edu (mailto:jade.bittle@rccc.edu)</div> <div>📞 (704) 216-7263</div> <div>📍 North</div>
<b>Melissa Mohlere</b> Instructor in Academic Programs[+]	<div>✉️ melissa.mohlere@rccc.edu (mailto:melissa.mohlere@rccc.edu)</div> <div>📞 (704) 216-7224</div> <div>📍 South</div>
<b>Karintha Tyree</b> Instructor in Academic Programs[+]	<div>✉️ karintha.tyree@rccc.edu (mailto:karintha.tyree@rccc.edu)</div> <div>📞 (704) 216-3590</div> <div>📍 CBTC</div>
<b>Nancy Waldrop</b> Instructor in Academic Programs[+]	<div>✉️ nancy.waldrop@rccc.edu (mailto:nancy.waldrop@rccc.edu)</div> <div>📞 (704) 216-7225</div> <div>📍 South</div>
<b>Candice Mills</b> Instructor in Academic Programs[+]	<div>✉️ candice.mills@rccc.edu (mailto:candice.mills@rccc.edu)</div>
<b>Nicholas McEntire</b> Instructor in Academic Programs[+]	<div>✉️ nicholas.mcentire@rccc.edu (mailto:nicholas.mcentire@rccc.edu)</div>
<b>Birgit Meadows</b> Instructor in Academic Programs[+]	<div>✉️ birgit.meadows@rccc.edu (mailto:birgit.meadows@rccc.edu)</div> <div>📞 (704) 216-3845</div> <div>📍 North</div>
<b>Amy Bartram</b> Instructor in Academic Programs[+]	<div>✉️ amy.bartram@rccc.edu (mailto:amy.bartram@rccc.edu)</div> <div>📍 North</div>

## Associate in Arts (10100) CIP 24.0101

### Associate in Arts Degree (A10100)

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#### General Education Requirements (45 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Communications/Humanities/Fine Arts

Take three courses from the following list from at least two different disciplines (prefixes).

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>9</b>

##### Social/Behavioral Sciences

Take three courses from the following list from at least two different disciplines (prefixes).

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>9</b>

##### Math

Take one course from the following list.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>3-4</b>

##### Natural Sciences

Take one of the following sets.

Set One

AST 111	<u>Descriptive Astronomy</u>	3
AST 111A	<u>Descriptive Astronomy Lab</u>	1

Set Two

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1

Set Three

BIO 110	<u>Principles of Biology</u>	4
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Set Four

BIO 111	<u>General Biology I</u>	4
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Set Five

CHM 151	<u>General Chemistry I</u>	4
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Set Six

PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

**Total SHC 4**

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Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your natural sciences course, you should select MAT 171 as your Math course or have credit for MAT 171.

## Additional General Education Hours

Take 13-14 SHC from the following list, or from any courses listed above that are not taken to satisfy the general education requirements .

ANT 210	<u>General Anthropology</u>	3
ANT 220	<u>Cultural Anthropology</u>	3
ANT 230	<u>Physical Anthropology</u>	3
ANT 230A	<u>Physical Anthropology Lab</u>	1
ANT 240	<u>Archaeology</u>	3
AST 152	<u>General Astronomy II</u>	3
AST 152A	<u>General Astronomy II Lab</u>	1
BIO 112	<u>General Biology II</u>	4
BIO 140	<u>Environmental Biology</u>	3
BIO 140A	<u>Environmental Biology Lab</u>	1
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 132	<u>Organic and Biochemistry</u>	4
CHM 152	<u>General Chemistry II</u>	4
CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
COM 110	<u>Introduction to Communication</u>	3
COM 120	<u>Intro to Interpersonal Communication</u>	3
COM 140	<u>Introduction to Intercultural Communication</u>	3
DRA 111	<u>Theatre Appreciation</u>	3
DRA 126	<u>Storytelling</u>	3
ECO 151	<u>Survey of Economics</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

ENG 131	<u>Introduction to Literature</u>	3
ENG 261	<u>World Literature I</u>	3
ENG 262	<u>World Literature II</u>	3
FRE 111	<u>Elementary French I</u>	3
FRE 112	<u>Elementary French II</u>	3
GEO 111	<u>World Regional Geography.</u>	3
GEO 112	<u>Cultural Geography.</u>	3
GEO 130	<u>General Physical Geography.</u>	3
HIS 122	<u>Western Civilization II</u>	3
HUM 110	<u>Technology and Society.</u>	3
HUM 115	<u>Critical Thinking</u>	3
HUM 120	<u>Cultural Studies</u>	3
HUM 121	<u>The Nature of America</u>	3
HUM 122	<u>Southern Culture</u>	3
HUM 130	<u>Myth in Human Culture</u>	3
HUM 160	<u>Introduction to Film</u>	3
HUM 212	<u>Humanities II</u>	3
MAT 172	<u>Precalculus Trigonometry.</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
MAT 273	<u>Calculus III</u>	4
MUS 210	<u>History of Rock Music</u>	3
PHI 210	<u>History of Philosophy.</u>	3
PHI 230	<u>Introduction to Logic</u>	3
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
POL 220	<u>International Relations</u>	3
PSY 237	<u>Social Psychology.</u>	3
PSY 239	<u>Psychology of Personality.</u>	3
PSY 241	<u>Developmental Psychology.</u>	3
PSY 281	<u>Abnormal Psychology.</u>	3
REL 110	<u>World Religions</u>	3
REL 211	<u>Introduction to Old Testament</u>	3
REL 212	<u>Introduction to New Testament</u>	3
SOC 213	<u>Sociology of the Family.</u>	3
SOC 220	<u>Social Problems</u>	3
SOC 230	<u>Race and Ethnic Relations</u>	3
SOC 240	<u>Social Psychology.</u>	3
SPA 111	<u>Elementary Spanish I</u>	3
SPA 112	<u>Elementary Spanish II</u>	3
SPA 211	<u>Intermediate Spanish I</u>	3
SPA 212	<u>Intermediate Spanish II</u>	3
<b>Total SHC</b>		<b>13-14</b>

## Other Required Hours (15 SHC)

### College Transfer Success

Take the following course.



## Additional Other Required Hours

Take 14 SHC from the following courses, or from any of the general education courses listed above not taken to satisfy the general education requirement or the additional general education hours requirement. If WBL 111 is selected, take 15 SHC.

ACC 120	<u>Principles of Financial Accounting</u>	4
ACC 121	<u>Principles of Managerial Accounting</u>	4
ART 121	<u>Two-Dimensional Design</u>	3
ART 122	<u>Three-Dimensional Design</u>	3
ART 131	<u>Drawing I</u>	3
ART 132	<u>Drawing II</u>	3
ART 135	<u>Figure Drawing I</u>	3
ART 212	<u>Gallery Assistantship I</u>	3
ART 214	<u>Portfolio and Resume</u>	1
ART 231	<u>Printmaking I</u>	3
ART 235	<u>Figure Drawing II</u>	3
ART 240	<u>Painting I</u>	3
ART 241	<u>Painting II</u>	3
ART 244	<u>Watercolor</u>	3
ART 261	<u>Photography I</u>	3
ART 262	<u>Photography II</u>	3
ART 264	<u>Digital Photography I</u>	3
ART 265	<u>Digital Photography II</u>	3
ART 266	<u>Videography I</u>	3
ART 267	<u>Videography II</u>	3
ART 281	<u>Sculpture I</u>	3
ART 282	<u>Sculpture II</u>	3
ART 283	<u>Ceramics I</u>	3
ART 288	<u>Studio</u>	3
AST 251	<u>Observational Astronomy</u>	2
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
BIO 250	<u>Genetics</u>	4
BIO 275	<u>Microbiology</u>	4
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 137	<u>Principles of Management</u>	3
CHM 263	<u>Analytical Chemistry</u>	5
CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 141	<u>Corrections</u>	3
COM 150	<u>Introduction to Mass Communication</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 239	<u>Advanced Visual BASIC Programming</u>	3
DRA 130	<u>Acting I</u>	3
DRA 132	<u>Stage Movement</u>	3
DRA 140	<u>Stagecraft I</u>	3
DRA 170	<u>Play Production I</u>	3

ENG 125	<u>Creative Writing I</u>	3
ENG 126	<u>Creative Writing II</u>	3
ENG 235	<u>Survey of Film As Lit</u>	3
ENG 272	<u>Southern Literature</u>	3
ENG 273	<u>African-American Literature</u>	3
ENG 274	<u>Literature by Women</u>	3
HEA 110	<u>Personal Health/Wellness</u>	3
HIS 162	<u>Women and History.</u>	3
HIS 163	<u>The World Since 1945</u>	3
HIS 221	<u>African-American History.</u>	3
HIS 226	<u>The Civil War</u>	3
HIS 236	<u>North Carolina History.</u>	3
HUM 170	<u>The Holocaust</u>	3
MUS 131	<u>Chorus I</u>	1
MUS 132	<u>Chorus II</u>	1
MUS 231	<u>Chorus III</u>	1
MUS 232	<u>Chorus IV</u>	1
PED 110	<u>Fit and Well for Life</u>	2
PED 111	<u>Physical Fitness I</u>	1
PED 113	<u>Aerobics I</u>	1
PED 117	<u>Weight Training I</u>	1
PED 118	<u>Weight Training II</u>	1
PED 120	<u>Walking for Fitness</u>	1
PED 121	<u>Walk, Jog, Run</u>	1
PED 122	<u>Yoga I</u>	1
PED 123	<u>Yoga II</u>	1
PED 124	<u>Run, Swim, Cycle</u>	1
PED 128	<u>Golf-Beginning</u>	1
PED 130	<u>Tennis-Beginning</u>	1
PED 142	<u>Lifetime Sports</u>	1
PED 154	<u>Swimming for Fitness</u>	1
PED 217	<u>Pilates I</u>	1
POL 130	<u>State &amp; Local Government</u>	3
PSY 211	<u>Psychology of Adjustment</u>	3
PSY 215	<u>Positive Psychology.</u>	3
PSY 231	<u>Forensic Psychology.</u>	3
PSY 243	<u>Child Psychology.</u>	3
PSY 246	<u>Adolescent Psychology.</u>	3
PSY 249	<u>Psychology of Aging</u>	3
PSY 259	<u>Human Sexuality.</u>	3
PSY 275	<u>Health Psychology.</u>	3
SOC 234	<u>Sociology of Gender</u>	3
SOC 242	<u>Sociology of Deviance</u>	3
SOC 245	<u>Drugs and Society.</u>	3
SOC 250	<u>Sociology of Religion</u>	3
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>14</b>

## Work-Based Learning (WBL)

WBL-111 does not count toward graduation or in the 60 hour minimum for this degree since it is not a transfer course. Students selecting WBL-111 will be required to complete 15 SHC for Additional Other Required Hours for a minimum of 61 SHC to earn the Associate in Arts degree.

*Total semester hour credits to complete degree: 60-61*

This entry was posted in [Arts and Sciences, Associate in Arts \(10100\)](#) and tagged [Degree, Transfer Degree](#). Bookmark the [permalink](#).

## Associate in Arts (10100) CIP 24.0101

### CCPP College Transfer Pathway to Associate in Arts (P1012C)

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#### General Education Requirements (31 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Humanities/Fine Arts/Communication

Take three courses from the following list from at least two different subjects (prefixes).

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>9</b>

##### Social/Behavioral Sciences

Take three courses from the following list from at least two different subjects (prefixes).

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>9</b>

##### Math

Take one course from the following list.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>3-4</b>

##### Natural Sciences

Take one of the following sets.

Set One

AST 111	<u>Descriptive Astronomy.</u>	3
AST 111A	<u>Descriptive Astronomy Lab</u>	1

Set Two

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1

Set Three

BIO 110	<u>Principles of Biology.</u>	4
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Set Four

BIO 111	<u>General Biology I</u>	4
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Set Five

CHM 151	<u>General Chemistry I</u>	4
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Set Six

PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

**Total SHC 4**

Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your natural sciences course, you should select MAT 171 as your Math course or have credit for MAT 171.

## Other Required Hours (1 SHC)

### College Transfer Success

Take the following course.

ACA 122	<u>College Transfer Success</u>	1
<b>Total SHC</b>		<b>1</b>

*Total semester hour credits to complete degree: 32*

## Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Arts and Sciences](#), [Associate in Arts \(10100\)](#), and tagged [Diploma](#), [Transfer Degree](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Associate in Engineering (10500) CIP 14.0102

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### Description

The Associate in Engineering (AE) degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and basic computer use.

The degree plan includes required general education and prerequisite courses that are acceptable to all state funded Bachelor of Engineering programs. Students who follow the degree progression plan will meet the entrance requirements at all of the North Carolina public Bachelor of Science Engineering programs. Associate in Engineering graduates may then apply to any of these programs without taking additional and sometimes duplicative courses. Admission to Engineering programs is highly competitive and admission is not guaranteed.

To be eligible for the transfer of credits under the AE to the Bachelor of Science in Engineering Articulation Agreement, community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.5 on a 4.0 scale.

### Awards

- Associate in Engineering Degree (A10500)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/18/associate-in-engineering-degree-a10500/>).
- CCPP College Transfer Pathway to Associate in Engineering (P1052C) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/29/ccpp-college-transfer-pathway-p1052c/>).

### Additional Information

- North Carolina Community College Transfer Guide for UNC Charlotte ([https://rccc.blackboard.com/bbcswebdav/pid-2632830-dt-content-rid-6114730\\_1/orgs/CURRICULUM-COMMITTEE-2013/UNCC%20Transfer%20Guide%20Eng%20%2B%20AE.pdf](https://rccc.blackboard.com/bbcswebdav/pid-2632830-dt-content-rid-6114730_1/orgs/CURRICULUM-COMMITTEE-2013/UNCC%20Transfer%20Guide%20Eng%20%2B%20AE.pdf)).

### Contact Information

The Associate in Engineering (10500) CIP 14.0102 program is in the RCCC Department of Arts and Sciences ([/liberalarts/](#)). For additional information regarding this program, contact the chair, Tony Bean ([tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)).

This entry was posted in Arts and Sciences, Associate in Engineering (10500), and tagged Program Description, Transfer Program. Bookmark the [permalink](#).

## Associate in Engineering (10500) CIP 14.0102

### Associate in Engineering Degree (A10500)

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#### General Education Requirements (42 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Humanities/Fine Arts

Take one of the following courses.

ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
PHI 240	<u>Introduction to Ethics</u>	3

Take one of the following courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
COM 231	<u>Public Speaking</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
<b>Total SHC</b>		<b>6</b>

##### Social/Behavioral Sciences

Take the following course.

ECO 251	<u>Principles of Microeconomics</u>	3
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Take one of the following courses.

HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

#### Natural Science and Mathematics Requirement (24 SHC)

##### Natural Sciences Requirement

Take all of the following courses.

CHM 151	<u>General Chemistry I</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4

## Mathematics Requirement

Take all of the following courses.

MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
MAT 273	<u>Calculus III</u>	4

## Other Required Hours (18 SHC)

### Required Courses

Take the following two courses.

ACA 122	<u>College Transfer Success</u>	1
EGR 150	<u>Introduction to Engineering</u>	2
<b>Total SHC</b>		<b>3</b>

### Other Required Hours

Take 15 semester hour credits from the following list of courses. Students selecting WBL 111 will be required to complete 16 SHC.

CHM 152	<u>General Chemistry II</u>	4
CSC 134	<u>C++ Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
DFT 170	<u>Engineering Graphics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
EGR 220	<u>Engineering Statics</u>	3
EGR 228	<u>Intro to Solid Mechanics</u>	3
HUM 110	<u>Technology and Society</u>	3
MAT 285	<u>Differential Equations</u>	3
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>15</b>

*Total semester hour credits to complete degree: 60-61*

## Work-Based Learning

WBL-111 does not count toward graduation or in the 60 hour minimum for this degree since it is not a transfer course. Students selecting WBL-111 will be required to complete 16 SHC for Additional Other Required Hours for a minimum of 61 SHC to earn the Associate in Engineering degree.

## Calculus Requirement

Students who are not calculus-ready will need to take MAT 171 and MAT 172 before taking MAT 271.

This entry was posted in [Associate in Engineering.\(10500\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Associate in Engineering (10500) CIP 14.0102

### CCPP College Transfer Pathway to Associate in Engineering (P1052C)

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#### General Education Requirements (28 SHC)

##### English Composition

Take the following course.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Humanities/Fine Arts/Communication

Take one of the following courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>3</b>

##### Social/Behavioral Sciences

Take the following courses.

ECO 251	<u>Principles of Microeconomics</u>	3
<b>Total SHC</b>		<b>3</b>

##### Mathematics

Take the following courses.

MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
<b>Total SHC</b>		<b>8</b>

Note Students who do not place directly into MAT 271 must complete MAT 171 and MAT 172 prior to enrolling in MAT 271 Calculus I.

##### Natural Sciences

Take two of the following courses.

CHM 151	<u>General Chemistry I</u>	4
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PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
<b>Total SHC</b>		<b>8</b>

## Other Required Hours (6 SHC)

Take the following courses.

ACA 122	<u>College Transfer Success</u>	1
DFT 170	<u>Engineering Graphics</u>	3
EGR 150	<u>Introduction to Engineering</u>	2
<b>Total SHC</b>		<b>6</b>

*Total semester hour credits to complete diploma: 34*

## Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Associate in Engineering \(10500\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Associate in Fine Arts in Visual Arts (10600) CIP 24.0101

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### Description

The Associate in Fine Arts (AFA) in Visual Arts degree is designed for students who want to achieve one or more of the following goals: 1) Transfer into a four-year BFA or BAFA program; 2) Earn an Associate's degree that is focused on Visual Arts; 3) Strengthen personal creative work and improve personal portfolio; and/or (4) Explore a variety of creative techniques, mediums, and disciplines.

The AFA in Visual Arts degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of college transfer courses. The AFA in Visual Arts degree consists of required core visual arts foundational courses and of elective courses in a wide range of visual arts mediums and processes. It also includes opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers. All of the AFA in Visual Arts general education courses are Universal General Education Transfer Courses that are guaranteed to transfer for general education equivalency credit to each of the 16 constituent institutions in the 2014 Comprehensive Articulation Agreement (CAA).

The Fine & Applied Arts Programs offer numerous opportunities for AFA in Visual Arts students including two student art exhibitions per year; internship (WBL: Work-Based Learning) opportunities in the creative industries; field trips to galleries and museums, professional artist lectures; and one-on-one advising with career, transfer, and creative goals. Faculty are specifically focused on providing personalized assistance in the process of applying for transfer to four-year universities. As requirements vary among four-year institutions, students should obtain current catalogs from the colleges/universities they plan to attend and use them to inform their course selections. Please see information and links below concerning the Uniform Articulation Agreement to all seven UNC System BFA Programs as well as the Bilateral Transfer Agreement with UNC Charlotte.

### Awards

- [Associate in Fine Arts in Visual Arts Degree \(A10600\)](https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/associate-in-fine-arts-degree-a10600/)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/associate-in-fine-arts-degree-a10600/>)
- [CCPP College Transfer Pathway to Associate in Fine Arts in Visual Arts \(P1062C\)](https://legacy.rccc.edu/catalog-2019-2020/2019/01/29/ccpp-pathway-to-associate-in-fine-arts-in-visual-arts-p1062c/)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/29/ccpp-pathway-to-associate-in-fine-arts-in-visual-arts-p1062c/>)

### Additional Information

Jenn Selby serves as the Director of Philanthropy, Transfer, and the Arts with Jonathan Hoffman serving as the Chair for both the Associate in Fine Arts in Visual Arts transfer degree program and the Advertising and Graphic Design Associate in Applied Science degree program. Rowan-Cabarrus Community College (RCCC) has a bilateral articulation agreement with UNC Charlotte's Department of Art & Art History. It is designed to assist AFA in Visual Arts graduates from RCCC in earning a BFA degree from UNC Charlotte. Please visit the Fine and Applied Arts Program Website below, located under Additional Information, or contact Jenn Selby for more details.

- [Fine and Applied Arts Programs Website](https://www.rccc.edu/finearts/)  
(<https://www.rccc.edu/finearts/>)
- [Uniform Articulation Agreement \(Associate in Fine Arts in Visual Arts\)](https://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/uniform_art_agree_afa-va_01.09.19.pdf)  
([https://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/uniform\\_art\\_agree\\_afa-va\\_01.09.19.pdf](https://www.nccommunitycolleges.edu/sites/default/files/basic-pages/academic-programs/attachments/uniform_art_agree_afa-va_01.09.19.pdf))
- [Transfer Agreement with UNC Charlotte](https://www.rccc.edu/finearts/unc-charlotte-transfer-information/)  
(<https://www.rccc.edu/finearts/unc-charlotte-transfer-information/>)
- [Advertising & Graphic Design AAS degree](https://legacy.rccc.edu/catalog-2019-2020/2018/11/30/5190/)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/30/5190/>)

### Contact Information

















The Associate in Fine Arts in Visual Arts (10600) CIP 24.0101 program is in the RCCC Department of [Arts and Sciences \(/liberalarts/\)](#). For additional information regarding this program, contact the chair, Jonathan Hoffman ([jonathan.hoffman@rccc.edu](mailto:jonathan.hoffman@rccc.edu) (<mailto:jonathan.hoffman@rccc.edu>)).

## Program Advising

### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

<b>Jenn Selby</b> Director in Philanthropy and the Arts[+]	 <a href="mailto:jenn.selby@rccc.edu">jenn.selby@rccc.edu</a> ( <a href="mailto:jenn.selby@rccc.edu">mailto:jenn.selby@rccc.edu</a> )  (704) 216-3820  North
<b>Travis Phillips</b> Instructor in Academic Programs[+]	 <a href="mailto:travis.phillips@rccc.edu">travis.phillips@rccc.edu</a> ( <a href="mailto:travis.phillips@rccc.edu">mailto:travis.phillips@rccc.edu</a> )  (704) 216-3837  North
<b>John Williams</b> Instructor in Academic Programs[+]	 <a href="mailto:john.williams@rccc.edu">john.williams@rccc.edu</a> ( <a href="mailto:john.williams@rccc.edu">mailto:john.williams@rccc.edu</a> )  (704) 216-7220  North
<b>Jonathan Hoffman</b> Chair in Academic Programs[+]	 <a href="mailto:jonathan.hoffman@rccc.edu">jonathan.hoffman@rccc.edu</a> ( <a href="mailto:jonathan.hoffman@rccc.edu">mailto:jonathan.hoffman@rccc.edu</a> )  (704) 216-3819  North
<b>Lorraine Turi</b> Instructor in Academic Programs[+]	 <a href="mailto:lorraine.turi@rccc.edu">lorraine.turi@rccc.edu</a> ( <a href="mailto:lorraine.turi@rccc.edu">mailto:lorraine.turi@rccc.edu</a> )  (704) 216-3792  South
<b>Carmen Neely</b> Instructor in Academic Programs[+]	 <a href="mailto:carmen.neely@rccc.edu">carmen.neely@rccc.edu</a> ( <a href="mailto:carmen.neely@rccc.edu">mailto:carmen.neely@rccc.edu</a> )

This entry was posted in [Arts and Sciences](#), [Associate in Fine Arts in Visual Arts \(10600\)](#), and tagged [Program Description](#), [Transfer Program](#). Bookmark the [permalink](#).

## Associate in Fine Arts in Visual Arts (10600) CIP 24.0101

### Associate in Fine Arts in Visual Arts Degree (A10600)

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#### General Education Requirements (40 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Communications and Humanities/Fine Arts

Take two of the following courses from two different disciplines (prefixes/subjects).

ART 111	<u>Art Appreciation</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>6</b>

##### Social/Behavioral Sciences

Take two of the following courses from two different disciplines (prefixes/subjects).

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

##### Math

Take one course from the following list.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>3-4</b>

##### Natural Sciences

Take one of the following sets.

#### Set One

AST 111	<u>Descriptive Astronomy</u>	3
AST 111A	<u>Descriptive Astronomy Lab</u>	1

#### Set Two

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1

#### Set Three

BIO 110	<u>Principles of Biology</u>	4
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#### Set Four

BIO 111	<u>General Biology I</u>	4
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#### Set Five

CHM 151	<u>General Chemistry I</u>	4
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#### Set Six

PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

**Total SHC 4**

Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your natural sciences course, you should select MAT 171 as your Math course or have credit for MAT 171.

### Additional Universal General Education Transfer Courses (UGETC): ART

Take the following courses.

ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3

**Total SHC 6**

### Other Required: ART

Take the following courses.

ART 121	<u>Two-Dimensional Design</u>	3
ART 122	<u>Three-Dimensional Design</u>	3
ART 131	<u>Drawing I</u>	3

**Total SHC 9**

### Other Required Hours (19 SHC)

Because one course cannot fulfill two requirements from different areas of the program of study, do not select for your Other Required Hours the course that you selected to fulfill your Communications/Humanities/Fine Arts requirement or your Social/Behavioral Science requirement.

### Other Required Hours

Take 19 SHC from the following courses. Students taking WBL 111 must take 20 SHC .

ART 111	<u>Art Appreciation</u>	3
ART 117	<u>Non-Western Art History</u>	3
ART 118	<u>Art by Women</u>	3
ART 132	<u>Drawing II</u>	3
ART 135	<u>Figure Drawing I</u>	3
ART 171	<u>Computer Art I</u>	3
ART 212	<u>Gallery Assistantship I</u>	3
ART 214	<u>Portfolio and Resume</u>	1

ART 231	<u>Printmaking I</u>	3
ART 232	<u>Printmaking II</u>	3
ART 235	<u>Figure Drawing II</u>	3
ART 240	<u>Painting I</u>	3
ART 241	<u>Painting II</u>	3
ART 244	<u>Watercolor</u>	3
ART 250	<u>Surface Design: Textiles</u>	3
ART 261	<u>Photography I</u>	3
ART 262	<u>Photography II</u>	3
ART 264	<u>Digital Photography I</u>	3
ART 265	<u>Digital Photography II</u>	3
ART 266	<u>Videography I</u>	3
ART 267	<u>Videography II</u>	3
ART 275	<u>Introduction to Graphic Design</u>	3
ART 281	<u>Sculpture I</u>	3
ART 282	<u>Sculpture II</u>	3
ART 283	<u>Ceramics I</u>	3
ART 284	<u>Ceramics II</u>	3
ART 288	<u>Studio</u>	3
COM 231	<u>Public Speaking</u>	3
ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
FRE 111	<u>Elementary French I</u>	3
FRE 112	<u>Elementary French II</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
SPA 111	<u>Elementary Spanish I</u>	3
SPA 112	<u>Elementary Spanish II</u>	3
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>19</b>

## College Transfer Success

Take the following course.

ACA 122	<u>College Transfer Success</u>	1
<b>Total SHC</b>		<b>1</b>

*Total semester hour credits to complete degree: 60*

## Work-Based Learning

WBL-111 does not count toward graduation or in the 60 hour minimum for this degree since it is not a transfer course. Students selecting WBL-111 will be required to complete 20 SHC for Other Required Hours for a minimum of 61 SHC to earn the Associate



in Fine Arts in Visual Arts degree.

This entry was posted in [Arts and Sciences](#), [Associate in Fine Arts in Visual Arts \(10600\)](#), and tagged [Degree](#), [Transfer Degree](#). Bookmark the [permalink](#).

## Associate in Fine Arts in Visual Arts (10600) CIP 24.0101

### CCPP College Transfer Pathway to Associate in Fine Arts in Visual Arts (P1062C)

#### General Education Requirements (25 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Humanities/Fine Arts/Communication

Take two courses from the following list from two different subjects (prefixes).

ART 111	<u>Art Appreciation</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>6</b>

##### Social/Behavioral Sciences

Take two courses from the following list from two different subjects (prefixes).

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

##### Math

Take one course from the following list.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>3-4</b>

##### Natural Sciences

Take one of the following sets.

Set One

AST 111	<u>Descriptive Astronomy</u>	3
AST 111A	<u>Descriptive Astronomy Lab</u>	1

Set Two

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1

Set Three

BIO 110	<u>Principles of Biology</u>	4
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Set Four

BIO 111	<u>General Biology I</u>	4
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Set Five

CHM 151	<u>General Chemistry I</u>	4
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**Total SHC 4**

Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your natural sciences course, you should select MAT 171 as your Math course or have credit for MAT 171.

## Other Required Hours (6 SHC)

### Art

Take the following courses.

ART 121	<u>Two-Dimensional Design</u>	3
ART 131	<u>Drawing I</u>	3

**Total SHC 6**

## Other Required Hours (1 SHC)

### College Transfer Success

Take the following course.

ACA 122	<u>College Transfer Success</u>	1
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**Total SHC 1**

*Total semester hour credits to complete degree: 32*

## Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Arts and Sciences](#), [Associate in Fine Arts in Visual Arts \(10600\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

## Associate in General Education (10300) CIP 24.0199

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### Description

The associate in general education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development.

Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided.

Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities.

### Awards

- Associate in General Education Degree (A10300)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/04/18/associate-in-general-education-degree-a10300/>).

### Contact Information

The Associate in General Education (10300) CIP 24.0199 program is in the RCCC Department of Health and Education ([/healthpublicservices/](http://healthpublicservices/)). For additional information regarding this program, contact the dean, Wendy Barnhardt ([wendy.barnhardt@rccc.edu](mailto:wendy.barnhardt@rccc.edu) (<mailto:wendy.barnhardt@rccc.edu>)).

This entry was posted in [Associate in General Education \(10300\)](#), [Health and Education](#) and tagged [Program Description](#). Bookmark the [permalink](#).

## Associate in General Education (10300) CIP 24.0199

### Associate in General Education Degree (A10300)

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#### General Education Requirements (15 SHC)

##### English Composition

ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>3</b>

##### Communication

Take one of the following courses.

COM 110	<u>Introduction to Communication</u>	3
COM 120	<u>Intro to Interpersonal Communication</u>	3
COM 140	<u>Introduction to Intercultural Communication</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>3</b>

##### Humanities/Fine Arts

Take 3 semester hour credits from the following courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
ART 117	<u>Non-Western Art History</u>	3
ART 118	<u>Art by Women</u>	3
ART 121	<u>Two-Dimensional Design</u>	3
ART 131	<u>Drawing I</u>	3
ART 132	<u>Drawing II</u>	3
ART 171	<u>Computer Art I</u>	3
ART 240	<u>Painting I</u>	3
ART 241	<u>Painting II</u>	3
ART 244	<u>Watercolor</u>	3
ART 261	<u>Photography I</u>	3
ART 262	<u>Photography II</u>	3
ART 266	<u>Videography I</u>	3
ART 281	<u>Sculpture I</u>	3
ART 283	<u>Ceramics I</u>	3
ART 288	<u>Studio</u>	3
COM 140	<u>Introduction to Intercultural Communication</u>	3
DRA 111	<u>Theatre Appreciation</u>	3
DRA 126	<u>Storytelling</u>	3
DRA 130	<u>Acting I</u>	3
ENG 125	<u>Creative Writing I</u>	3
ENG 131	<u>Introduction to Literature</u>	3



ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
ENG 261	<u>World Literature I</u>	3
ENG 262	<u>World Literature II</u>	3
ENG 272	<u>Southern Literature</u>	3
ENG 273	<u>African-American Literature</u>	3
ENG 274	<u>Literature by Women</u>	3
HUM 110	<u>Technology and Society</u>	3
HUM 115	<u>Critical Thinking</u>	3
HUM 120	<u>Cultural Studies</u>	3
HUM 121	<u>The Nature of America</u>	3
HUM 122	<u>Southern Culture</u>	3
HUM 130	<u>Myth in Human Culture</u>	3
HUM 160	<u>Introduction to Film</u>	3
HUM 170	<u>The Holocaust</u>	3
HUM 212	<u>Humanities II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
MUS 210	<u>History of Rock Music</u>	3
PHI 210	<u>History of Philosophy</u>	3
PHI 221	<u>Western Philosophy II</u>	3
PHI 230	<u>Introduction to Logic</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
REL 110	<u>World Religions</u>	3
REL 211	<u>Introduction to Old Testament</u>	3
REL 212	<u>Introduction to New Testament</u>	3
<b>Total SHC</b>		<b>3</b>

## Social/Behavioral Sciences

Take 3 semester hour credits from the following courses.

ANT 210	<u>General Anthropology</u>	3
ANT 220	<u>Cultural Anthropology</u>	3
ANT 230	<u>Physical Anthropology</u>	3
ANT 230A	<u>Physical Anthropology Lab</u>	1
ANT 240	<u>Archaeology</u>	3
ANT 240A	<u>Archaeology Field Lab</u>	2
ECO 151	<u>Survey of Economics</u>	3
ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
GEO 111	<u>World Regional Geography</u>	3
GEO 112	<u>Cultural Geography</u>	3
GEO 130	<u>General Physical Geography</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 122	<u>Western Civilization II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
HIS 162	<u>Women and History</u>	3
HIS 163	<u>The World Since 1945</u>	3
HIS 221	<u>African-American History</u>	3

HIS 226	<u>The Civil War</u>	3
HIS 236	<u>North Carolina History</u>	3
POL 120	<u>American Government</u>	3
POL 130	<u>State &amp; Local Government</u>	3
POL 220	<u>International Relations</u>	3
PSY 110	<u>Life Span Development</u>	3
PSY 118	<u>Interpersonal Psychology</u>	3
PSY 150	<u>General Psychology</u>	3
PSY 211	<u>Psychology of Adjustment</u>	3
PSY 237	<u>Social Psychology</u>	3
PSY 239	<u>Psychology of Personality</u>	3
PSY 241	<u>Developmental Psychology</u>	3
PSY 243	<u>Child Psychology</u>	3
PSY 246	<u>Adolescent Psychology</u>	3
PSY 249	<u>Psychology of Aging</u>	3
PSY 259	<u>Human Sexuality</u>	3
PSY 263	<u>Educational Psychology</u>	3
PSY 275	<u>Health Psychology</u>	3
PSY 281	<u>Abnormal Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
SOC 213	<u>Sociology of the Family</u>	3
SOC 220	<u>Social Problems</u>	3
SOC 230	<u>Race and Ethnic Relations</u>	3
SOC 234	<u>Sociology of Gender</u>	3
SOC 240	<u>Social Psychology</u>	3
SOC 242	<u>Sociology of Deviance</u>	3
SOC 250	<u>Sociology of Religion</u>	3
<b>Total SHC</b>		<b>3</b>

## Natural Sciences/Math

Take 3-4 semester hour credits from the following courses. If CHM 131 is selected, the accompanying lab CHM 131A must also be taken.

AST 111	<u>Descriptive Astronomy</u>	3
AST 151	<u>General Astronomy I</u>	3
BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4
BIO 140	<u>Environmental Biology</u>	3
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
CHM 121	<u>Foundations of Chemistry</u>	3
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 151	<u>General Chemistry I</u>	4
MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
PHY 110	<u>Conceptual Physics</u>	3
<b>Total SHC</b>		<b>3-4</b>

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Note

Beginning Fall 2018, CHM 151 will have a co-requisite of MAT 171. If you select CHM 151 as your Natural Sciences/Math course, you must also have credit for or take concurrently MAT 171.

## Other Required Hours (49 SHC)

### Academic Related

Take one of the following courses.

ACA 115	<u>Success &amp; Study Skills</u>	1
ACA 118	<u>College Study Skills</u>	2
ACA 122	<u>College Transfer Success</u>	1
<b>Total SHC</b>		<b>1-2</b>

### Additional Other Required Hours

Additional other required hours include additional general education and associate degree level courses. Courses must be at the 110-199 or 210-299 level. A total of 48 semester hour credits must be selected. A maximum of 7 semester hour credits in health, physical education, college orientation, and/or study skills may be included. Selected topics or seminar courses may be included in a program of study up to a maximum of three semester hour credits. These other required hour courses can be selected from any of the preceding courses not chosen for the general education requirement plus any of the 110-199 or 210-299 level courses with the following prefixes: ACC, AHR, ALT, ANT, ARC, ART, AST, ATR, AUT, BAF, BIO, BPR, BTC, BUS, CCT, CHM, CIS, CIV, CJC, CMT, COM, COS, CSC, CST, CTI, CTS, DBA, DDF, DFT, DRA, ECM, ECO, EDU, EGR, EHS, ELC, ELN, EMS, ENG, EPT, ETR, FIP, FRE, GEO, GIS, GRD, HEA, HIS, HSE, HUM, HYD, INS, INT, ISC, LDD, MAC, MAT, MEC, MED, MKT, MSM, MUS, NET, NOS, NUR, OMT, OST, OTA, PED, PHI, PHY, POL, PSY, PTA, RAD, REF, REL, SEC, SOC, SPA, SST, TRN, WEB, WLD.

WBL 110 may also be selected as part of the Additional Other Required Hours.

**Total SHC     48**

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64-66*

This entry was posted in [Associate in General Education \(10300\)](#), [Health and Education](#) and tagged [AGE](#), [Degree](#). Bookmark the [permalink](#).

## Associate in Science (10400) CIP 24.0101

### Description

The Associate in Science degree shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of college transfer courses. Within the degree program, the institution shall include opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic computer use. Academic advisors are available to assist students in selecting courses that best meet students' interests and the requirements of transfer institutions. Because course requirements vary among four-year institutions, students should obtain current catalogs from the schools they plan to attend.

Courses are approved for transfer through the Comprehensive Articulation Agreement (CAA). The CAA enables North Carolina community college graduates of two-year associate in science programs who are admitted to constituent institutions of The University of North Carolina to transfer with junior status.

Community college graduates must obtain a grade of "C" or better in each course and an overall GPA of at least 2.0 on a 4.0 scale in order to transfer with a junior status. Courses may also transfer through bilateral agreements between institutions.

### Awards

- Associate in Science Degree (A10400)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/associate-in-science-degree-a10400/>).
- CCPP College Transfer Pathway to Associate in Science (P1042C) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/29/college-transfer-pathway-to-associate-in-science-p1042c/>).

### Contact Information

The Associate in Science (10400) CIP 24.0101 program is in the RCCC Department of Arts and Sciences (/liberalarts/). For additional information regarding this program, contact the dean, Carol Scherczinger ([carol.scherczinger@rccc.edu](mailto:carol.scherczinger@rccc.edu)) (<mailto:carol.scherczinger@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Sharon Allen</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:sharon.allen@rccc.edu">sharon.allen@rccc.edu</a> (<a href="mailto:sharon.allen@rccc.edu">mailto:sharon.allen@rccc.edu</a>)</p> <p>☎ (704) 216-3860</p> <p>📍 South</p>
<p><b>Chelsea Edward</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:chelsea.edward@rccc.edu">chelsea.edward@rccc.edu</a> (<a href="mailto:chelsea.edward@rccc.edu">mailto:chelsea.edward@rccc.edu</a>)</p> <p>☎ (704) 216-7152</p> <p>📍 NCRC</p>

## Justin Bost

Instructor in Academic Programs[+]

✉ [justin.bost@rccc.edu](mailto:justin.bost@rccc.edu)

(mailto:justin.bost@rccc.edu)

☎ (704) 216-3823

📍 South

## Leanne Dixon

Instructor in Academic Programs[+]

✉ [leanne.dixon@rccc.edu](mailto:leanne.dixon@rccc.edu)

(mailto:leanne.dixon@rccc.edu)

☎ (704) 216-3880

📍 South

## Charles Dobbins

Instructor in Academic Programs[+]

✉ [charles.dobbins@rccc.edu](mailto:charles.dobbins@rccc.edu)

(mailto:charles.dobbins@rccc.edu)

☎ (704) 216-3861

📍 NCRC

## Bestos Fongoh

Instructor in Academic Programs[+]

✉ [bestos.fongoh@rccc.edu](mailto:bestos.fongoh@rccc.edu)

(mailto:bestos.fongoh@rccc.edu)

☎ (704) 216-3885

📍 South

## Kelly Lowman

Instructor in Academic Programs[+]

✉ [kelly.lowman@rccc.edu](mailto:kelly.lowman@rccc.edu)

(mailto:kelly.lowman@rccc.edu)

☎ (704) 216-3886

📍 North

## Denise Madrazo

Instructor in Academic Programs[+]

✉ [denise.madrazo@rccc.edu](mailto:denise.madrazo@rccc.edu)

(mailto:denise.madrazo@rccc.edu)

☎ (704) 216-3839

📍 South

## Maureen Thayer

Teaching Assistant in Academic Programs[+]

✉ [maureen.thayer@rccc.edu](mailto:maureen.thayer@rccc.edu)

(mailto:maureen.thayer@rccc.edu)

☎ (704) 216-3929

📍 South

## Ginger Pack

Instructor in Academic Programs[+]

✉ [ginger.pack@rccc.edu](mailto:ginger.pack@rccc.edu)

(mailto:ginger.pack@rccc.edu)

☎ (704) 216-3891

📍 South

## Melissa Reid

Chair in Academic Programs[+]

✉ [melissa.reid@rccc.edu](mailto:melissa.reid@rccc.edu)

(mailto:melissa.reid@rccc.edu)

☎ (704) 216-3892

📍 South































## Carol Scherczinger

Dean in Academic Programs[+]

✉ [carol.scherczinger@rccc.edu](mailto:carol.scherczinger@rccc.edu)

(mailto:carol.scherczinger@rccc.edu)

☎ (704) 216-3923

	 NCRC
<b>Denise Schweizer</b> Chair in Academic Programs[+]	 denise.schweizer@rccc.edu (mailto:denise.schweizer@rccc.edu)
	 (704) 216-7102
	 NCRC
<b>Lara Swenson</b> Instructor in Academic Programs[+]	 lara.swenson@rccc.edu (mailto:lara.swenson@rccc.edu)
	 (704) 216-3830
	 South
<b>Barbara Taylor-Lineberry</b> Instructor in Academic Programs[+]	 barbara.taylorlinebe@rccc.edu (mailto:barbara.taylorlinebe@rccc.edu)
	 (704) 216-3895
	 North
<b>Linne Wallace</b> Instructor in Academic Programs[+]	 linne.wallace@rccc.edu (mailto:linne.wallace@rccc.edu)
	 (704) 216-3868
	 NCRC
<b>Kim Webster</b> Instructor in Academic Programs[+]	 kim.webster@rccc.edu (mailto:kim.webster@rccc.edu)
	 (704) 216-3783
	 North
<b>Tracy Zanolini</b> Instructor in Academic Programs[+]	 tracy.zanolini@rccc.edu (mailto:tracy.zanolini@rccc.edu)
	 (704) 216-3572
	 South
<b>Katherine Bender</b> Instructor in Academic Programs[+]	 kassy.bender@rccc.edu (mailto:kassy.bender@rccc.edu)
	 (704) 216-3760
	 South
<b>Matthew Hendricks</b> Instructor in Academic Programs[+]	 matt.hendricks@rccc.edu (mailto:matt.hendricks@rccc.edu)
	 North
<b>Caroline Cook</b> Instructor in Academic Programs[+]	 caroline.cook@rccc.edu (mailto:caroline.cook@rccc.edu)
	 (704) 216-3629
	 North
<b>Lisa Bratti</b> Instructor in Academic Programs[+]	 lisa.bratti@rccc.edu (mailto:lisa.bratti@rccc.edu)
	 (704) 216-7151
	 South



## Matthew Lowder

Instructor in Academic Programs[+]

✉ matthew.lowder@rccc.edu  
(mailto:matthew.lowder@rccc.edu)

## Alisha Pendergrass

Instructor in Academic Programs[+]

✉ alisha.pendergrass@rccc.edu  
(mailto:alisha.pendergrass@rccc.edu)

☎ (704) 216-7146

📍 North

## Eric Savage

Instructor in Academic Programs[+]

✉ eric.savage@rccc.edu  
(mailto:eric.savage@rccc.edu)

☎ (704) 216-7106

📍 North

## John Berryman

Instructor in Academic Programs[+]

✉ john.berryman@rccc.edu  
(mailto:john.berryman@rccc.edu)

☎ (704) 216-3804

📍 South

## Sara English

Instructor in Academic Programs[+]

✉ sara.english@rccc.edu  
(mailto:sara.english@rccc.edu)

☎ (704) 216-3564

📍 NCRC

## Rebekah Liberty

Instructor in Academic Programs[+]

✉ rebekah.liberty@rccc.edu  
(mailto:rebekah.liberty@rccc.edu)

☎ (704) 216-3564

📍 North

## Nikki Russell

Instructor in Academic Programs[+]

✉ nikki.russell@rccc.edu  
(mailto:nikki.russell@rccc.edu)

## Victoria Hayes

Instructor in Academic Programs[+]

✉ victoria.hayes@rccc.edu  
(mailto:victoria.hayes@rccc.edu)

☎ (704) 216-7221

📍 North

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## Associate in Science (10400) CIP 24.0101

### Associate in Science Degree (A10400)

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#### General Education Requirements (45 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Communications/Humanities/Fine Arts

Take two courses from the following list from at least two different disciplines (prefixes).

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>6</b>

##### Social/Behavioral Sciences

Take two courses from the following list from at least two different disciplines (prefixes).

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

##### Math

Take two courses from the following list.

MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4

## Natural Sciences

Take one of the following sets.

### Set One

BIO 111	<u>General Biology I</u>	4
BIO 112	<u>General Biology II</u>	4

### Set Two

CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4

### Set Three

PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4

### Set Four

PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4

### Set Five

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1
BIO 110	<u>Principles of Biology</u>	4

### Set Six

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

### Set Seven

BIO 110	<u>Principles of Biology</u>	4
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

Total SHC 8

Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151/CHM 152 for your natural sciences courses, you should select MAT 171 as one of your Math courses or have credit for MAT 171.

## Additional General Education Hours

Take 11 SHC from the following list or from any courses listed above that are not taken to satisfy the general education requirements.

ANT 210	<u>General Anthropology</u>	3
ANT 220	<u>Cultural Anthropology</u>	3
ANT 230	<u>Physical Anthropology</u>	3
ANT 230A	<u>Physical Anthropology Lab</u>	1
ANT 240	<u>Archaeology</u>	3
AST 152	<u>General Astronomy II</u>	3
AST 152A	<u>General Astronomy II Lab</u>	1
BIO 140	<u>Environmental Biology</u>	3
BIO 140A	<u>Environmental Biology Lab</u>	1
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 132	<u>Organic and Biochemistry</u>	4

CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
COM 110	<u>Introduction to Communication</u>	3
COM 120	<u>Intro to Interpersonal Communication</u>	3
COM 140	<u>Introduction to Intercultural Communication</u>	3
DRA 111	<u>Theatre Appreciation</u>	3
DRA 126	<u>Storytelling</u>	3
ECO 151	<u>Survey of Economics</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
ENG 131	<u>Introduction to Literature</u>	3
ENG 261	<u>World Literature I</u>	3
ENG 262	<u>World Literature II</u>	3
FRE 111	<u>Elementary French I</u>	3
FRE 112	<u>Elementary French II</u>	3
GEO 111	<u>World Regional Geography.</u>	3
GEO 112	<u>Cultural Geography.</u>	3
GEO 130	<u>General Physical Geography.</u>	3
HIS 122	<u>Western Civilization II</u>	3
HUM 110	<u>Technology and Society.</u>	3
HUM 115	<u>Critical Thinking</u>	3
HUM 120	<u>Cultural Studies</u>	3
HUM 121	<u>The Nature of America</u>	3
HUM 122	<u>Southern Culture</u>	3
HUM 130	<u>Myth in Human Culture</u>	3
HUM 160	<u>Introduction to Film</u>	3
HUM 212	<u>Humanities II</u>	3
MAT 143	<u>Quantitative Literacy.</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 273	<u>Calculus III</u>	4
MUS 210	<u>History of Rock Music</u>	3
PHI 210	<u>History of Philosophy.</u>	3
PHI 230	<u>Introduction to Logic</u>	3
POL 220	<u>International Relations</u>	3
PSY 237	<u>Social Psychology.</u>	3
PSY 239	<u>Psychology of Personality.</u>	3
PSY 241	<u>Developmental Psychology.</u>	3
PSY 281	<u>Abnormal Psychology.</u>	3
REL 110	<u>World Religions</u>	3
REL 211	<u>Introduction to Old Testament</u>	3
REL 212	<u>Introduction to New Testament</u>	3
SOC 213	<u>Sociology of the Family.</u>	3
SOC 220	<u>Social Problems</u>	3
SOC 230	<u>Race and Ethnic Relations</u>	3
SOC 240	<u>Social Psychology.</u>	3
SPA 111	<u>Elementary Spanish I</u>	3
SPA 112	<u>Elementary Spanish II</u>	3
SPA 211	<u>Intermediate Spanish I</u>	3
SPA 212	<u>Intermediate Spanish II</u>	3
<b>Total SHC</b>		<b>11</b>

## Other Required Hours (15 SHC)

### College Transfer Success

Take the following course.

ACA 122	<u>College Transfer Success</u>	1
<b>Total SHC</b>		<b>1</b>

### Additional Other Required Hours

Take 14 SHC from the following courses or from any of the general education courses listed above not taken to satisfy the general education requirement or the additional general education hours requirement. If WBL 111 is selected, take 15 SHC.

ACC 120	<u>Principles of Financial Accounting</u>	4
ACC 121	<u>Principles of Managerial Accounting</u>	4
ANT 240A	<u>Archaeology Field Lab</u>	2
ART 121	<u>Two-Dimensional Design</u>	3
ART 122	<u>Three-Dimensional Design</u>	3
ART 131	<u>Drawing I</u>	3
ART 132	<u>Drawing II</u>	3
ART 135	<u>Figure Drawing I</u>	3
ART 212	<u>Gallery Assistantship I</u>	3
ART 214	<u>Portfolio and Resume</u>	1
ART 231	<u>Printmaking I</u>	3
ART 235	<u>Figure Drawing II</u>	3
ART 240	<u>Painting I</u>	3
ART 241	<u>Painting II</u>	3
ART 244	<u>Watercolor</u>	3
ART 261	<u>Photography I</u>	3
ART 262	<u>Photography II</u>	3
ART 264	<u>Digital Photography I</u>	3
ART 265	<u>Digital Photography II</u>	3
ART 266	<u>Videography I</u>	3
ART 267	<u>Videography II</u>	3
ART 281	<u>Sculpture I</u>	3
ART 282	<u>Sculpture II</u>	3
ART 283	<u>Ceramics I</u>	3
ART 288	<u>Studio</u>	3
AST 251	<u>Observational Astronomy</u>	2
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
BIO 250	<u>Genetics</u>	4
BIO 275	<u>Microbiology</u>	4
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 137	<u>Principles of Management</u>	3
CHM 251	<u>Organic Chemistry I</u>	4
CHM 252	<u>Organic Chemistry II</u>	4
CHM 263	<u>Analytical Chemistry</u>	5
CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 141	<u>Corrections</u>	3
COM 150	<u>Introduction to Mass Communication</u>	3

CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 239	<u>Advanced Visual BASIC Programming</u>	3
DRA 130	<u>Acting I</u>	3
DRA 132	<u>Stage Movement</u>	3
DRA 140	<u>Stagecraft I</u>	3
DRA 170	<u>Play Production I</u>	3
ENG 125	<u>Creative Writing I</u>	3
ENG 126	<u>Creative Writing II</u>	3
ENG 235	<u>Survey of Film As Lit</u>	3
ENG 272	<u>Southern Literature</u>	3
ENG 273	<u>African-American Literature</u>	3
ENG 274	<u>Literature by Women</u>	3
HEA 110	<u>Personal Health/Wellness</u>	3
HIS 162	<u>Women and History</u>	3
HIS 163	<u>The World Since 1945</u>	3
HIS 221	<u>African-American History</u>	3
HIS 226	<u>The Civil War</u>	3
HIS 236	<u>North Carolina History</u>	3
HUM 170	<u>The Holocaust</u>	3
MAT 280	<u>Linear Algebra</u>	3
MAT 285	<u>Differential Equations</u>	3
MUS 131	<u>Chorus I</u>	1
MUS 132	<u>Chorus II</u>	1
MUS 231	<u>Chorus III</u>	1
MUS 232	<u>Chorus IV</u>	1
PED 110	<u>Fit and Well for Life</u>	2
PED 111	<u>Physical Fitness I</u>	1
PED 113	<u>Aerobics I</u>	1
PED 117	<u>Weight Training I</u>	1
PED 118	<u>Weight Training II</u>	1
PED 120	<u>Walking for Fitness</u>	1
PED 121	<u>Walk, Jog, Run</u>	1
PED 122	<u>Yoga I</u>	1
PED 124	<u>Run, Swim, Cycle</u>	1
PED 128	<u>Golf-Beginning</u>	1
PED 130	<u>Tennis-Beginning</u>	1
PED 142	<u>Lifetime Sports</u>	1
PED 154	<u>Swimming for Fitness</u>	1
PED 217	<u>Pilates I</u>	1
POL 130	<u>State &amp; Local Government</u>	3
PSY 211	<u>Psychology of Adjustment</u>	3
PSY 215	<u>Positive Psychology</u>	3
PSY 231	<u>Forensic Psychology</u>	3
PSY 243	<u>Child Psychology</u>	3
PSY 246	<u>Adolescent Psychology</u>	3
PSY 249	<u>Psychology of Aging</u>	3
PSY 259	<u>Human Sexuality</u>	3
PSY 275	<u>Health Psychology</u>	3
SOC 234	<u>Sociology of Gender</u>	3



SOC 242	<u>Sociology of Deviance</u>	3
SOC 245	<u>Drugs and Society</u>	3
SOC 250	<u>Sociology of Religion</u>	3
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>14</b>

## Work-Based Learning (WBL)

WBL-111 does not count toward graduation or in the 60 hour minimum for this degree since it is not a transfer course. Students selecting WBL-111 will be required to complete 15 SHC for Additional Other Required Hours for a minimum of 61 SHC to earn the Associate in Science degree.

*Total semester hour credits to complete degree: 60-61*

This entry was posted in [Associate in Science \(10400\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Degree](#), [Transfer Degree](#). Bookmark the [permalink](#).

## Associate in Science (10400) CIP 24.0101

### CCPP College Transfer Pathway to Associate in Science (P1042C)

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#### General Education Requirements (34 SHC)

##### English Composition

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
<b>Total SHC</b>		<b>6</b>

##### Humanities/Fine Arts/Communication

Take two courses from the following list from at least two different subjects (prefixes).

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 231	<u>American Literature I</u>	3
ENG 232	<u>American Literature II</u>	3
ENG 241	<u>British Literature I</u>	3
ENG 242	<u>British Literature II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>6</b>

##### Social/Behavioral Sciences

Take two courses from the following list from at least two different subjects (prefixes).

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

##### Math

Take two courses from the following list.

MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4

MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
<b>Total SHC</b>		<b>8</b>

## Natural Sciences

Take one of the following sets.

### Set One

BIO 111	<u>General Biology I</u>	4
BIO 112	<u>General Biology II</u>	4

### Set Two

CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4

### Set Three

PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4

### Set Four

PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4

### Set Five

AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1
BIO 110	<u>Principles of Biology</u>	4

### Set Six

BIO 110	<u>Principles of Biology</u>	4
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

**Total SHC 8**

Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151/CHM 152 for your natural sciences courses, you should select MAT 171 as one of your Math courses or have credit for MAT 171.

## Other Required Hours (1 SHC)

### College Transfer Success

Take the following course.

ACA 122	<u>College Transfer Success</u>	1
<b>Total SHC</b>		<b>1</b>

*Total semester hour credits to complete degree: 35*

## Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

## Automotive Light-Duty Diesel Technology (60430) CIP 47.0605

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### Description

This curriculum prepares individuals for employment as entry-level transportation service technicians. The program prepares individuals to apply technical knowledge and skills to diagnose, adjust, repair, or overhaul light duty diesel vehicles under one ton classification.

Coursework includes instruction in electrical systems, diesel-electric drive, engine performance, engine repair, emission systems, and all types of diesel engines related to the light duty diesel vehicle.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to the programs of study, and to enter careers as entry-level technicians in the transportation industry working primarily with automobile diesel engines.

### Awards

- **Diploma (D60430)** (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/19/diploma-d60430/>).
- **Basic Certificate (C60430BA)** (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/19/basic-certificate-c60430ba/>).

### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive light-duty diesel technology program chair or student services.

- **Automotive Light-Duty Diesel Technology Diploma Ed Plan** (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2018/07/Automotive-Light-Duty-Diesel-Tech-Diploma-D60430-2018-2019-Ed-Plan.pdf>)
- **Automotive Light-Duty Diesel Technology Basic Certificate Ed Plan** (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2018/07/Automotive-Light-Duty-Diesel-Tech-Basic-Certificate-C60430-2018-2019-Ed-Plan.pdf>).

### Contact Information

The Automotive Light-Duty Diesel Technology (60430) CIP 47.0605 program is in the RCCC Department of **Business, Engineering Technologies and Public Services** (</industrialengineering/>). For additional information regarding this program, contact the chair, Wade Vernon ([wade.vernon@rccc.edu](mailto:wade.vernon@rccc.edu) (<mailto:wade.vernon@rccc.edu>)).

This entry was posted in **[Automotive Light-Duty Diesel Technology](#)**, **[Business, Engineering Technologies and Public Services](#)** and tagged **[Program Description](#)**. Bookmark the **[permalink](#)**.

## Automotive Light-Duty Diesel Technology\_(60430)\_CIP 47.0605 Diploma (D60430)

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### First Year Fall

• LDD 112	<u>Intro Light-Duty Diesel</u>	3
• TRN 110	<u>Introduction to Transport Technology</u>	2
• TRN 120	<u>Basic Transportation Electricity</u>	5
— —	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>		<b>13</b>

### First Year Spring

ENG 111	<u>Writing and Inquiry</u>	3
• LDD 116	<u>Diesel Electric-Drive</u>	4
• LDD 181	<u>LDD Fuel Systems</u>	4
• LDD 183	<u>Air, Exhaust, Emissions</u>	4
<b>Total SHC</b>		<b>15</b>

### First Year Summer

LDD 284	<u>LDD Test and Diagnosis</u>	3
TRN 130	<u>Intro to Sustainable Transportation</u>	3
TRN 170	<u>Pc Skills for Transportation</u>	2

Take one of the following Work-Based Learning courses

WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
<b>Total SHC</b>		<b>9-11</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 37-39*

### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive light-duty diesel technology program chair or student services.

This entry was posted in [Automotive Light-Duty Diesel Technology](#) and tagged [Diploma](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Automotive Light-Duty Diesel Technology\_(60430)\_CIP 47.0605

### Basic Certificate (C60430BA)

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#### First Year Fall

LDD 112	<u>Intro Light-Duty Diesel</u>	3
• TRN 110	<u>Introduction to Transport Technology</u>	2
• TRN 120	<u>Basic Transportation Electricity</u>	5
<b>Total SHC</b>		<b>10</b>

#### First Year Spring

LDD 181	<u>LDD Fuel Systems</u>	4
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 14*

#### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive systems technology program chair or student services.

This entry was posted in [Automotive Light-Duty Diesel Technology](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Automotive Systems Technology (60160) CIP 47.0604

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### Description

The automotive systems technology curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Coursework may include transportation systems theory, braking systems, climate control, design parameters, drive trains, electrical/electronic systems, engine repair, engine performance, environmental regulations, materials, product finish, safety, steering/suspension, transmission transaxles, and sustainable transportation. Instruction covers rake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmission and drive trains, and heating and air condition systems. Students are prepared to apply technical knowledge and skills to repair, service, and maintain all types of automobiles.

Graduates should be prepared to take professional licensure exams and enter careers as entry-level technicians in the transportation industry.

### Awards

- Associate in Applied Science Degree (A60160)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/associate-in-applied-science-degree-a60160/>)
- Diploma (D60160) (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/05/diploma-d60160/>)
- CCPP Certificate (C60160PB) (<https://legacy.rccc.edu/catalog-2019-2020/2017/11/08/ccpp-certificate-c60160p/>)
- Chassis Certificate (C60160CH)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/09/27/chassis-certificate-c60160ch/>)
- Engine Performance and Engine Repair Certificate (C60160EP) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/engine-performance-and-engine-repair-certificate-c60160ep/>)
- Management Certificate (C60160AM)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/17/automotive-management-certificate-c60160am/>)

### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive systems technology chair or student services.

### Contact Information

The Automotive Systems Technology (60160) CIP 47.0604 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Wade Vernon ([wade.vernon@rccc.edu](mailto:wade.vernon@rccc.edu) (<mailto:wade.vernon@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

<b>Thomas Atwell</b> Instructor in Academic Programs[+]	<div>✉ <a href="mailto:thomas.atwell@rccc.edu">thomas.atwell@rccc.edu</a> (mailto:thomas.atwell@rccc.edu)</div> <div>☎ (704) 216-3902</div> <div>📍 North</div>
<b>Carl Smith</b> Instructor in Academic Programs[+]	<div>✉ <a href="mailto:carl.smith@rccc.edu">carl.smith@rccc.edu</a> (mailto:carl.smith@rccc.edu)</div> <div>☎ (704) 216-3925</div> <div>📍 North</div>
<b>Nathan Snyder</b> Instructor in Academic Programs[+]	<div>✉ <a href="mailto:nathan.snyder@rccc.edu">nathan.snyder@rccc.edu</a> (mailto:nathan.snyder@rccc.edu)</div> <div>☎ (704) 216-3904</div> <div>📍 North</div>
<b>Wade Vernon</b> Chair in Academic Programs[+]	<div>✉ <a href="mailto:wade.vernon@rccc.edu">wade.vernon@rccc.edu</a> (mailto:wade.vernon@rccc.edu)</div> <div>☎ (704) 216-3924</div> <div>📍 North</div>

This entry was posted in [Automotive Systems Technology \(60160\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Automotive Systems Technology (60160) CIP 47.0604

### Associate in Applied Science Degree (A60160)

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#### First Year Fall

Take the following courses.

AUT 116	<u>Engine Repair</u>	3
AUT 116A	<u>Engine Repair Lab</u>	1
• TRN 110	<u>Introduction to Transport Technology</u>	2
• TRN 120	<u>Basic Transportation Electricity</u>	5
— —	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

Take the following courses.

• AUT 141	<u>Suspension &amp; Steering Systems</u>	3
AUT 141A	<u>Suspension &amp; Steering Lab</u>	1
• AUT 151	<u>Brake Systems</u>	3
AUT 151A	<u>Brakes Systems Lab</u>	1
• AUT 181	<u>Engine Performance 1</u>	3
AUT 181A	<u>Engine Performance 1 Lab</u>	1
<b>Total SHC</b>		<b>12</b>

#### First Year Summer

Take the following courses.

• AUT 183	<u>Engine Performance 2</u>	4
• TRN 140	<u>Transportation Climate Control</u>	2
TRN 140A	<u>Transportation Climate Control Lab</u>	2
TRN 170	<u>Pc Skills for Transportation</u>	2
<b>Total SHC</b>		<b>10</b>

#### Second Year Fall

Take the following courses.

AUT 163	<u>Advanced Automotive Electricity</u>	3
AUT 163A	<u>Advanced Automotive Electricity Lab</u>	1
AUT 231	<u>Manual Transmissions/Transaxles/Drive Trains</u>	3
AUT 231A	<u>Manual Transmissions/Transaxles/Drive Trains Lab</u>	1
ENG 111	<u>Writing and Inquiry</u>	3
MAT 110	<u>Mathematical Measurement and Literacy</u>	3
<b>Total SHC</b>		<b>14</b>

#### Second Year Spring

Take the following courses.

AUT 221	<u>Automatic Transmissions/Transaxles</u>	3
AUT 221A	<u>Automatic Transmissions/Transaxles Lab</u>	1
COM 231	<u>Public Speaking</u>	3
WLD 112	<u>Basic Welding Processes</u>	2
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>12</b>

## Second Year Summer

Take the following courses.

TRN 130	<u>Intro to Sustainable Transportation</u>	3
— —	Major Electives	2
<b>Total SHC</b>		<b>5</b>

## Major Electives

Take two SHC from the following courses. Students may take either AUT 113 or WBL 112 in the second year summer term. Students may choose to take WBL 111 and WBL 121 instead of taking AUT 113 or WBL 112. WBL can be taken at any time in the curriculum to equal two credit hours total.

AUT 113	<u>Automotive Servicing I</u>	2
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 67*

## Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the Automotive Systems Technology program Chair or Student Services.

This entry was posted in [Automotive Systems Technology \(60160\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Automotive Systems Technology\_(60160)\_CIP 47.0604 Diploma (D60160)

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### First Year Fall

HUM 110	<u>Technology and Society</u>	3
• TRN 110	<u>Introduction to Transport Technology</u>	2
• TRN 120	<u>Basic Transportation Electricity</u>	5
<b>Total SHC</b>		<b>10</b>

### First Year Spring

• AUT 141	<u>Suspension &amp; Steering Systems</u>	3
AUT 141A	<u>Suspension &amp; Steering Lab</u>	1
• AUT 151	<u>Brake Systems</u>	3
AUT 151A	<u>Brakes Systems Lab</u>	1
• AUT 181	<u>Engine Performance 1</u>	3
AUT 181A	<u>Engine Performance 1 Lab</u>	1
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>15</b>

### First Year Summer

• AUT 183	<u>Engine Performance 2</u>	4
TRN 140	<u>Transportation Climate Control</u>	2
TRN 140A	<u>Transportation Climate Control Lab</u>	2
<b>Total SHC</b>		<b>8</b>

### Second Year Fall

AUT 163	<u>Advanced Automotive Electricity</u>	3
AUT 163A	<u>Advanced Automotive Electricity Lab</u>	1
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 37*

## Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive systems technology program chair or student services.

This entry was posted in [Automotive Systems Technology\\_\(60160\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Automotive Systems Technology\_(60160)\_CIP 47.0604 Chassis Certificate (C60160CH)

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### First Year Fall

• TRN 110	<u>Introduction to Transport Technology.</u>	2
• TRN 120	<u>Basic Transportation Electricity.</u>	5
<b>Total SHC</b>		<b>7</b>

### First Year Spring

• AUT 141	<u>Suspension &amp; Steering Systems</u>	3
AUT 141A	<u>Suspension &amp; Steering Lab</u>	1
• AUT 151	<u>Brake Systems</u>	3
AUT 151A	<u>Brakes Systems Lab</u>	1
<b>Total SHC</b>		<b>8</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive systems technology program chair or student services.

This entry was posted in [Automotive Systems Technology\\_\(60160\).](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Automotive Systems Technology (60160) CIP 47.0604

### Engine Performance and Engine Repair Certificate (C60160EP)

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#### First Year Fall

AUT 116	<u>Engine Repair</u>	3
AUT 116A	<u>Engine Repair Lab</u>	1
TRN 120	<u>Basic Transportation Electricity</u>	5
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

AUT 181	<u>Engine Performance 1</u>	3
AUT 181A	<u>Engine Performance 1 Lab</u>	1
<b>Total SHC</b>		<b>4</b>

#### First Year Summer

AUT 183	<u>Engine Performance 2</u>	4
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive systems technology program chair or student services.

This entry was posted in [Automotive Systems Technology \(60160\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Automotive Systems Technology\_(60160)\_CIP 47.0604 Management Certificate (C60160AM)

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### First Year Fall

ACC 115	<u>College Accounting</u>	4
BUS 137	<u>Principles of Management</u>	3
TRN 110	<u>Introduction to Transport Technology</u>	2
<b>Total SHC</b>		<b>9</b>

### First Year Spring

BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Automotive Systems Technology\\_\(60160\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Automotive Systems Technology\_(60160)\_CIP 47.0604

### CCPP Certificate (C60160PB)

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#### Courses

AUT 141	<u>Suspension &amp; Steering Systems</u>	3
AUT 141A	<u>Suspension &amp; Steering Lab</u>	1
AUT 151	<u>Brake Systems</u>	3
AUT 151A	<u>Brakes Systems Lab</u>	1
TRN 110	<u>Introduction to Transport Technology.</u>	2
TRN 120	<u>Basic Transportation Electricity.</u>	5
WBL 110	<u>World of Work</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

#### Additional Information

Students must furnish hand tools and protective clothing, as well as textbooks, and may obtain this list from the automotive systems technology program chair or student services.

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Automotive Systems Technology\\_\(60160\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Basic Law Enforcement Training (55120) CIP 43.0107

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### Description

Basic Law Enforcement Training (BLET) is designed to give students essential skills required for entry-level employment as law enforcement officers with state, county, or municipal governments, or with private enterprise.

This program utilizes State commission-mandated topics and methods of instruction. General subjects include, but are not limited to, criminal, juvenile, civil, traffic and alcohol beverage laws; investigative, patrol, custody and court procedures; emergency responses; and ethics and community relations.

Students must successfully complete and pass all units of study mandated by the North Carolina Criminal Justice Education and Training Standards Commission and the North Carolina Sheriffs' Education and Training Standards Commission to receive a certificate. Students must also pass the state comprehensive written examination to be awarded the C55120 certificate.

### Awards

- Certificate (C55120) (<https://legacy.rccc.edu/catalog-2019-2020/2017/11/09/certificate-program-c55120/>).

### Additional Information

- BLET Admission Requirements (<https://www.rccc.edu/lawenforcement/blet-admission-requirements/>).

### Contact Information

The Basic Law Enforcement Training (55120) CIP 43.0107 program is in the RCCC Department of Business, Engineering Technologies and Public Services ([/industrialengineering/](#)). For additional information regarding this program, contact the director, Chris Nesbitt ([chris.nesbitt@rccc.edu](mailto:chris.nesbitt@rccc.edu) (<mailto:chris.nesbitt@rccc.edu>)).

This entry was posted in [Basic Law Enforcement Training \(55120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).



## Basic Law Enforcement Training.(55120).CIP 43.0107 Certificate (C55120)

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### Required Courses

CJC 100	<u>Basic Law Enforcement Training</u>	20
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Note      Students must also pass the state comprehensive written examination to be awarded the C55120 certificate.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 20*

This entry was posted in [Basic Law Enforcement Training.\(55120\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Biotechnology (20100) CIP 26.1201

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### Description

The biotechnology curriculum, which has emerged from molecular biology and chemical engineering, is designed to meet the increasing demands for skilled laboratory technicians in various fields of biological and chemical technology

Course work emphasizes biology, chemistry, mathematics and technical communications. The curriculum objectives are designed to prepare graduates to serve in three distinct capacities: research assistant to a biologist or chemist, laboratory technician or instrumentation technician, and quality control or quality assurance technician.

Graduates may find employment in various areas of industry and government, including research and development, manufacturing, sales and customer service.

### Awards

- Associate in Applied Science Degree (A20100)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/27/associate-in-applied-science-degree-a20100/>)
- CCPP Certificate (C20100PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate/>)

### Contact Information

The Biotechnology (20100) CIP 26.1201 program is in the RCCC Department of Arts and Sciences (/liberalarts/). For additional information regarding this program, contact the chair, Chelsea Edward ([chelsea.edward@rccc.edu](mailto:chelsea.edward@rccc.edu) (<mailto:chelsea.edward@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Meghan Davis</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:meghan.davis@rccc.edu">meghan.davis@rccc.edu</a> (<a href="mailto:meghan.davis@rccc.edu">mailto:meghan.davis@rccc.edu</a>)</p> <p>☎ (704) 216-7104</p> <p>📍 NCRC</p>
<p><b>Shirley Foley</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:shirley.foley@rccc.edu">shirley.foley@rccc.edu</a> (<a href="mailto:shirley.foley@rccc.edu">mailto:shirley.foley@rccc.edu</a>)</p> <p>☎ (704) 216-7216</p> <p>📍 NCRC</p>
<p><b>Carol Scherczinger</b></p> <p>Dean in Academic Programs[+]</p>	<p>✉ <a href="mailto:carol.scherczinger@rccc.edu">carol.scherczinger@rccc.edu</a> (<a href="mailto:carol.scherczinger@rccc.edu">mailto:carol.scherczinger@rccc.edu</a>)</p> <p>☎ (704) 216-3923</p> <p>📍 NCRC</p>



## Biotechnology (20100) CIP 26.1201

### Associate in Applied Science Degree (A20100)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• BIO 111	<u>General Biology I</u>	4
CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4

Take one of the following ACA courses.

ACA 115	<u>Success &amp; Study Skills</u>	1
ACA 122	<u>College Transfer Success</u>	1

**Total SHC 14**

Note ACA 115 is preferred.

#### First Year Spring

• BIO 112	<u>General Biology II</u>	4
• BTC 181	<u>Basic Laboratory Techniques</u>	4

Take one of the following chemistry courses. CHM 131 requires CHM 131A.

• CHM 131	<u>Introduction to Chemistry</u>	3
• CHM 131A	<u>Introduction to Chemistry Lab</u>	1
• CHM 151	<u>General Chemistry I</u>	4

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

**Total SHC 15**

Note Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your chemistry course, you should select MAT 171 as your Math course or have credit for MAT 171.

#### First Year Summer

• BIO 275	<u>Microbiology</u>	4
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>7</b>

#### Second Year Fall

• BIO 250	<u>Genetics</u>	4
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BTC 285	<u>Cell Culture</u>	3
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Take one of the following chemistry courses.

- |           |                                 |   |
|-----------|---------------------------------|---|
| • CHM 132 | <u>Organic and Biochemistry</u> | 4 |
| • CHM 152 | <u>General Chemistry II</u>     | 4 |

Take one of the following social/behavioral science courses.

- |         |                                 |   |
|---------|---------------------------------|---|
| PSY 118 | <u>Interpersonal Psychology</u> | 3 |
| PSY 150 | <u>General Psychology</u>       | 3 |

**Total SHC 14**

## Second Year Spring

- |         |                                   |   |
|---------|-----------------------------------|---|
| BTC 270 | <u>Recombinant DNA Technology</u> | 4 |
| BTC 286 | <u>Immunological Techniques</u>   | 4 |
| — —     | Major Electives                   | 8 |

**Total SHC 16**

## Major Electives

Take 8 SHC from the following courses. Only one WBL course may be taken.

- |         |                                       |   |
|---------|---------------------------------------|---|
| BIO 140 | <u>Environmental Biology</u>          | 3 |
| BIO 163 | <u>Basic Anatomy &amp; Physiology</u> | 5 |
| CHM 263 | <u>Analytical Chemistry</u>           | 5 |
| COM 231 | <u>Public Speaking</u>                | 3 |
| MAT 152 | <u>Statistical Methods I</u>          | 4 |
| WBL 111 | <u>Work-Based Learning I</u>          | 1 |
| WBL 112 | <u>Work-Based Learning I</u>          | 2 |

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 66*

This entry was posted in [Arts and Sciences](#), [Biotechnology \(20100\)](#), and tagged [Degree](#). Bookmark the [permalink](#).

## Biotechnology\_(20100)\_CIP 26.1201

### CCPP Certificate (C20100PB)

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#### Courses

BIO 111	<u>General Biology I</u>	4
BIO 275	<u>Microbiology</u>	4
BTC 181	<u>Basic Laboratory Techniques</u>	4
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Arts and Sciences](#), [Biotechnology\\_\(20100\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Business Administration (25120) CIP 52.0201

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### Description

The business administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations in today's global economy.

Course work includes business concepts such as accounting, business law, economics, management and marketing. Skills related to the application of these concepts are developed through the study of computer applications, communication, team building and decision making.

Through these skills, students will have a sound business education base for lifelong learning. Graduates are prepared for employment opportunities in government agencies, financial institutions, and large to small business or industry.

### Awards

- Associate in Applied Science Degree General (A25120BA)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/22/associate-in-applied-science-general-business-administration-a25120ba/>)
- Associate in Applied Science Degree Human Resources Management (A25120HR) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/22/associate-in-applied-science-human-resources-management-a25120hr/>)
- Associate in Applied Science Degree Marketing (A25120MK) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/22/associate-in-applied-science-degree-marketing-a25120mk/>)
- Diploma (D25120) (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/diploma-d25120/>)
- Computing Certificate (C25120BC)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/27/business-computing-certificate-c25120bc/>)
- Customer Service Certificate (C25120CS)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/04/business-administration-customer-service-certificate-c25120cs/>)
- Entrepreneurship Certificate (C25120EN)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/entrepreneurship-certificate-c25120en/>)
- Human Resources Certificate (C25120HR)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/04/human-resources-certificate-c25120hr/>)
- Management Certificate (C25120BM)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/business-management-certificate-c25120bm/>)

### Contact Information

The Business Administration (25120) CIP 52.0201 program is in the RCCC Department of [Business, Engineering Technologies and Public Services \(/industrialengineering/\)](#). For additional information regarding this program, contact the chair, Garland Fulp ([garland.fulp@rccc.edu](mailto:garland.fulp@rccc.edu) (<mailto:garland.fulp@rccc.edu>)).

## Program Advising

### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

Garland Fulp  Chair in Academic Programs[+]	✉ <a href="mailto:garland.fulp@rccc.edu">garland.fulp@rccc.edu</a> ( <a href="mailto:garland.fulp@rccc.edu">mailto:garland.fulp@rccc.edu</a> )
	☎ (704) 216-3770
	📍 North
Calvin Moore  Instructor in Academic Programs[+]	✉ <a href="mailto:calvin.moore@rccc.edu">calvin.moore@rccc.edu</a> ( <a href="mailto:calvin.moore@rccc.edu">mailto:calvin.moore@rccc.edu</a> )
	📍 North,Web

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Business Administration (25120) CIP 52.0201

### Associate in Applied Science Degree General (A25120BA)

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#### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

• ACC 120	<u>Principles of Financial Accounting</u>	4
• BUS 110	<u>Introduction to Business</u>	3
• BUS 240	<u>Business Ethics</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4

Take one of the following ACA courses.

ACA 115	<u>Success &amp; Study Skills</u>	1
ACA 122	<u>College Transfer Success</u>	1

**Total SHC 16-17**

#### First Year Spring

Take the following courses.

• BUS 115	<u>Business Law I</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
• MKT 120	<u>Principles of Marketing</u>	3

Take one of the following economics courses.

• ECO 151	<u>Survey of Economics</u>	3
• ECO 251	<u>Principles of Microeconomics</u>	3
• ECO 252	<u>Principles of Macroeconomics</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

**Total SHC 16**

#### Second Year Fall

Take the following courses.

• BUS 137	<u>Principles of Management</u>	3
• BUS 230	<u>Small Business Management</u>	3
• BUS 253	<u>Leadership and Management Skills</u>	3
• BUS 260	<u>Business Communication</u>	3



—	—	<u>Social/Behavioral Sciences Elective</u>	3
—	—	Major Electives	3
<b>Total SHC</b>			<b>18</b>

## Second Year Spring

Take the following courses.

ACC 121	<u>Principles of Managerial Accounting</u>	4
• BUS 225	<u>Business Finance</u>	3
CTS 130	<u>Spreadsheet</u>	3
INT 110	<u>International Business</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
Total SHC		16

## MAJOR ELECTIVES

Take 3 SHC from the following courses.

ACC 270	<u>International Accounting</u>	3
BUS 121	<u>Business Math</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
ECM 210	<u>Introduction to E-Commerce</u>	3
ETR 210	<u>Introduction to Entrepreneurship</u>	3
ETR 215	<u>Law for Entrepreneurs</u>	3
ETR 220	<u>Innovation and Creativity</u>	3
ETR 230	<u>Entrepreneur Marketing</u>	3
ETR 240	<u>Funding for Entrepreneurs</u>	3
ETR 270	<u>Entrepreneurship Issues</u>	3
INT 115	<u>Global Communication</u>	3
INT 210	<u>International Trade</u>	3
INT 220	<u>International Economics</u>	3
INT 230	<u>International Law</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
MKT 220	<u>Advertising and Sales Promotion</u>	3
MKT 223	<u>Customer Service</u>	3
MKT 224	<u>International Marketing</u>	3
MKT 225	<u>Marketing Research</u>	3
MKT 227	<u>Marketing Applications</u>	3
MKT 232	<u>Social Media Marketing</u>	4
OST 136	<u>Word Processing</u>	3
SPA 111	<u>Elementary Spanish I</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 131	<u>Work-Based Learning III</u>	1
WEB 214	<u>Social Media</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 66-67*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Business Administration (25120) CIP 52.0201

### Associate in Applied Science Degree Human Resources Management (A25120HR)

## Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

### First Year Fall

Take the following courses.

• ACC 120	<u>Principles of Financial Accounting</u>	4
• BUS 110	<u>Introduction to Business</u>	3
• BUS 217	<u>Employment Law and Regulations</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4

Take one of the following ACA courses.

ACA 115	<u>Success &amp; Study Skills</u>	1
ACA 122	<u>College Transfer Success</u>	1

**Total SHC 16-17**

### First Year Spring

Take the following courses.

• BUS 115	<u>Business Law I</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
• MKT 120	<u>Principles of Marketing</u>	3

Take one of the following economics courses.

• ECO 151	<u>Survey of Economics</u>	3
• ECO 251	<u>Principles of Microeconomics</u>	3
• ECO 252	<u>Principles of Macroeconomics</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

**Total SHC 16**

### Second Year Fall

Take the following courses.

• BUS 137	<u>Principles of Management</u>	3
• BUS 234	<u>Training and Development</u>	3
• BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
• BUS 258	<u>Compensation and Benefits</u>	3

—	—	<u>Social/Behavioral Sciences Elective</u>	3
—	—	Major Electives	3
<b>Total SHC</b>			<b>18</b>

## Second Year Spring

Take the following courses.

ACC 121	<u>Principles of Managerial Accounting</u>	4
• BUS 259	<u>HRM Applications</u>	3
CTS 130	<u>Spreadsheet</u>	3
INT 110	<u>International Business</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>16</b>

## MAJOR ELECTIVES

Take 3 SHC from the following courses.

ACC 270	<u>International Accounting</u>	3
BUS 121	<u>Business Math</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 225	<u>Business Finance</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 260	<u>Business Communication</u>	3
ECM 210	<u>Introduction to E-Commerce</u>	3
ETR 210	<u>Introduction to Entrepreneurship</u>	3
ETR 215	<u>Law for Entrepreneurs</u>	3
ETR 220	<u>Innovation and Creativity</u>	3
ETR 230	<u>Entrepreneur Marketing</u>	3
ETR 240	<u>Funding for Entrepreneurs</u>	3
ETR 270	<u>Entrepreneurship Issues</u>	3
INT 115	<u>Global Communication</u>	3
INT 210	<u>International Trade</u>	3
INT 220	<u>International Economics</u>	3
INT 230	<u>International Law</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
MKT 220	<u>Advertising and Sales Promotion</u>	3
MKT 223	<u>Customer Service</u>	3
MKT 224	<u>International Marketing</u>	3
MKT 225	<u>Marketing Research</u>	3
MKT 227	<u>Marketing Applications</u>	3
MKT 232	<u>Social Media Marketing</u>	4
OST 136	<u>Word Processing</u>	3
SPA 111	<u>Elementary Spanish I</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 131	<u>Work-Based Learning III</u>	1
WEB 214	<u>Social Media</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 66-67*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Business Administration (25120) CIP 52.0201

### Associate in Applied Science Degree Marketing (A25120MK)

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#### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• ACC 120	<u>Principles of Financial Accounting</u>	4
• BUS 110	<u>Introduction to Business</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following marketing courses.

• MKT 123	<u>Fundamentals of Selling</u>	3
• MKT 223	<u>Customer Service</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4

Take one of the following ACA courses.

ACA 115	<u>Success &amp; Study Skills</u>	1
ACA 122	<u>College Transfer Success</u>	1

**Total SHC 16-17**

#### First Year Spring

• BUS 115	<u>Business Law I</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
• MKT 120	<u>Principles of Marketing</u>	3

Take one of the following economics courses.

• ECO 151	<u>Survey of Economics</u>	3
• ECO 251	<u>Principles of Microeconomics</u>	3
• ECO 252	<u>Principles of Macroeconomics</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

**Total SHC 16**

#### Second Year Fall

• BUS 137	<u>Principles of Management</u>	3
• MKT 220	<u>Advertising and Sales Promotion</u>	3
• MKT 225	<u>Marketing Research</u>	3
• MKT 232	<u>Social Media Marketing</u>	4
— —	<u>Social/Behavioral Sciences Elective</u>	3



**Total SHC 19**

## Second Year Spring

ACC 121	<u>Principles of Managerial Accounting</u>	4
CTS 130	<u>Spreadsheet</u>	3
INT 110	<u>International Business</u>	3
• MKT 227	<u>Marketing Applications</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>16</b>

## Major Electives

Take 3 SHC from the following courses. You may not select as a Major Electives the course you selected for your First Year Fall Marketing course.

ACC 270	<u>International Accounting</u>	3
BUS 121	<u>Business Math</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 225	<u>Business Finance</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
BUS 260	<u>Business Communication</u>	3
ECM 210	<u>Introduction to E-Commerce</u>	3
ETR 210	<u>Introduction to Entrepreneurship</u>	3
ETR 215	<u>Law for Entrepreneurs</u>	3
ETR 220	<u>Innovation and Creativity</u>	3
ETR 230	<u>Entrepreneur Marketing</u>	3
ETR 240	<u>Funding for Entrepreneurs</u>	3
ETR 270	<u>Entrepreneurship Issues</u>	3
INT 115	<u>Global Communication</u>	3
INT 210	<u>International Trade</u>	3
INT 220	<u>International Economics</u>	3
INT 230	<u>International Law</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
MKT 223	<u>Customer Service</u>	3
MKT 224	<u>International Marketing</u>	3
OST 136	<u>Word Processing</u>	3
SPA 111	<u>Elementary Spanish I</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 131	<u>Work-Based Learning III</u>	1
WEB 214	<u>Social Media</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 67-68*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Business Administration (25120) CIP 52.0201

### Diploma (D25120)

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#### First Year Fall

• ACC 120	<u>Principles of Financial Accounting</u>	4
BUS 110	<u>Introduction to Business</u>	3
• BUS 137	<u>Principles of Management</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>16</b>

#### First Year Spring

ACC 121	<u>Principles of Managerial Accounting</u>	4
BUS 121	<u>Business Math</u>	3
BUS 260	<u>Business Communication</u>	3
• ECO 151	<u>Survey of Economics</u>	3
• MKT 120	<u>Principles of Marketing</u>	3
<b>Total SHC</b>		<b>16</b>

#### First Year Summer

• BUS 115	<u>Business Law I</u>	3
— —	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 38*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Business Administration (25120) CIP 52.0201

### Computing Certificate (C25120BC)

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#### First Year Fall

BUS 110	<u>Introduction to Business</u>	3
CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

BUS 260	<u>Business Communication</u>	3
CTS 130	<u>Spreadsheet</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Business Administration (25120) CIP 52.0201

### Customer Service Certificate (C25120CS)

---

#### First Year Fall

Take the following courses.

BUS 110	<u>Introduction to Business</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

Take the following courses.

BUS 260	<u>Business Communication</u>	3
MKT 120	<u>Principles of Marketing</u>	3
MKT 223	<u>Customer Service</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Business Administration \(25120\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Business Administration (25120) CIP 52.0201

### Entrepreneurship Certificate (C25120EN)

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#### First Year Fall

ACC 120	<u>Principles of Financial Accounting</u>	4
BUS 230	<u>Small Business Management</u>	3
ETR 210	<u>Introduction to Entrepreneurship</u>	3
MKT 232	<u>Social Media Marketing</u>	4
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

ETR 220	<u>Innovation and Creativity</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Business Administration (25120) CIP 52.0201

### Human Resources Certificate (C25120HR)

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#### First Year Fall

Take the following courses.

BUS 217	<u>Employment Law and Regulations</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
<b>Total SHC</b>		<b>12</b>

#### First Year Spring

Take the following courses.

BUS 153	<u>Human Resource Management</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Business Administration \(25120\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Business Administration (25120) CIP 52.0201 Management Certificate (C25120BM)

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### First Year Fall

BUS 137	<u>Principles of Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
<b>Total SHC</b>		<b>9</b>

### First Year Spring

BUS 115	<u>Business Law I</u>	3
BUS 240	<u>Business Ethics</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Business Administration \(25120\)](#), [Business, Engineering Technologies and Public Services](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining (50210) CIP 48.0503

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### Description

The computer-integrated machining curriculum prepares students with the analytical, creative and innovative skills necessary to take a production idea from an initial concept through design, development and production, resulting in a finished product.

Coursework may include manual machining, computer applications, engineering design, computer-aided drafting (CAD), computer-aided machining (CAM), blueprint interpretation, advanced computerized numeric control (CNC) equipment, basic and advanced machining operations, precision measurement and high-speed multi-axis machining.

Graduates should qualify for employment as machining technicians in high-tech manufacturing, rapid-prototyping and rapid-manufacturing industries, specialty machine shops, fabrication industries, and high-tech or emerging industries such as aerospace, aviation, medical, and renewable energy, and to sit for machining certification examinations.

### Awards

- Associate in Applied Science Degree (A50210)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/07/11/associate-in-applied-science-degree-a50210/>)
- CCPP Diploma (D50210PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-diploma-d50210p/>)
- Diploma (D50210) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/26/diploma-program-d50210/>)
- Basic CNC Certificate (C50210CN)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/basic-cnc-certificate-c50300cn/>)
- Basic Certificate (C50210BA) (<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/basic-certificate-c50300ba/>)
- CAM Certificate (C50210CA) (<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/cam-certificate-c50210ca-2/>)
- CCPP CAM Certificate (C50210PC)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/ccpp-cam-certificate-c50210pc/>)
- CCPP Certificate (C50210PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c50210pb/>)
- CNC Operator Certificate (C50210OP)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/cnc-operator-certificate-c50210op/>)
- Conventional Certificate (C50210CM)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/conventional-machining-certificate-c50210cm/>)

### Contact Information


The Computer-Integrated Machining (50210) CIP 48.0503 program is in the RCCC Department of Business, Engineering Technologies and Public Services ([industrialengineering/](mailto:industrialengineering/)). For additional information regarding this program, contact the chair, Robert Simpson ([robert.simpson@rccc.edu](mailto:robert.simpson@rccc.edu) (<mailto:robert.simpson@rccc.edu>)).

# Program Advising

## Advising Details

*Students seeking advising during the summer term should contact the program chair.*

## Program Advisors

Thomas Purser  Instructor in Academic Programs[+]	 <a href="mailto:thomas.purser@rccc.edu">thomas.purser@rccc.edu</a> (mailto:thomas.purser@rccc.edu)
	 (704) 216-3914
	 North
Jason Hill  Instructor in Academic Programs[+]	 <a href="mailto:jason.hill@rccc.edu">jason.hill@rccc.edu</a> (mailto:jason.hill@rccc.edu)
	 (704) 216-3915
	 North
David Thompson  Instructor in Academic Programs[+]	 <a href="mailto:david.thompson@rccc.edu">david.thompson@rccc.edu</a> (mailto:david.thompson@rccc.edu)

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining \(50210\)](#), and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Computer-Integrated Machining (50210) CIP 48.0503

### Associate in Applied Science Degree (A50210)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• BPR 111	<u>Print Reading</u>	2
• MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAC 151	<u>Machining Calculations</u>	2
MEC 142	<u>Physical Metallurgy</u>	2
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

BPR 121	<u>Blueprint Reading-Mechanical</u>	2
• MAC 112	<u>Machining Technology II</u>	6
• MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAC 152	<u>Advanced Machining Calculations</u>	2
MEC 110	<u>Introduction to CAD/CAM</u>	2
<b>Total SHC</b>		<b>16</b>

#### First Year Summer

ISC 113	<u>Industrial Specifications</u>	1
MAC 143	<u>Machining Applications III</u>	4
MAC 222	<u>Advanced CNC Turning</u>	2
MAC 224	<u>Advanced CNC Milling</u>	2
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
<b>Total SHC</b>		<b>12</b>

#### Second Year Fall

ENG 111	<u>Writing and Inquiry</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
— —	<u>Social/Behavioral Sciences Elective</u>	3
— —	Major Electives	2
<b>Total SHC</b>		<b>14</b>

#### Second Year Spring

MAC 233	<u>Appl in CNC Machining</u>	6
MAC 248	<u>Production Procedures</u>	2
— —	<u>Humanities/Fine Arts Elective</u>	3

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>14</b>

## Major Electives

Select 2 semester hour credits from the following courses.

BUS 230	<u>Small Business Management</u>	3
CIS 110	<u>Introduction to Computers</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
ISC 112	<u>Industrial Safety</u>	2
ISC 220	<u>Lean Manufacturing</u>	3
MAC 229	<u>CNC Programming</u>	2
MAC 234	<u>Advanced Multi-Axis Machining</u>	3
MEC 111	<u>Machine Processes I</u>	3
WBL 112	<u>Work-Based Learning I</u>	2
WLD 112	<u>Basic Welding Processes</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 70*

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining \(50210\)](#), and tagged [Degree](#). Bookmark the [permalink](#).

## Computer-Integrated Machining\_(50210)\_CIP 48.0503

### Diploma (D50210)

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#### First Year Fall

• BPR 111	<u>Print Reading</u>	2
• MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAC 151	<u>Machining Calculations</u>	2
MEC 142	<u>Physical Metallurgy</u>	2
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

BPR 121	<u>Blueprint Reading-Mechanical</u>	2
• MAC 112	<u>Machining Technology II</u>	6
• MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAC 152	<u>Advanced Machining Calculations</u>	2
MEC 110	<u>Introduction to CAD/CAM</u>	2
<b>Total SHC</b>		<b>16</b>

#### First Year Summer

ENG 111	<u>Writing and Inquiry</u>	3
MAC 143	<u>Machining Applications III</u>	4
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>10</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 40*

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining\\_\(50210\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining.(50210).CIP 48.0503

### Basic Certificate (C50210BA)

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#### First Year Fall

BPR 111	<u>Print Reading</u>	2
MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAC 151	<u>Machining Calculations</u>	2
<b>Total SHC</b>		<b>12</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Computer-Integrated Machining.\(50210\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Computer-Integrated Machining.(50210).CIP 48.0503

### Basic CNC Certificate (C50210CN)

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#### First Year Fall

MAC 114	<u>Introduction to Metrology.</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy.</u>	2
<b>Total SHC</b>		<b>7</b>

#### First Year Spring

MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MEC 110	<u>Introduction to CAD/CAM</u>	2
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Computer-Integrated Machining.\(50210\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining (50210) CIP 48.0503 CAM Certificate (C50210CA)

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### First Year Spring

MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MEC 110	<u>Introduction to CAD/CAM</u>	2
<b>Total SHC</b>		<b>6</b>

### First Year Summer

MEC 231	<u>Computer-Aided Manufacturing I</u>	3
<b>Total SHC</b>		<b>3</b>

### First Year Fall

MEC 232	<u>Computer-Aided Manufacturing II</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining \(50210\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining (50210) CIP 48.0503

### CNC Operator Certificate (C50210OP)

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#### First Year Fall

BPR 111	<u>Print Reading</u>	2
MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
<b>Total SHC</b>		<b>10</b>

#### First Year Spring

MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 14*

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining \(50210\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining.(50210).CIP 48.0503 Conventional Certificate (C50210CM)

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### First Year Fall

MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology.</u>	2
<b>Total SHC</b>		<b>8</b>

### First Year Spring

MAC 112	<u>Machining Technology II</u>	6
<b>Total SHC</b>		<b>6</b>

### First Year Summer

MAC 143	<u>Machining Applications III</u>	4
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining.\(50210\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining (50210) CIP 48.0503

### CCPP Diploma (D50210PB)

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#### Courses

BPR 111	<u>Print Reading</u>	2
ENG 111	<u>Writing and Inquiry</u>	3
HUM 110	<u>Technology and Society</u>	3
MAC 111	<u>Machining Technology I</u>	6
MAC 112	<u>Machining Technology II</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAC 151	<u>Machining Calculations</u>	2
MAC 222	<u>Advanced CNC Turning</u>	2
MAC 224	<u>Advanced CNC Milling</u>	2
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 40*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Computer-Integrated Machining \(50210\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining (50210) CIP 48.0503 CCPP Certificate (C50210PB)

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### Courses

BPR 111	<u>Print Reading</u>	2
MAC 111	<u>Machining Technology I</u>	6
MAC 112	<u>Machining Technology II</u>	6
MAC 114	<u>Introduction to Metrology</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining \(50210\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Computer-Integrated Machining (50210) CIP 48.0503

### CCPP CAM Certificate (C50210PC)

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#### Courses

MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Computer-Integrated Machining \(50210\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Construction Management Technology (35190) CIP 46.0401

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### Description

The construction management technology curriculum is designed to prepare students to apply technical knowledge and skills in the construction management field. It prepares students to supervise, manage, and inspect construction sites, buildings, and associated facilities.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to construction occupations. Instruction includes site safety, personnel supervision, labor relations, diversity training, construction documentation, scheduling, resource and cost control, bid strategies, rework prevention, construction insurance and bonding, accident management and investigation, applicable law and regulations, and communication skills.

Graduates should qualify for entry-level positions in construction and trades professions as well as positions in industry and government.

### Awards

- Associate in Applied Science Degree (A35190)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/23/associate-in-applied-science-degree-a35190/>).
- Diploma (D35190) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/03/diploma-program-d35190/>).
- BIM/CAD Certificate (C35190BC)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/c35190bc-bimcad/>).
- CCPP Certificate (C35190PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c35190p/>).
- Project Supervision Certificate (C35190SU)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/20/project-supervision-certificate-c35190ps/>).

### Additional Information

- 4-Year Degree Transfer Information  
(<https://www.rccc.edu/beps/2-2-transfer-programs/>).

### Contact Information

The Construction Management Technology (35190) CIP 46.0401 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Joe Christie ([joe.christie@rccc.edu](mailto:joe.christie@rccc.edu) (<mailto:joe.christie@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

**Joe Christie**

Chair in Academic Programs[+]




✉ [joe.christie@rccc.edu](mailto:joe.christie@rccc.edu)  
(<mailto:joe.christie@rccc.edu>)

☎ (704) 216-3908

📍 CBTC

## Kao Vang

Lead Faculty in Academic Programs[+]

 kao.vang@rccc.edu ( <a href="mailto:kao.vang@rccc.edu">mailto:kao.vang@rccc.edu</a> )
 (704) 216-3903
 South

This entry was posted in [Business, Engineering Technologies and Public Services, Construction Management Technology \(35190\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Construction Management Technology (35190) CIP 46.0401

### Associate in Applied Science Degree (A35190)

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#### Course Requirements

The following is a suggested program of study for completing this degree in 6 semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• BPR 130	<u>Print Reading-Construction</u>	3
• CMT 210	<u>Construction Management Fundamentals</u>	3
• CMT 212	<u>Total Safety Performance</u>	3
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following natural sciences/math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
PHY 110	<u>Conceptual Physics</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

AHR 120	<u>HVACR Maintenance</u>	2
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
EGR 125	<u>Appl Software for Tech</u>	2

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>13</b>

#### First Year Summer

• CMT 120	<u>Codes and Inspections</u>	3
• SST 140	<u>Green Building and Design Concepts</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

• ACC 120	<u>Principles of Financial Accounting</u>	4
ELC 111	<u>Introduction to Electricity</u>	3
— —	Major Electives	6
<b>Total SHC</b>		<b>13</b>

#### Second Year Spring

• CMT 214	<u>Planning and Scheduling</u>	3
• CST 241	<u>Planning/Estimating I</u>	3
SPA 120	<u>Spanish for the Workplace</u>	3
— —	Major Electives	3
<b>Total SHC</b>		<b>12</b>

## Second Year Summer

—	—	<u>Humanities/Fine Arts Elective</u>	3
—	—	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>			<b>6</b>

## Major Electives

Select 9 SHC from the following courses. AHR coursework is limited to 7 SHC for Major Electives because 2 SHC are required (see above). ELC coursework is limited to 6 SHC for Major Electives because 3 SHC are required (see above). WBL coursework is limited to 7 SHC. Students anticipating transferring to a four-year university must immediately consult with the program chair of construction management technology to choose electives that will better prepare transfer students.

ACC 115	<u>College Accounting</u>	4
ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 129	<u>Individual Income Taxes</u>	3
ACC 132	<u>NC Business Taxes</u>	2
ACC 140	<u>Payroll Accounting</u>	2
ACC 149	<u>Intro to ACC Spreadsheets</u>	2
ACC 150	<u>Accounting Software Applications</u>	2
ACC 175	<u>Hotel and Restaurant Accounting</u>	4
ACC 215	<u>Ethics in Accounting</u>	3
ACC 220	<u>Intermediate Accounting I</u>	4
ACC 221	<u>Intermediate Accounting II</u>	4
ACC 225	<u>Cost Accounting</u>	3
ACC 227	<u>Practices in Accounting</u>	3
ACC 240	<u>Gov &amp; Not-For-Profit Acct</u>	3
ACC 250	<u>Advanced Accounting</u>	3
ACC 268	<u>Information Systems &amp; Internal Controls</u>	3
ACC 269	<u>Auditing &amp; Assurance Services</u>	3
ACC 270	<u>International Accounting</u>	3
AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
AHR 113	<u>Comfort Cooling</u>	4
AHR 114	<u>Heat Pump Technology</u>	4
AHR 115	<u>Refrigeration Systems</u>	2
AHR 130	<u>HVAC Controls</u>	3
AHR 151	<u>HVAC Duct Systems I</u>	2
AHR 152	<u>HVAC Duct Systems II</u>	2
AHR 160	<u>Refrigerant Certification</u>	1
AHR 211	<u>Residential System Design</u>	3
AHR 212	<u>Advanced Comfort Systems</u>	4
AHR 213	<u>HVACR Building Code</u>	2
AHR 215	<u>Commercial HVAC Controls</u>	2
AHR 225	<u>Commercial System Design</u>	3
AHR 235	<u>Refrigeration Design</u>	3
AHR 245	<u>Chiller Systems</u>	2
AHR 255	<u>Indoor Air Quality</u>	2
AHR 263	<u>Energy Management</u>	2
ALT 120	<u>Renewable Energy Technologies</u>	3
ARC 114	<u>Architectural CAD</u>	2
ARC 221	<u>Architectural 3-D CAD</u>	3
ARC 225	<u>Architectural Building Information Modeling</u>	2

ARC 226	<u>Architectural Building Information Modeling II</u>	2
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 230	<u>Commercial Blueprints</u>	2
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 125	<u>Personal Finance</u>	3
BUS 137	<u>Principles of Management</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 225	<u>Business Finance</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
BUS 260	<u>Business Communication</u>	3
CIV 240	<u>Project Management</u>	3
CST 110	<u>Intro to Construction</u>	2
CST 131	<u>OSHA/Safety/Certification</u>	3
CST 231	<u>Soils &amp; Site Work</u>	4
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
ECO 151	<u>Survey of Economics</u>	3
ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 138	<u>DC Circuit Analysis</u>	4
ELC 139	<u>AC Circuit Analysis</u>	4
ELC 215	<u>Electrical Maintenance</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 271	<u>Calculus I</u>	4

MAT 272	<u>Calculus II</u>	4
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 143	<u>Welding Metallurgy.</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 65*

This entry was posted in [Business, Engineering Technologies and Public Services, Construction Management Technology \(35190\)](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Construction Management Technology\_(35190)\_CIP 46.0401 Diploma (D35190)

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### First Year Fall

• BPR 130	<u>Print Reading-Construction</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>12</b>

### First Year Spring

CMT 214	<u>Planning and Scheduling</u>	3
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
• CST 241	<u>Planning/Estimating I</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
<b>Total SHC</b>		<b>14</b>

### First Year Summer

• CMT 120	<u>Codes and Inspections</u>	3
• SST 140	<u>Green Building and Design Concepts</u>	3
<b>Total SHC</b>		<b>6</b>

### Second Year Fall

ACC 120	<u>Principles of Financial Accounting</u>	4
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Take three semester hour credits from the following general education courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
— —	<u>Humanities &amp; Fine Arts Elective</u>	3
— —	<u>Social &amp; Behavioral Science Elective</u>	3
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 39*

This entry was posted in [Business, Engineering Technologies and Public Services, Construction Management Technology\\_\(35190\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).



## Construction Management Technology\_(35190)\_CIP 46.0401 BIM/CAD Certificate (C35190BC)

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### First Year Fall

ARC 114	<u>Architectural CAD</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
<b>Total SHC</b>		<b>5</b>

### First Year Spring

ARC 221	<u>Architectural 3-D CAD</u>	3
ARC 225	<u>Architectural Building Information Modeling</u>	2
I		
<b>Total SHC</b>		<b>5</b>

### First Year Summer

ARC 226	<u>Architectural Building Information Modeling</u>	2
II		
<b>Total SHC</b>		<b>2</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Construction Management Technology\\_\(35190\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Construction Management Technology\_(35190)\_CIP 46.0401

### Project Supervision Certificate (C35190SU)

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#### First Year Fall

BPR 130	<u>Print Reading-Construction</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

CMT 214	<u>Planning and Scheduling</u>	3
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Business, Engineering Technologies and Public Services, Construction Management Technology\\_\(35190\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Construction Management Technology\_(35190)\_CIP 46.0401

### CCPP Certificate (C35190PB)

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#### Courses

BPR 130	<u>Print Reading-Construction</u>	3
CMT 120	<u>Codes and Inspections</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CST 241	<u>Planning/Estimating I</u>	3
SST 140	<u>Green Building and Design Concepts</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Construction Management Technology\\_\(35190\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Cosmetology (55140) CIP 12.0401

### Description

The cosmetology curriculum is designed to provide competency-based knowledge, scientific and artistic principles, and hands-on fundamentals associated with the cosmetology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional imaging, hair design, chemical processes, skin care, nail care, multicultural practices, business and computer principles, product knowledge, and other selected topics.

Graduates should qualify to sit for the State Board of Cosmetic Arts examination. Upon successfully passing the State Board exam, graduates will be issued a license. Employment is available in beauty salons and related businesses.

### Awards

- Associate in Applied Science Degree (A55140) (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/16/associate-in-applied-science-degree-a55140/>)
- Diploma (D55140) (<https://legacy.rccc.edu/catalog-2019-2020/2016/10/31/diploma-d55140/>)
- CCPP Certificate (C55140PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c55240p/>)
- Certificate (C55140) (<https://legacy.rccc.edu/catalog-2019-2020/2018/11/24/cosmetology-certificate-c55140/>)

### Additional Information

- Admission Requirements for Cosmetology Programs (<https://www.rccc.edu/cosmetology/admission-requirements-for-cosmetology-programs/>)

### Contact Information

The Cosmetology (55140) CIP 12.0401 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Ronald Wolfe ([ronald.wolfe@rccc.edu](mailto:ronald.wolfe@rccc.edu) (<mailto:ronald.wolfe@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Michelle Sofia</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:michelle.sofia@rccc.edu">michelle.sofia@rccc.edu</a> (<a href="mailto:michelle.sofia@rccc.edu">mailto:michelle.sofia@rccc.edu</a>)</p> <p>☎ (704) 216-3928</p> <p>📍 College Station</p>
<p><b>Patricia Stirewalt</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:patricia.stirewalt@rccc.edu">patricia.stirewalt@rccc.edu</a> (<a href="mailto:patricia.stirewalt@rccc.edu">mailto:patricia.stirewalt@rccc.edu</a>)</p> <p>☎ (704) 216-3938</p> <p>📍 College Station</p>

Kim Newcomb

Instructor in Academic Programs[+]

✉ kim.newcomb@rccc.edu  
(mailto:kim.newcomb@rccc.edu)

☎ (704) 216-3932

📍 College Station

## Carissa Hooks

Instructor in Academic Programs[+]

✉ cari.hooks@rccc.edu  
(mailto:cari.hooks@rccc.edu)

☎ (704) 216-3550

📍 College Station

## Ronald Wolfe

Chair in Academic Programs[+]

✉ ronald.wolfe@rccc.edu  
(mailto:ronald.wolfe@rccc.edu)

☎ (704) 216-3927

📍 College Station

## Karen Baucom

Instructor in Academic Programs[+]

✉ karen.baucom@rccc.edu  
(mailto:karen.baucom@rccc.edu)

☎ (704) 216-3856

📍 College Station

This entry was posted in [Business, Engineering Technologies and Public Services, Cosmetology \(55140\)](#), and tagged [Applied Sciences Program, Cosmetology Program, Program Description](#). Bookmark the [permalink](#).

## Cosmetology\_(55140)\_CIP 12.0401

### Associate in Applied Science Degree (A55140)

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#### First Year Fall

• COS 111	<u>Cosmetology Concepts I</u>	4
• COS 112	<u>Salon I</u>	8
MKT 232	<u>Social Media Marketing</u>	4
<b>Total SHC</b>		<b>16</b>

#### First Year Spring

• COS 113	<u>Cosmetology Concepts II</u>	4
• COS 114	<u>Salon II</u>	8
SOC 210	<u>Introduction to Sociology.</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Summer

• COS 115	<u>Cosmetology Concepts III</u>	4
• COS 116	<u>Salon III</u>	4

Take one of the following natural sciences/math courses.

BIO 140	<u>Environmental Biology.</u>	3
MAT 110	<u>Mathematical Measurement and Literacy.</u>	3
<b>Total SHC</b>		<b>11</b>

#### Second Year Fall

• COS 117	<u>Cosmetology Concepts IV</u>	2
COS 118	<u>Salon IV</u>	7
COS 223	<u>Contemp Hair Coloring</u>	2
COS 240	<u>Contemporary Design</u>	2
<b>Total SHC</b>		<b>13</b>

#### Second Year Spring

CIS 110	<u>Introduction to Computers</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 111	<u>Writing and Inquiry.</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 67*

This entry was posted in [Cosmetology\\_\(55140\)](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Cosmetology\_(55140)\_CIP 12.0401

### Diploma (D55140)

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#### First Year Fall

- COS 111      Cosmetology Concepts I      4
- COS 112      Salon I      8

Take one of the following communication courses.

- ENG 102      Applied Communications II      3
- ENG 111      Writing and Inquiry      3

**Total SHC      15**

#### First Year Spring

- COS 113      Cosmetology Concepts II      4
- COS 114      Salon II      8

Take one of the following social/behavioral sciences courses.

- PSY 118      Interpersonal Psychology      3
- SOC 210      Introduction to Sociology      3

**Total SHC      15**

#### First Year Summer

- COS 115      Cosmetology Concepts III      4
- COS 116      Salon III      4

**Total SHC      8**

#### Second Year Fall

- COS 117      Cosmetology Concepts IV      2
- COS 118      Salon IV      7

**Total SHC      9**

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 47*

This entry was posted in [Cosmetology\\_\(55140\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

### Program Costs

- Tuition & Fees – \$3,803.00
- Books & Supplies – \$2,333.00



## Length of Program

- Credit Hours – 47
- Intended Time to Complete – 4 Semesters

## Program Completion

- On Time Completion Rate – 0

## Occupation Information (O\*NET/SOC)

- 39-5012

## Career Titles

- Hairdressers, Hairstylists, and Cosmetologists

*Rowan-Cabarrus Community College had less than ten completers with loan debt. Student employment data is not collected.*

## Cosmetology\_(55140)\_CIP 12.0401

### Certificate (C55140)

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#### First Year Fall

• COS 111	<u>Cosmetology Concepts I</u>	4
• COS 112	<u>Salon I</u>	8
<b>Total SHC</b>		<b>12</b>

#### First Year Spring

• COS 113	<u>Cosmetology Concepts II</u>	4
• COS 114	<u>Salon II</u>	8
<b>Total SHC</b>		<b>12</b>

#### First Year Summer

• COS 115	<u>Cosmetology Concepts III</u>	4
• COS 116	<u>Salon III</u>	4
<b>Total SHC</b>		<b>8</b>

#### Second Year Fall

Take one of the following Cosmetology courses.

COS 117	<u>Cosmetology Concepts IV</u>	2
COS 240	<u>Contemporary Design</u>	2
<b>Total SHC</b>		<b>2</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 34*

This entry was posted in [Cosmetology\\_\(55140\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

### Program Costs

- Tuition & Fees – \$2,713.00
- Books & Supplies – \$2,354.00

### Length of Program

- Credit Hours – 34
- Intended Time to Complete – 3 Semesters

### Program Completion

- On Time Completion Rate – 0

## Occupation Information (O\*NET/SOC)

- 39-5012

## Career Titles

- Hairdressers, Hairstylists, and Cosmetologists

*Rowan-Cabarrus Community College had less than ten completers with loan debt. Student employment data is not collected.*

## Cosmetology\_(55140)\_CIP 12.0401

### CCPP Certificate (C55140PB)

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#### Courses

COS 111	<u>Cosmetology Concepts I</u>	4
COS 112	<u>Salon I</u>	8
COS 113	<u>Cosmetology Concepts II</u>	4
COS 114	<u>Salon II</u>	8
COS 115	<u>Cosmetology Concepts III</u>	4
COS 116	<u>Salon III</u>	4
COS 240	<u>Contemporary Design</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 34*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Cosmetology\\_\(55140\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Cosmetology Instructor (55160) CIP 12.0413

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### Description

The cosmetology instructor curriculum provides a course of study for learning the skills needed to teach the theory and practice of cosmetology as required by the North Carolina Board of Cosmetic Arts.

Course work includes requirements for becoming an instructor, introduction to teaching theory, methods and aids, practice teaching, and development of evaluation instruments.

Graduates of the program may be employed as cosmetology instructors in public or private education and business.

### Awards

- Certificate (C55160) (<https://legacy.rccc.edu/catalog-2019-2020/2018/08/30/certificate-program-c55160/>).

### Additional Information

- Admission Requirements for Cosmetology Programs (<https://www.rccc.edu/cosmetology/admission-requirements-for-cosmetology-programs/>)
- Cosmetology Instructor Ed Plan (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2017/05/Cosmetology-Instructor-C55160-2018-2019-Ed-Plan.pdf>)

### Contact Information

The Cosmetology Instructor (55160) CIP 12.0413 program is in the RCCC Department of Business, Engineering Technologies and Public Services ([/industrialengineering/](#)). For additional information regarding this program, contact the chair, Ronald Wolfe ([ronald.wolfe@rccc.edu](mailto:ronald.wolfe@rccc.edu) (<mailto:ronald.wolfe@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Michelle Sofia</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:michelle.sofia@rccc.edu">michelle.sofia@rccc.edu</a> (<a href="mailto:michelle.sofia@rccc.edu">mailto:michelle.sofia@rccc.edu</a>)</p> <p>☎ (704) 216-3928</p> <p>📍 College Station</p>
<p><b>Ronald Wolfe</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:ronald.wolfe@rccc.edu">ronald.wolfe@rccc.edu</a> (<a href="mailto:ronald.wolfe@rccc.edu">mailto:ronald.wolfe@rccc.edu</a>)</p> <p>☎ (704) 216-3927</p> <p>📍 College Station</p>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Cosmetology Instructor \(55160\)](#), and tagged [Applied Sciences Program](#), [Cosmetology Program](#), [Program Description](#). Bookmark the [permalink](#).

## Cosmetology Instructor (55160) CIP 12.0413 Certificate (C55160)

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### First Year Fall

• COS 271	<u>Instructor Concepts I</u>	5
• COS 272	<u>Instructor Practicum I</u>	7
<b>Total SHC</b>		<b>12</b>

### First Year Spring

• COS 273	<u>Instructor Concepts II</u>	5
• COS 274	<u>Instructor Practicum II</u>	7
<b>Total SHC</b>		<b>12</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 24*

This entry was posted in [Cosmetology Instructor \(55160\)](#), [Health and Education](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Criminal Justice Technology (55180) CIP 43.0104

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### Description

The criminal justice technology curriculum is designed to provide knowledge of criminal justice systems and operations. Study will focus on local, state, and federal law enforcement, judicial processes, corrections, and security services. The criminal justice system's role within society will be explored.

Emphasis is on criminal justice systems, criminology, juvenile justice, criminal and constitutional law, investigative principles, ethics, and community relations. Additional study may include issues and concepts of government, counseling, communications, computers, and technology.

Employment opportunities exist in a variety of local, state, and federal law enforcement, corrections, and security fields. Examples include police officer, deputy sheriff, county detention officer, state trooper, intensive probation/parole surveillance officer, correctional officer, and loss prevention specialist.

### Awards

- Associate in Applied Science Degree (A55180)  
(<https://legacy.rccc.edu/catalog-2019-2020/2016/12/02/associate-in-applied-science-degree-a55180/>)
- CCPP Diploma (D55180PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-diploma-d55180p/>)
- Diploma (D55180) (<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/criminal-justice-diploma-d55180/>)
- CCPP Certificate (C55180PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c55180p/>)
- Certificate (C55180) (<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/certificate-program-c55180/>)
- Corrections Certificate (C55180CR)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/criminal-justice-corrections-certificate-c55180cr/>)
- Homeland Security Certificate (C55180HS)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/09/28/homeland-security-certificate-c55180hs/>)
- Juvenile Justice Certificate (C55180JJ)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/02/juvenile-justice-certificate-c55180jj/>)

### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

### Contact Information

The Criminal Justice Technology (55180) CIP 43.0104 program is in the RCCC Department of Business, Engineering Technologies and Public Services ([/industrialengineering/](https://legacy.rccc.edu/catalog-2019-2020/2019/01/02/industrialengineering/)). For additional information regarding this program, contact the director, Chris Nesbitt ([chris.nesbitt@rccc.edu](mailto:chris.nesbitt@rccc.edu) (<mailto:chris.nesbitt@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*



## Program Advisors

### F. Wayne Laney Jr.

Instructor in Academic Programs[+]

✉ [frank.laney@rccc.edu](mailto:frank.laney@rccc.edu)  
(mailto:frank.laney@rccc.edu)

☎ (704) 216-3883

📍 North

### Chris Nesbitt

Director in Corporate and Continuing Education[+]

Chair in Academic Programs[+]

✉ [chris.nesbitt@rccc.edu](mailto:chris.nesbitt@rccc.edu)  
(mailto:chris.nesbitt@rccc.edu)

☎ (704) 216-3756

📍 North

This entry was posted in [Business, Engineering Technologies and Public Services, Criminal Justice Technology \(55180\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Criminal Justice Technology\_(55180)\_CIP 43.0104

### Associate in Applied Science Degree (A55180)

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#### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 141	<u>Corrections</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

CIS 110	<u>Introduction to Computers</u>	3
• CJC 112	<u>Criminology</u>	3
• CJC 113	<u>Juvenile Justice</u>	3
COM 231	<u>Public Speaking</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>18</b>

#### Second Year Fall

• CJC 131	<u>Criminal Law</u>	3
CJC 160	<u>Terrorism: Underlying Issues</u>	3
• CJC 212	<u>Ethics &amp; Community Relations</u>	3
• CJC 231	<u>Constitutional Law</u>	3
— —	Major Electives	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>18-19</b>

#### Second Year Spring

CJC 132	<u>Court Procedure &amp; Evidence</u>	3
CJC 214	<u>Victimology</u>	3
• CJC 221	<u>Investigative Principles</u>	4
HUM 115	<u>Critical Thinking</u>	3
— —	Major Electives	3
<b>Total SHC</b>		<b>16</b>

## Major Electives

Select 6 SHC from the following courses. This may include up to 3 SHC from WBL course/combination of courses.

CJC 161	<u>Introduction to Homeland Security.</u>	3
CJC 162	<u>Intelligence Analysis and Security Management</u>	3
CJC 163	<u>Transportation and Border Security.</u>	3
CJC 170	<u>Critical Incident Mgmt for Public Safety.</u>	3
CJC 223	<u>Organized Crime</u>	3
CJC 233	<u>Correctional Law</u>	3
CJC 241	<u>Community-Based Corrections</u>	3
CJC 261	<u>High-Risk Situations</u>	2
CJC 262	<u>High-Risk Event Planning</u>	2
PED 111	<u>Physical Fitness I</u>	1
PED 112	<u>Physical Fitness II</u>	1
POL 120	<u>American Government</u>	3
PSY 231	<u>Forensic Psychology.</u>	3
PSY 281	<u>Abnormal Psychology.</u>	3
SOC 213	<u>Sociology of the Family.</u>	3
SOC 245	<u>Drugs and Society.</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 131	<u>Work-Based Learning III</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 67-68*

## Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

This entry was posted in [Criminal Justice Technology \(55180\)](#), and tagged [Degree](#). Bookmark the [permalink](#).

## Criminal Justice Technology\_(55180)\_CIP 43.0104 Diploma (D55180)

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### First Year Fall

• CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 141	<u>Corrections</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>12</b>

### First Year Spring

CIS 110	<u>Introduction to Computers</u>	3
• CJC 112	<u>Criminology</u>	3
• CJC 113	<u>Juvenile Justice</u>	3
COM 231	<u>Public Speaking</u>	3
<b>Total SHC</b>		<b>12</b>

### Second Year Fall

• CJC 131	<u>Criminal Law</u>	3
• CJC 212	<u>Ethics &amp; Community Relations</u>	3
• CJC 231	<u>Constitutional Law</u>	3
MAT 143	<u>Quantitative Literacy</u>	3

Take one of the following Work-Based Learning courses

WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>13</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 37*

### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

This entry was posted in [Criminal Justice Technology\\_\(55180\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Criminal Justice Technology\_(55180)\_CIP 43.0104 Certificate (C55180)

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### First Year Fall

CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 141	<u>Corrections</u>	3
<b>Total SHC</b>		<b>9</b>

### First Year Spring

CJC 112	<u>Criminology</u>	3
CJC 113	<u>Juvenile Justice</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

This entry was posted in [Criminal Justice Technology\\_\(55180\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Criminal Justice Technology\_(55180)\_CIP 43.0104 Corrections Certificate (C55180CR)

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### First Year Fall

CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 141	<u>Corrections</u>	3
CJC 212	<u>Ethics &amp; Community Relations</u>	3
CJC 233	<u>Correctional Law</u>	3
CJC 241	<u>Community-Based Corrections</u>	3
<b>Total SHC</b>		<b>15</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

This entry was posted in [Criminal Justice Technology\\_\(55180\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Criminal Justice Technology\_(55180)\_CIP 43.0104

### Homeland Security Certificate (C55180HS)

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#### First Year Fall

CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 161	<u>Introduction to Homeland Security</u>	3
CJC 162	<u>Intelligence Analysis and Security Management</u>	3
CJC 163	<u>Transportation and Border Security</u>	3
CJC 231	<u>Constitutional Law</u>	3
CJC 261	<u>High-Risk Situations</u>	2
<b>Total SHC</b>		<b>17</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

#### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

This entry was posted in [Criminal Justice Technology\\_\(55180\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Criminal Justice Technology\_(55180)\_CIP 43.0104

### Juvenile Justice Certificate (C55180JJ)

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#### First Year Fall

CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 141	<u>Corrections</u>	3
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

CJC 112	<u>Criminology</u>	3
CJC 113	<u>Juvenile Justice</u>	3
SOC 213	<u>Sociology of the Family</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

#### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

This entry was posted in [Criminal Justice Technology\\_\(55180\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Criminal Justice Technology\_(55180)\_CIP 43.0104

### CCPP Diploma (D55180PB)

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#### Courses

CIS 110	<u>Introduction to Computers</u>	3
CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 112	<u>Criminology</u>	3
CJC 113	<u>Juvenile Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 131	<u>Criminal Law</u>	3
CJC 141	<u>Corrections</u>	3
CJC 212	<u>Ethics &amp; Community Relations</u>	3
CJC 231	<u>Constitutional Law</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
WBL 110	<u>World of Work</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 37*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Criminal Justice Technology\\_\(55180\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Criminal Justice Technology\_(55180)\_CIP 43.0104 CCPP Certificate (C55180PB)

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### Courses

CJC 111	<u>Introduction to Criminal Justice</u>	3
CJC 112	<u>Criminology</u>	3
CJC 113	<u>Juvenile Justice</u>	3
CJC 121	<u>Law Enforcement Operations</u>	3
CJC 131	<u>Criminal Law</u>	3
CJC 141	<u>Corrections</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

### Additional Information

Criminal Justice employers require criminal background checks and a criminal record may prohibit employment.

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Criminal Justice Technology \(55180\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Dental Assisting (45240) CIP 51.0601

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### Description

The dental assisting curriculum prepares individuals to assist the dentist in the delivery of dental treatment and to function as integral members of the dental team while performing chairside and related office and laboratory procedures.

Course work includes instruction in general studies, biomedical sciences, dental sciences, clinical sciences and clinical practice. A combination of lecture, laboratory and clinical experiences provide students with knowledge in infection and hazard control, radiography, dental materials, preventive dentistry, and clinical procedures.

Graduates may be eligible to take the Dental Assisting National Board Examination to become Certified Dental Assistants. As a Dental Assistant II, defined by the Dental Laws of North Carolina, graduates work in dental offices and other related areas.

### Awards

- [Diploma \(D45240\)](https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/diploma-d45240/) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/diploma-d45240/>).

### Additional Information

- [Dental Assisting Admission and Program Information](https://www.rccc.edu/healtheducation/dental-assisting-program-information/) (<https://www.rccc.edu/healtheducation/dental-assisting-program-information/>).

### Contact Information

The Dental Assisting (45240) CIP 51.0601 program is in the RCCC Department of [Health and Education](/healthpublicservices/) (</healthpublicservices/>). For additional information regarding this program, contact the chair, Meredith Parker ([meredith.parker@rccc.edu](mailto:meredith.parker@rccc.edu)) (<mailto:meredith.parker@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

Students whose last name begins with A-L are assigned to Amanda Myers; M-Z are assigned to Meredith Parker.

### Program Advisors

<p><b>Meredith Parker</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:meredith.parker@rccc.edu">meredith.parker@rccc.edu</a> (<a href="mailto:meredith.parker@rccc.edu">mailto:meredith.parker@rccc.edu</a>)</p> <p>☎ (704) 216-3726</p> <p>📍 North</p>
<p><b>Amanda Myers</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:amanda.myers@rccc.edu">amanda.myers@rccc.edu</a> (<a href="mailto:amanda.myers@rccc.edu">mailto:amanda.myers@rccc.edu</a>)</p> <p>☎ (704) 216-3727</p> <p>📍 North</p>

This entry was posted in [Dental Assisting \(45240\)](#), [Health and Education](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Dental Assisting (45240) CIP 51.0601

### Diploma (D45240)

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#### Fall Semester

BIO 106	<u>Intro to Anatomy/Physiology/Microbiology.</u>	3
• DEN 100	<u>Basic Orofacial Anatomy.</u>	2
• DEN 101	<u>Preclinical Procedures</u>	7
• DEN 102	<u>Dental Materials</u>	4
• DEN 111	<u>Infection/Hazard Control</u>	2
<b>Total SHC</b>		<b>18</b>

Note Instead of taking BIO 106, students may take BIO 168, BIO 169, and BIO 275 (all three courses).

#### Spring Semester

• DEN 103	<u>Dental Sciences</u>	2
• DEN 104	<u>Dental Health Education</u>	3
• DEN 105	<u>Practice Management</u>	2
• DEN 106	<u>Clinical Practice I</u>	6
• DEN 112	<u>Dental Radiography</u>	3
<b>Total SHC</b>		<b>16</b>

#### Summer Term

• DEN 107	<u>Clinical Practice II</u>	5
ENG 102	<u>Applied Communications II</u>	3
PSY 118	<u>Interpersonal Psychology.</u>	3
<b>Total SHC</b>		<b>11</b>

Note Instead of taking ENG-102, students may take both ENG-111 and COM-231. Instead of taking PSY 118, students may take PSY 150.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 45*

### Alternative Biology Courses

Students planning to take the alternate BIO courses (BIO-168, BIO-169, AND BIO-275 instead of BIO-106) must discuss with the chair prior to registering for the alternate courses.

This entry was posted in [Dental Assisting \(45240\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

### Program Costs

- Tuition & Fees – \$4,497.00
- Books & Supplies – \$1,312.00

### Length of Program

- Credit Hours – 45
- Intended Time to Complete – 3 Semesters

### Program Completion

- On Time Completion Rate – 0

### Occupation Information (O\*NET/SOC)

- 31-9091

### Career Titles

- Dental Assistants

*Rowan-Cabarrus Community College had less than ten completers with loan debt. Student employment data is not collected.*

## Early Childhood Education (55220) CIP 13.1210

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### Description

The early childhood education curriculum prepares individuals to work with children from birth through eight in diverse learning environments. Students will combine learned theories with practice in actual settings with young children under the supervision of qualified teachers.

Course work includes child growth and development; physical/nutritional needs of children; care and guidance of children; and communication skills with families and children. Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of young children.

Graduates are prepared to plan and implement developmentally appropriate programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Head Start programs, and school-age programs.

### Awards

- Career Ready Associate in Applied Science Degree (A55220NT) (<https://legacy.rccc.edu/catalog-2019-2020/2019/02/20/associates-in-applied-science-a55220/>)
- Transfer B-K Teacher Licensure Associate in Applied Science Degree (A55220TL) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/03/associate-in-applied-science-degree-a55220tl/>)
- Transfer Non-Licensure Associate in Applied Science Degree (A55220TN) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/22/associate-in-applied-science-degree-a55220tn/>)
- Diploma (D55220) (<https://legacy.rccc.edu/catalog-2019-2020/2019/02/22/diploma-program-d55220/>)
- Administrators Advanced Certificate (C55220EA) (<https://legacy.rccc.edu/catalog-2019-2020/2019/02/21/early-childhood-administrators-advanced-certificate-c55220ea/>)
- CCPP Certificate (C55220PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c55220p/>)
- Child Care Specialist Certificate (C55220CS) (<https://legacy.rccc.edu/catalog-2019-2020/2017/08/28/child-care-specialist-certificate-c55220cs/>)

### Additional Information

North Carolina Child Care Licensing Regulations require that all volunteers working in the Early Childhood field obtain a federal criminal background check. Because most of our courses require students to enter child care centers and schools, all students enrolled in the Early Childhood programs are required to obtain a federal criminal background check and submit to the program chair a copy of the qualification letter they receive from the state. A negative report may prevent students from participating in required courses, which means that the student cannot complete the program requirements. An application process will be required prior to students entering into EDU 214 and EDU 284. Students must have at least a 2.5 GPA, C or higher in Early Childhood courses and be in their last two semesters in order to apply for EDU 214 and EDU 284. Please contact the program chair of Early Childhood Education if you have any questions.

- See Infant/Toddler Care Certificate (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/infanttoddler-care-55290/>)

### Contact Information

The Early Childhood Education (55220) CIP 13.1210 program is in the RCCC Department of Health and Education (</healthpublicservices/>). For additional information regarding this program, contact the program chair, Waynett Taylor ([waynett.taylor@rccc.edu](mailto:waynett.taylor@rccc.edu) (<mailto:waynett.taylor@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*



## Program Advisors

### Kelly Neymen

Instructor in Academic Programs[+]

✉ kelly.neymen@rccc.edu  
(mailto:kelly.neymen@rccc.edu)

☎ (704) 216-3735

📍 South

### Terri Pickett

Instructor in Academic Programs[+]

✉ terri.pickett@rccc.edu  
(mailto:terri.pickett@rccc.edu)

☎ (704) 216-3728

📍 North

### Waynett Taylor

Program Chair in Academic Programs[+]

✉ waynett.taylor@rccc.edu  
(mailto:waynett.taylor@rccc.edu)

☎ (704) 216-3699

📍 North

### Jennifer Rosalino

Instructor in Academic Programs[+]

✉ jennifer.rosalino@rccc.edu  
(mailto:jennifer.rosalino@rccc.edu)

☎ (704) 216-3781

This entry was posted in [Early Childhood Education \(55220\)](#), [Health and Education](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Early Childhood Education (55220) CIP 13.1210

### Career Ready Associate in Applied Science Degree (A55220NT)

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#### Career Ready Program

This program is for students who are NOT planning to transfer per the Early Childhood Articulation Agreement (ECAA).

#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• EDU 119	<u>Introduction to Early Childhood Education</u>	4
• EDU 144	<u>Child Development I</u>	3
• EDU 151	<u>Creative Activities</u>	3
• EDU 153	<u>Health, Safety and Nutrition</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>16</b>

#### First Year Spring

EDU 131	<u>Child, Family, and Community</u>	3
• EDU 145	<u>Child Development II</u>	3
• EDU 146	<u>Child Guidance</u>	3
EDU 162	<u>Observation and Assessment in Early Childhood Education</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>15</b>

Note Students may select any of the Humanities/Fine Arts electives except for ENG courses. Students may also select MUS 112, which is not on the Humanities/Fine Arts Electives list.

#### First Year Summer

COM 231	<u>Public Speaking</u>	3
PSY 150	<u>General Psychology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 113	<u>Literature-Based Research</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>9</b>

#### Second Year Fall

EDU 214	<u>Early Childhood Intermediate Practicum</u>	4
• EDU 221	<u>Children With Exceptionalities</u>	3
EDU 251	<u>Exploration Activities</u>	3
• EDU 280	<u>Language/Literacy Experiences</u>	3

**Total SHC 15**

## Second Year Spring

• EDU 234	<u>Infants, Toddlers, &amp; Twos</u>	3
EDU 271	<u>Educational Technology</u>	3
EDU 282	<u>Early Childhood Literature</u>	3
• EDU 284	<u>Early Childhood Capstone Practicum</u>	4

Take one of the following natural sciences/mathematics courses.

AST 111	<u>Descriptive Astronomy</u>	3
BIO 111	<u>General Biology I</u>	4
BIO 140	<u>Environmental Biology</u>	3
CHM 121	<u>Foundations of Chemistry</u>	3
MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
PHY 110	<u>Conceptual Physics</u>	3

**Total SHC 16-17**

## Major Electives

Take 2 SHC from the following courses.

EDU 235	<u>School-Age Development and Programs</u>	3
EDU 247	<u>Sensory and Physical Disabilities</u>	3
EDU 248	<u>Developmental Delays</u>	3
EDU 254	<u>Music and Movement for Children</u>	2
EDU 259	<u>Curriculum Planning</u>	3
EDU 261	<u>Early Childhood Administration I</u>	3
EDU 262	<u>Early Childhood Administration II</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
SOC 213	<u>Sociology of the Family</u>	3
SPA 120	<u>Spanish for the Workplace</u>	3
WBL 110	<u>World of Work</u>	1
WBL 112	<u>Work-Based Learning I</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 71-72*

## Criminal Background Check

North Carolina Child Care Licensing Regulations require that all volunteers working in the Early Childhood field obtain a criminal background check. Because most of our courses require students to enter child care centers and schools, all students enrolled in the Early Childhood programs are required to obtain a criminal background check and submit to the program chair a copy of the clearance letter they receive from the state. A negative report may prevent students from participating in required courses, which means that the student cannot complete the program requirements.

## Practicum Application

An application process will be required prior to students entering into EDU 214 and EDU 284. Students must have at least a 2.5 GPA, C or higher in Early Childhood courses and be in their last two semesters in order to apply for EDU 214 and EDU 284. Please contact the program chair of Early Childhood Education if you have any questions.

## Early Childhood Education (55220) CIP 13.1210

### Transfer B-K Teacher Licensure Associate in Applied Science Degree (A55220TL)

#### Transfer Program

This program is for students who are planning to transfer per the Early Childhood Articulation Agreement (ECAA) for Birth to Kindergarten (B-K) Licensure.

#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• EDU 119	<u>Introduction to Early Childhood Education</u>	4
• EDU 144	<u>Child Development I</u>	3
• EDU 151	<u>Creative Activities</u>	3
• EDU 153	<u>Health, Safety and Nutrition</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>16</b>

#### First Year Spring

• EDU 145	<u>Child Development II</u>	3
• EDU 146	<u>Child Guidance</u>	3
MAT 143	<u>Quantitative Literacy</u>	3

Take one of the following natural sciences/mathematics sets of courses. Each set has two courses. CHM 151 has a required corequisite of MAT 171.

AST 111	<u>Descriptive Astronomy</u>	3
AST 111A	<u>Descriptive Astronomy Lab</u>	1
AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1
CHM 151	<u>General Chemistry I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

Take one of the following social/behavioral science courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

**Total SHC 16**

#### First Year Summer

COM 231	<u>Public Speaking</u>	3
PSY 150	<u>General Psychology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>9</b>

## Second Year Fall

• EDU 216	<u>Foundations of Education</u>	3
• EDU 221	<u>Children With Exceptionalities</u>	3
• EDU 280	<u>Language/Literacy Experiences</u>	3

Take one of the following biology courses.

BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>16</b>

## Second Year Spring

• EDU 131	<u>Child, Family, and Community</u>	3
• EDU 234	<u>Infants, Toddlers, &amp; Twos</u>	3
• EDU 250	<u>Teacher Licensure Preparation</u>	3
• EDU 284	<u>Early Childhood Capstone Practicum</u>	4
<b>Total SHC</b>		<b>13</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 70*

## Criminal Background Check

North Carolina Child Care Licensing Regulations require that all volunteers working in the Early Childhood field obtain a criminal background check. Because most of our courses require students to enter child care centers and schools, all students enrolled in the Early Childhood programs are required to obtain a criminal background check and submit to the program chair a copy of the clearance letter they receive from the state. A negative report may prevent students from participating in required courses, which means that the student cannot complete the program requirements.

## Practicum Application

An application process will be required prior to students entering into EDU 214 and EDU 284. Students must have at least a 2.5 GPA, C or higher in Early Childhood courses and be in their last two semesters in order to apply for EDU 214 and EDU 284. Please contact the program chair of Early Childhood Education if you have any questions.

## CHM 151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your Natural Science, you must also select MAT 171 or have credit for MAT 171.

## Early Childhood Education (55220) CIP 13.1210

### Transfer Non-Licensure Associate in Applied Science Degree (A55220TN)

#### Transfer Program

This program is for students who are planning to transfer per the Early Childhood Articulation Agreement (ECAA) for Early Childhood Education Non-Licensure.

#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• EDU 119	<u>Introduction to Early Childhood Education</u>	4
• EDU 144	<u>Child Development I</u>	3
• EDU 151	<u>Creative Activities</u>	3
• EDU 153	<u>Health, Safety and Nutrition</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>16</b>

#### First Year Spring

• EDU 145	<u>Child Development II</u>	3
• EDU 146	<u>Child Guidance</u>	3
MAT 143	<u>Quantitative Literacy</u>	3

Take one of the following natural sciences/mathematics sets of courses. Each set has two courses. CHM 151 has a required corequisite of MAT 171.

AST 111	<u>Descriptive Astronomy</u>	3
AST 111A	<u>Descriptive Astronomy Lab</u>	1
AST 151	<u>General Astronomy I</u>	3
AST 151A	<u>General Astronomy I Lab</u>	1
CHM 151	<u>General Chemistry I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1

Take one of the following social/behavioral science courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3
HIS 111	<u>World Civilizations I</u>	3
HIS 112	<u>World Civilizations II</u>	3
HIS 131	<u>American History I</u>	3
HIS 132	<u>American History II</u>	3
POL 120	<u>American Government</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>16</b>

#### First Year Summer

COM 231	<u>Public Speaking</u>	3
PSY 150	<u>General Psychology</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>9</b>

## Second Year Fall

- EDU 221 Children With Exceptionalities 3
- EDU 261 Early Childhood Administration I 3
- EDU 280 Language/Literacy Experiences 3

Take one of the following biology courses.

BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
MUS 110	<u>Music Appreciation</u>	3
MUS 112	<u>Introduction to Jazz</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>16</b>

## Second Year Spring

- EDU 131 Child, Family, and Community 3
  - EDU 234 Infants, Toddlers, & Twos 3
  - EDU 262 Early Childhood Administration II 3
  - EDU 284 Early Childhood Capstone Practicum 4
- Total SHC 13**

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 70*

## Criminal Background Check

North Carolina Child Care Licensing Regulations require that all volunteers working in the Early Childhood field obtain a criminal background check. Because most of our courses require students to enter child care centers and schools, all students enrolled in the Early Childhood programs are required to obtain a criminal background check and submit to the program chair a copy of the clearance letter they receive from the state. A negative report may prevent students from participating in required courses, which means that the student cannot complete the program requirements.

## Practicum Application

An application process will be required prior to students entering into EDU 214 and EDU 284. Students must have at least a 2.5 GPA, C or higher in Early Childhood courses and be in their last two semesters in order to apply for EDU 214 and EDU 284. Please contact the program chair of Early Childhood Education if you have any questions.

## CHM 151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as your Natural Science, you must also select MAT 171 or have credit for MAT 171.



## Early Childhood Education (55220) CIP 13.1210

### Diploma (D55220)

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#### First Year Fall

•	EDU 119	<u>Introduction to Early Childhood Education</u>	4
•	EDU 144	<u>Child Development I</u>	3
•	EDU 151	<u>Creative Activities</u>	3
•	EDU 153	<u>Health, Safety and Nutrition</u>	3
	ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>			<b>16</b>

#### First Year Spring

•	EDU 131	<u>Child, Family, and Community</u>	3
•	EDU 145	<u>Child Development II</u>	3
•	EDU 146	<u>Child Guidance</u>	3
	EDU 162	<u>Observation and Assessment in Early Childhood Education</u>	3
<b>Total SHC</b>			<b>12</b>

#### Second Year Fall

	EDU 214	<u>Early Childhood Intermediate Practicum</u>	4
•	EDU 221	<u>Children With Exceptionalities</u>	3
	EDU 271	<u>Educational Technology</u>	3
	PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>			<b>13</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 41*

### Criminal Background Check

North Carolina Child Care Licensing Regulations require that all volunteers working in the Early Childhood field obtain a criminal background check. Because most of our courses require students to enter child care centers and schools, all students enrolled in the Early Childhood and School Age programs are required to obtain a criminal background check and submit to the program chair a copy of the clearance letter they receive from the state. A negative report may prevent students from participating in required courses, which means that the student cannot complete the program requirements.

### Practicum Application

An application process will be required prior to students entering into EDU 214. Students must have at least a 2.5 GPA, C or higher in Early Childhood courses and be in their last semester in order to apply for EDU 214. Please contact the program chair of Early Childhood Education if you have any questions.

This entry was posted in [Early Childhood Education \(55220\)](#), [Health and Education](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Early Childhood Education (55220) CIP 13.1210 Administrators Advanced Certificate (C55220EA)

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### First Year Fall

EDU 119	<u>Introduction to Early Childhood Education</u>	4
EDU 153	<u>Health, Safety and Nutrition</u>	3
<b>Total SHC</b>		<b>7</b>

### First Year Spring

EDU 131	<u>Child, Family, and Community</u>	3
EDU 261	<u>Early Childhood Administration I</u>	3
EDU 262	<u>Early Childhood Administration II</u>	3
<b>Total SHC</b>		<b>9</b>

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Note     EDU 261 will be taught in the first 8-weeks; EDU 262 will be taught in the second 8-weeks.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Early Childhood Education \(55220\)](#), [Health and Education](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Early Childhood Education (55220) CIP 13.1210

### Child Care Specialist Certificate (C55220CS)

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#### First Year Fall

EDU 119	<u>Introduction to Early Childhood Education</u>	4
EDU 151	<u>Creative Activities</u>	3
<b>Total SHC</b>		<b>7</b>

#### First Year Spring

EDU 146	<u>Child Guidance</u>	3
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Take 6 SHC from the following courses.

EDU 131	<u>Child, Family, and Community</u>	3
EDU 144	<u>Child Development I</u>	3
EDU 145	<u>Child Development II</u>	3
EDU 153	<u>Health, Safety and Nutrition</u>	3
EDU 162	<u>Observation and Assessment in Early Childhood Education</u>	3
EDU 271	<u>Educational Technology</u>	3
WBL 110	<u>World of Work</u>	1
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Early Childhood Education \(55220\)](#), [Health and Education](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Early Childhood Education (55220) CIP 13.1210 CCPP Certificate (C55220PB)

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### Courses

EDU 119	<u>Introduction to Early Childhood Education</u>	4
EDU 131	<u>Child, Family, and Community</u>	3
EDU 146	<u>Child Guidance</u>	3
EDU 151	<u>Creative Activities</u>	3
WBL 110	<u>World of Work</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 14*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Early Childhood Education \(55220\)](#), [Health and Education](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Electrical Systems Technology (35130) CIP 46.0302

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### Description

The electrical system technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical systems found in residential, commercial, and industrial facilities.

Coursework, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, programmable logic controllers, industrial motor controls, applications of the National Electric Code, and other subjects as local needs require.

Graduates should qualify for a variety of jobs in the electrical field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical systems.

### Awards

- Associate in Applied Science Degree (A35130)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/18/associate-in-applied-science-degree-a35130/>).
- CCPP Diploma (D35130PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-diploma-d35130p/>).
- Diploma (D35130) (<https://legacy.rccc.edu/catalog-2019-2020/2019/02/14/electrical-systems-technology-diploma-d35130/>).
- Basic Certificate (C35130BA) (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/basic-certificate-c35130ba/>).
- CCPP Certificate (C35130PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c35130pb/>).
- Industrial Motor Control Certificate (C35130MO)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/industrial-motor-control-certificate-c35130mo/>).
- Wiring and NEC Certificate (C35130NE)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/04/wiring-and-nec-certificate-c35130ne/>).

### Contact Information

The Electrical Systems Technology (35130) CIP 46.0302 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Joe Christie ([joe.christie@rccc.edu](mailto:joe.christie@rccc.edu) (<mailto:joe.christie@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

Joe Christie

Chair in Academic Programs[+]

✉ [joe.christie@rccc.edu](mailto:joe.christie@rccc.edu)

(<mailto:joe.christie@rccc.edu>)

☎ (704) 216-3908

 CBTC
 james.hauss@rccc.edu (mailto:james.hauss@rccc.edu)
 (704) 216-3916
 CBTC

# James Lynn Hauss

Lead Instructor in Academic Programs[+]

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Electrical Systems Technology (35130) CIP 46.0302

### Associate in Applied Science Degree (A35130)

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#### Course Requirements

The following is a suggested program of study for completing this degree in SIX semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• ELC 112	<u>DC/AC Electricity</u>	5
• ELC 113	<u>Residential Wiring</u>	4
• ELC 118	<u>National Electrical Code</u>	2
• ELC 126	<u>Electrical Computations</u>	3
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

EGR 125	<u>Appl Software for Tech</u>	2
• ELC 117	<u>Motors and Controls</u>	4
• ELC 125	<u>Diagrams and Schematics</u>	2
• ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
— —	Major Electives	3
<b>Total SHC</b>		<b>14</b>

#### First Year Summer

• ELC 119	<u>NEC Calculations</u>	2
— —	Major Electives	3
<b>Total SHC</b>		<b>5</b>

#### Second Year Fall

CST 131	<u>OSHA/Safety/Certification</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
— —	Major Electives	4

Take one of the following natural sciences/math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
PHY 110	<u>Conceptual Physics</u>	3
<b>Total SHC</b>		<b>13</b>

#### Second Year Spring

AHR 120	<u>HVACR Maintenance</u>	2
• ELC 115	<u>Industrial Wiring</u>	4
ELC 215	<u>Electrical Maintenance</u>	3

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3



## Second Year Summer

—	—	<u>Humanities/Fine Arts Elective</u>	3
—	—	<u>Social/Behavioral Sciences Elective</u>	3
Total SHC			6

## Major Electives

Select 10 semester hour credits from the following courses. AHR coursework is limited to 7 SHC because AHR 120 is required and AHR coursework is limited to a total of 9 SHC. CST coursework is limited to 6 SHC because CST 131 is required and CST coursework is limited to a total of 9 SHC. EGR coursework is limited to 7 SHC because EGR 125 is required and EGR coursework is limited to a total of 9 SHC. BUS, CMT, ISC, and WLD coursework is limited to a total of 9 SHC. Also, WBL coursework is limited to a total of 6 SHC.

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
AHR 113	<u>Comfort Cooling</u>	4
AHR 114	<u>Heat Pump Technology</u>	4
AHR 115	<u>Refrigeration Systems</u>	2
AHR 130	<u>HVAC Controls</u>	3
AHR 151	<u>HVAC Duct Systems I</u>	2
AHR 152	<u>HVAC Duct Systems II</u>	2
AHR 160	<u>Refrigerant Certification</u>	1
AHR 211	<u>Residential System Design</u>	3
AHR 212	<u>Advanced Comfort Systems</u>	4
AHR 213	<u>HVACR Building Code</u>	2
AHR 215	<u>Commercial HVAC Controls</u>	2
AHR 225	<u>Commercial System Design</u>	3
AHR 235	<u>Refrigeration Design</u>	3
AHR 245	<u>Chiller Systems</u>	2
AHR 255	<u>Indoor Air Quality</u>	2
AHR 263	<u>Energy Management</u>	2
ALT 120	<u>Renewable Energy Technologies</u>	3
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 125	<u>Personal Finance</u>	3
BUS 137	<u>Principles of Management</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
BUS 260	<u>Business Communication</u>	3
CMT 120	<u>Codes and Inspections</u>	3

CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CMT 214	<u>Planning and Scheduling</u>	3
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
CST 110	<u>Intro to Construction</u>	2
CST 231	<u>Soils &amp; Site Work</u>	4
CST 241	<u>Planning/Estimating I</u>	3
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology.</u>	3
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 111	<u>Introduction to Electricity</u>	3
ELN 133	<u>Digital Electronics</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 232	<u>Introduction to Microprocessors</u>	4
ELN 234	<u>Communication Systems</u>	4
ELN 260	<u>Prog Logic Controllers</u>	4
ISC 112	<u>Industrial Safety.</u>	2
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety.</u>	2
ISC 121	<u>Environmental Health &amp; Safety.</u>	3
ISC 132	<u>Manufacturing Quality Control</u>	3
ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary.</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy.</u>	3
SST 140	<u>Green Building and Design Concepts</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1

WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 143	<u>Welding Metallurgy</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64*

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Electrical Systems Technology (35130) CIP 46.0302

### Diploma (D35130)

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#### First Year Fall

CST 131	<u>OSHA/Safety/Certification</u>	3
• ELC 112	<u>DC/AC Electricity</u>	5
• ELC 113	<u>Residential Wiring</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 126	<u>Electrical Computations</u>	3
<b>Total SHC</b>		<b>17</b>

#### First Year Spring

EGR 125	<u>Appl Software for Tech</u>	2
ELC 115	<u>Industrial Wiring</u>	4
• ELC 117	<u>Motors and Controls</u>	4
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Summer

ELC 119	<u>NEC Calculations</u>	2
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Take three semester hour credits from the following general education courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
PHY 110	<u>Conceptual Physics</u>	3
— —	<u>Humanities &amp; Fine Arts Elective</u>	3
— —	<u>Social &amp; Behavioral Science Elective</u>	3
<b>Total SHC</b>		<b>5</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 40*

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

## Electrical Systems Technology (35130) CIP 46.0302

### Basic Certificate (C35130BA)

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#### First Year Fall

CST 131	<u>OSHA/Safety/Certification</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 118	<u>National Electrical Code</u>	2
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

ELC 125	<u>Diagrams and Schematics</u>	2
<b>Total SHC</b>		<b>2</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Electrical Systems Technology (35130) CIP 46.0302

### Industrial Motor Control Certificate (C35130MO)

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#### First Year Fall

ELC 112	<u>DC/AC Electricity</u>	5
ELC 126	<u>Electrical Computations</u>	3
<b>Total SHC</b>		<b>8</b>

#### First Year Spring

ELC 117	<u>Motors and Controls</u>	4
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Electrical Systems Technology (35130) CIP 46.0302

### Wiring and NEC Certificate (C35130NE)

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#### First Year Fall

ELC 113	<u>Residential Wiring</u>	4
ELC 118	<u>National Electrical Code</u>	2
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

ELC 115	<u>Industrial Wiring</u>	4
<b>Total SHC</b>		<b>4</b>

#### First Year Summer

ELC 119	<u>NEC Calculations</u>	2
<b>Total SHC</b>		<b>2</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Electrical Systems Technology\_(35130)\_CIP 46.0302

### CCPP Diploma (D35130PB)

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EGR 125	<u>Appl Software for Tech</u>	2
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
PSY 150	<u>General Psychology</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 37*

## Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Electrical Systems Technology\\_\(35130\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Electrical Systems Technology (35130) CIP 46.0302 CCPP Certificate (C35130PB)

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CST 131	<u>OSHA/Safety/Certification</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 16*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Electrical Systems Technology \(35130\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Electronics Engineering Technology (40200) CIP 15.0303

### Description

The electronics engineering technology curriculum prepares students to apply basic engineering principles and technical skills in electrical maintenance and management or in the design, planning, construction, development, and installation of electrical systems, machines, and power generating equipment. Students are prepared through the study and application of principles from mathematics, natural sciences, and technology and applied processes in electrical engineering.

Coursework includes mathematics, natural sciences, engineering sciences and technology. Instruction covers electrical circuitry, prototype development and testing, systems analysis and testing, systems maintenance, instrument calibration, and report preparation.

Graduates should qualify for employment as technicians, engineering assistants, technical managers, or salespersons in electrical generation/distribution, industrial maintenance, electronic repair, or other fields requiring a broad-based knowledge of electrical and electronic concepts.

### Awards

- **Associate in Applied Science Degree (A40200)** (<https://legacy.rccc.edu/catalog-2019-2020/2018/08/11/associate-in-applied-science-degree-a40200/>).
- **Diploma (D40200)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/02/electronics-engineering-technology-diploma-d40200/>).
- **CCPP Certificate (C40200PB)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c40200p/>).
- **Certificate (C40200)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/14/certificate-c40200/>).

### Additional Information

- **Electronics Engineering Technology AAS Ed Plan** (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2017/09/Electronics-Engineering-Technology-A40200-2018-2019-Ed-Plan.pdf>).
- **Electronics Engineering Technology Diploma Ed Plan** (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2017/09/Electronics-Engineering-Technology-D40200-2018-2019-Ed-Plan.pdf>).
- **Electronics Engineering Technology Certificate Ed Plan** ()

### Contact Information

The Electronics Engineering Technology (40200) CIP 15.0303 program is in the RCCC Department of **Business, Engineering Technologies and Public Services (/industrialengineering/)**. For additional information regarding this program, contact the chair, Tony Bean ([tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Tony Bean</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:tony.bean@rccc.edu">tony.bean@rccc.edu</a> (<a href="mailto:tony.bean@rccc.edu">mailto:tony.bean@rccc.edu</a>)</p> <p>☎ (704) 216-3917</p> <p>📍 North</p>
<p><b>Jim de Friess</b></p> <p>Lead Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:jim.defriess@rccc.edu">jim.defriess@rccc.edu</a> (<a href="mailto:jim.defriess@rccc.edu">mailto:jim.defriess@rccc.edu</a>)</p> <p>☎ (704) 216-3490</p>

This entry was posted in [Business, Engineering Technologies and Public Services, Electronics Engineering Technology \(40200\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Electronics Engineering Technology (40200) CIP 15.0303

### Associate in Applied Science Degree (A40200)

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#### First Year Fall

• ELC 138	<u>DC Circuit Analysis</u>	4
• ELN 133	<u>Digital Electronics</u>	4
— —	Major Electives	6
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

• ELC 139	<u>AC Circuit Analysis</u>	4
• ELN 131	<u>Analog Electronics I</u>	4
ENG 111	<u>Writing and Inquiry</u>	3

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>14-15</b>

#### First Year Summer

— —	<u>Humanities/Fine Arts Elective</u>	3
— —	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

• ELN 132	<u>Analog Electronics II</u>	4
• ELN 234	<u>Communication Systems</u>	4
— —	Major Electives	7
<b>Total SHC</b>		<b>15</b>

#### Second Year Spring

• ELN 232	<u>Introduction to Microprocessors</u>	4
ENG 114	<u>Professional Research &amp; Reporting</u>	3
— —	Major Elective	8
<b>Total SHC</b>		<b>15</b>

#### Major Electives

Select 21 SHC from the following courses. This may include up to 4 SHC from WBL course/combination of courses. Courses with the prefix AHR, BIO, CHM, CSC, CTI, CTS, DFT, EGR, ISC, MAT, MEC, NET, PHY, SEC, WEB, and WLD are limited to a total of 9 SHC each.

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
AHR 113	<u>Comfort Cooling</u>	4
AHR 114	<u>Heat Pump Technology</u>	4
AHR 115	<u>Refrigeration Systems</u>	2
AHR 151	<u>HVAC Duct Systems I</u>	2

AHR 152	<u>HVAC Duct Systems II</u>	2
AHR 160	<u>Refrigerant Certification</u>	1
AHR 211	<u>Residential System Design</u>	3
AHR 212	<u>Advanced Comfort Systems</u>	4
AHR 213	<u>HVACR Building Code</u>	2
AHR 225	<u>Commercial System Design</u>	3
AHR 235	<u>Refrigeration Design</u>	3
AHR 245	<u>Chiller Systems</u>	2
AHR 255	<u>Indoor Air Quality</u>	2
ALT 120	<u>Renewable Energy Technologies</u>	3
ATR 112	<u>Intro to Automation</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4
BIO 112	<u>General Biology II</u>	4
BIO 140	<u>Environmental Biology</u>	3
BIO 140A	<u>Environmental Biology Lab</u>	1
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
BIO 250	<u>Genetics</u>	4
BIO 275	<u>Microbiology</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
CHM 121	<u>Foundations of Chemistry</u>	3
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 132	<u>Organic and Biochemistry</u>	4
CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4
CHM 251	<u>Organic Chemistry I</u>	4
CHM 252	<u>Organic Chemistry II</u>	4
CHM 263	<u>Analytical Chemistry</u>	5
CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 153	<u>C# Programming</u>	3
CSC 239	<u>Advanced Visual BASIC Programming</u>	3
CSC 251	<u>Advanced JAVA Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
CTI 140	<u>Virtualization Concepts</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
CTS 120	<u>Hardware/Software Support</u>	3
CTS 130	<u>Spreadsheet</u>	3

CTS 155	<u>Tech Support Functions</u>	3
CTS 230	<u>Advanced Spreadsheet</u>	3
CTS 240	<u>Project Management</u>	3
DBA 110	<u>Database Concepts</u>	3
DBA 120	<u>Database Programming I</u>	3
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology.</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 130	<u>Advanced Motors/Controls</u>	3
ELC 213	<u>Instrumentation</u>	4
ELC 215	<u>Electrical Maintenance</u>	3
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 260	<u>Prog Logic Controllers</u>	4
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 112	<u>Industrial Safety.</u>	2
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety.</u>	2
ISC 121	<u>Environmental Health &amp; Safety.</u>	3
ISC 132	<u>Manufacturing Quality Control</u>	3
ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary.</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy.</u>	3
MAT 143	<u>Quantitative Literacy.</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry.</u>	4
MAT 263	<u>Brief Calculus</u>	4



MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
MAT 273	<u>Calculus III</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy</u>	2
MEC 145	<u>Manufacturing Materials I</u>	3
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
MEC 275	<u>Engineering Mechanisms</u>	3
NET 110	<u>Networking Concepts</u>	3
NET 125	<u>Introduction to Networks</u>	3
NET 126	<u>Routing Basics</u>	3
NET 175	<u>Wireless Technology</u>	3
NET 225	<u>Routing &amp; Switching I</u>	3
NET 226	<u>Routing and Switching II</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
OMT 240	<u>Customers and Products</u>	3
OMT 241	<u>Logistics</u>	3
OMT 243	<u>Support Functions</u>	3
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
SEC 110	<u>Security Concepts</u>	3
SEC 150	<u>Secure Communications</u>	3
SEC 160	<u>Security Administration I</u>	3
SEC 210	<u>Intrusion Detection</u>	3
SST 140	<u>Green Building and Design Concepts</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WEB 110	<u>Internet/Web Fundamentals</u>	3
WEB 111	<u>Introduction to Web Graphics</u>	3
WEB 115	<u>Web Markup and Scripting</u>	3
WEB 180	<u>Active Server Pages</u>	3
WEB 187	<u>Programming for Mobile Devices</u>	3
WEB 211	<u>Advanced Web Graphics</u>	3
WEB 214	<u>Social Media</u>	3
WEB 225	<u>Content Management Systems</u>	3

WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 143	<u>Welding Metallurgy</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64*

## Transfer Students

Suggested Major Electives for students planning to transfer to UNC-C are CSC 134, ELN 150, MAT 171, MAT 172, MAT 271, PHY 151, and PHY 152.

## Major Electives-CHM 151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as one of your Major Electives, you must also select MAT 171 as either your math course or as another of your Major Electives, or have credit for MAT 171.

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Electronics Engineering Technology \(40200\)](#) and tagged [Degree](#). Bookmark the [permalink](#). [Edit](#)

## Electronics Engineering Technology (40200) CIP 15.0303 Diploma (D40200)

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### First Year Fall

• ELC 138	<u>DC Circuit Analysis</u>	4
• ELN 133	<u>Digital Electronics</u>	4
— —	Major Electives	6
<b>Total SHC</b>		<b>14</b>

### First Year Spring

• ELC 139	<u>AC Circuit Analysis</u>	4
• ELN 131	<u>Analog Electronics I</u>	4
• ELN 232	<u>Introduction to Microprocessors</u>	4

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>15</b>

### Second Year Fall

• ELN 234	<u>Communication Systems</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>7</b>

### Major Electives

Select 6 SHC from the following courses. This may include up to 3 SHC from WBL course/combination of courses.

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
AHR 113	<u>Comfort Cooling</u>	4
AHR 114	<u>Heat Pump Technology</u>	4
AHR 115	<u>Refrigeration Systems</u>	2
AHR 151	<u>HVAC Duct Systems I</u>	2
AHR 152	<u>HVAC Duct Systems II</u>	2
AHR 160	<u>Refrigerant Certification</u>	1
AHR 211	<u>Residential System Design</u>	3
AHR 212	<u>Advanced Comfort Systems</u>	4
AHR 213	<u>HVACR Building Code</u>	2
AHR 225	<u>Commercial System Design</u>	3
AHR 235	<u>Refrigeration Design</u>	3
AHR 245	<u>Chiller Systems</u>	2
AHR 255	<u>Indoor Air Quality</u>	2
ALT 120	<u>Renewable Energy Technologies</u>	3
ATR 112	<u>Intro to Automation</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4

BIO 112	<u>General Biology II</u>	4
BIO 140	<u>Environmental Biology</u>	3
BIO 140A	<u>Environmental Biology Lab</u>	1
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
BIO 250	<u>Genetics</u>	4
BIO 275	<u>Microbiology</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
CHM 121	<u>Foundations of Chemistry</u>	3
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 132	<u>Organic and Biochemistry</u>	4
CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4
CHM 251	<u>Organic Chemistry I</u>	4
CHM 252	<u>Organic Chemistry II</u>	4
CHM 263	<u>Analytical Chemistry</u>	5
CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 153	<u>C# Programming</u>	3
CSC 239	<u>Advanced Visual BASIC Programming</u>	3
CSC 251	<u>Advanced JAVA Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
CTI 140	<u>Virtualization Concepts</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
CTS 120	<u>Hardware/Software Support</u>	3
CTS 130	<u>Spreadsheet</u>	3
CTS 155	<u>Tech Support Functions</u>	3
CTS 230	<u>Advanced Spreadsheet</u>	3
CTS 240	<u>Project Management</u>	3
DBA 110	<u>Database Concepts</u>	3
DBA 120	<u>Database Programming I</u>	3
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2

EGR 115	<u>Intro to Technology</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 130	<u>Advanced Motors/Controls</u>	3
ELC 213	<u>Instrumentation</u>	4
ELC 215	<u>Electrical Maintenance</u>	3
ELN 132	<u>Analog Electronics II</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 260	<u>Prog Logic Controllers</u>	4
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 112	<u>Industrial Safety</u>	2
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety</u>	2
ISC 121	<u>Environmental Health &amp; Safety</u>	3
ISC 132	<u>Manufacturing Quality Control</u>	3
ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
MAT 273	<u>Calculus III</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy</u>	2
MEC 145	<u>Manufacturing Materials I</u>	3
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
MEC 275	<u>Engineering Mechanisms</u>	3
NET 110	<u>Networking Concepts</u>	3
NET 125	<u>Introduction to Networks</u>	3

NET 126	<u>Routing Basics</u>	3
NET 175	<u>Wireless Technology</u>	3
NET 225	<u>Routing &amp; Switching I</u>	3
NET 226	<u>Routing and Switching II</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
OMT 240	<u>Customers and Products</u>	3
OMT 241	<u>Logistics</u>	3
OMT 243	<u>Support Functions</u>	3
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
SEC 110	<u>Security Concepts</u>	3
SEC 150	<u>Secure Communications</u>	3
SEC 160	<u>Security Administration I</u>	3
SEC 210	<u>Intrusion Detection</u>	3
SST 140	<u>Green Building and Design Concepts</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WEB 110	<u>Internet/Web Fundamentals</u>	3
WEB 111	<u>Introduction to Web Graphics</u>	3
WEB 115	<u>Web Markup and Scripting</u>	3
WEB 180	<u>Active Server Pages</u>	3
WEB 187	<u>Programming for Mobile Devices</u>	3
WEB 211	<u>Advanced Web Graphics</u>	3
WEB 214	<u>Social Media</u>	3
WEB 225	<u>Content Management Systems</u>	3
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 143	<u>Welding Metallurgy</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3

WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 36*

## Major Electives-CHM 151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as one of your Major Electives, you must also select MAT 171 as either your math course or as another of your Major Electives, or have credit for MAT 171.

This entry was posted in [Business, Engineering Technologies and Public Services, Electronics Engineering Technology \(40200\)](#) and tagged [Diploma](#). Bookmark the [permalink](#). [Edit](#)

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Electronics Engineering Technology\_(40200)\_CIP 15.0303 Certificate (C40200)

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### First Year Fall

ELC 138	<u>DC Circuit Analysis</u>	4
ELN 133	<u>Digital Electronics</u>	4
<b>Total SHC</b>		<b>8</b>

### First Year Spring

ELC 139	<u>AC Circuit Analysis</u>	4
ELN 131	<u>Analog Electronics I</u>	4
<b>Total SHC</b>		<b>8</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Business, Engineering Technologies and Public Services, Electronics Engineering Technology\\_\(40200\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Electronics Engineering Technology\_(40200)\_CIP 15.0303 CCPP Certificate (C40200PB)

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### Courses

ELC 138	<u>DC Circuit Analysis</u>	4
ELC 139	<u>AC Circuit Analysis</u>	4
ELN 131	<u>Analog Electronics I</u>	4
ELN 133	<u>Digital Electronics</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Electronics Engineering Technology\\_\(40200\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302

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### Description

The Emergency Management curriculum is designed to provide students with a foundation of technical and professional knowledge needed for emergency services delivery in local and state government agencies. Study involves both management and technical aspects of law enforcement, fire protection, emergency medical services, and emergency planning.

Course work includes classroom and laboratory exercises to introduce the student to various aspects of emergency preparedness, protection, and enforcement. Students will learn technical and administrative skills such as investigative principles, hazardous materials, codes, standards, emergency agency operations, and finance.

Employment opportunities include ambulance services, fire/rescue agencies, law enforcement agencies, fire marshal offices, industrial firms, educational institutions, emergency management offices, and other government agencies. Employed persons should have opportunities for skilled and supervisory-level positions.

### Awards

- Associate in Applied Science Degree (A55460)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/03/15/associate-in-applied-science-degree-a55460/>)
- Diploma (D55460) (<https://legacy.rccc.edu/catalog-2019-2020/2017/03/15/emergency-management-diploma-d55460/>)
- Business Continuity Certificate (C55460BC)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/emergency-business-continuity-track-c55460bc/>)
- Certificate (C55460MG) (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/emergency-management-track-c55460mg/>)
- Fire Investigations Certificate (C55460FI)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/fire-investigations-c55460fi/>)
- Medical Technician Certificate (C55460MT)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/18/medical-technician-certificate-c55460mt/>)
- Rescue Certificate (C55460RS)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/emergency-rescue-track-c55460rs/>)
- Response and Recovery Certificate (C55460RR)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/01/30/emergency-response-and-recovery-track-c55460rr/>)
- Volunteer Services & NGO Certificate (C55460VS)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/emergency-volunteer-services-ngo-track-c55460vs/>)
- for Policing Certificate (C55460LE)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/12/18/for->

## Contact Information

The Emergency Management (55460) CIP 43.0302 program is in the RCCC Department of [Business, Engineering Technologies and Public Services \(/industrialengineering/\)](#). For additional information regarding this program, contact the director, Alan Thompson ([alan.thompson@rccc.edu](mailto:alan.thompson@rccc.edu) (<mailto:alan.thompson@rccc.edu>)).

## Program Advising

### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

## Program Advisors

Alan Thompson		
	Director in Corporate and Continuing Education[+]	
	Program Chair in Academic Programs[+]	
		 <a href="mailto:alan.thompson@rccc.edu">alan.thompson@rccc.edu</a>
		( <a href="mailto:alan.thompson@rccc.edu">mailto:alan.thompson@rccc.edu</a> )
		 (704) 216-7141
		 North

This entry was posted in [Business, Engineering Technologies and Public Services, Emergency Management \(55460\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Emergency Management (55460) CIP 43.0302

### Associate in Applied Science Degree (A55460)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
COM 140	<u>Introduction to Intercultural Communication</u>	3
ENG 111	<u>Writing and Inquiry.</u>	3
• EPT 120	<u>Sociology of Disaster</u>	3
• EPT 140	<u>Emergency Management</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

EMS 150	<u>Emergency Vehicles and EMS Communication</u>	2
• EPT 130	<u>Mitigation &amp; Preparedness</u>	3

Take one of the following Incident Management courses.

• CJC 170	<u>Critical Incident Mgmt for Public Safety.</u>	3
• EPT 150	<u>Incident Management</u>	3

Take one of the following communication courses. ENG 114 is recommended.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy.</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>14</b>

Note ENG 114 and MAT 143 are recommended.

#### First Year Summer

• EPT 220	<u>Terrorism and Emergency Management</u>	3
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Take one of the following social/behavioral sciences courses.

POL 120	<u>American Government</u>	3
PSY 150	<u>General Psychology.</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

EMS 140	<u>Rescue Scene Management</u>	2
• EPT 210	<u>Response &amp; Recovery.</u>	3
• EPT 275	<u>Emergency Operations Center Management</u>	3

•	FIP	228	<u>Local Government Finance</u>	3
—	—		Major Elective	3

Take one of the following Law and Ethics courses.

•	EPT	124	<u>EM Services Law &amp; Ethics</u>	3
•	FIP	152	<u>Fire Protection Law</u>	3
<b>Total SHC</b>				<b>17</b>

## Second Year Spring

EPT	230	<u>Emergency Planning</u>	3
GIS	252	<u>Utilities in GIS</u>	3
—	—	Major Electives	6
<b>Total SHC</b>			<b>12</b>

## Major Electives

Select nine semester hour credits from the following courses. This may include up to 3 SHC from WBL. The courses not taken to satisfy the Incident Management and Law and Ethics requirements may be selected as Major Electives.

CJC	121	<u>Law Enforcement Operations</u>	3
CJC	131	<u>Criminal Law</u>	3
CJC	132	<u>Court Procedure &amp; Evidence</u>	3
CJC	160	<u>Terrorism: Underlying Issues</u>	3
CJC	221	<u>Investigative Principles</u>	4
EHS	215	<u>Incident Management</u>	4
EMS	140A	<u>Rescue Scene Skills Lab</u>	1
EPT	225	<u>Hazard Analysis/Risk Assessment</u>	3
EPT	260	<u>Business Continuity</u>	3
FIP	128	<u>Detection and Investigation</u>	3
FIP	132	<u>Building Construction</u>	3
FIP	164	<u>OSHA Standards</u>	3
FIP	176	<u>HazMat: Operations</u>	4
FIP	180	<u>Wildland Fire Behavior</u>	3
FIP	256	<u>Municipal Public Relations</u>	3
GIS	212	<u>GIS/GPS Applications</u>	6
WBL	110	<u>World of Work</u>	1
WBL	111	<u>Work-Based Learning I</u>	1
WBL	112	<u>Work-Based Learning I</u>	2
WBL	113	<u>Work-Based Learning I</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64*

This entry was posted in [Emergency Management \(55460\)](#), and tagged [Degree](#). Bookmark the [permalink](#).

## Emergency Management (55460) CIP 43.0302 Diploma (D55460)

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### Course Requirements

The following is a suggested program of study for completing this degree in three semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

COM 140	<u>Introduction to Intercultural Communication</u>	3
• EPT 120	<u>Sociology of Disaster</u>	3
• EPT 140	<u>Emergency Management</u>	3
• EPT 210	<u>Response &amp; Recovery</u>	3
• EPT 275	<u>Emergency Operations Center Management</u>	3
• FIP 228	<u>Local Government Finance</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Spring

EMS 150	<u>Emergency Vehicles and EMS Communication</u>	2
• EPT 130	<u>Mitigation &amp; Preparedness</u>	3
EPT 230	<u>Emergency Planning</u>	3
GIS 252	<u>Utilities in GIS</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>14</b>

#### First Year Summer

CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• EPT 220	<u>Terrorism and Emergency Management</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 41*

This entry was posted in [Emergency Management \(55460\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Emergency Management (55460) CIP 43.0302 Business Continuity Certificate (C55460BC)

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### First Year Spring

EPT	225	<u>Hazard Analysis/Risk Assessment</u>	3
EPT	230	<u>Emergency Planning</u>	3
EPT	260	<u>Business Continuity</u>	3
FIP	164	<u>OSHA Standards</u>	3
FIP	176	<u>HazMat: Operations</u>	4
<b>Total SHC</b>			<b>16</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302 Certificate (C55460MG)

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### First Year Fall

EPT 140	<u>Emergency Management</u>	3
EPT 275	<u>Emergency Operations Center Management</u>	3
FIP 256	<u>Municipal Public Relations</u>	3
<b>Total SHC</b>		<b>9</b>

### First Year Spring

EPT 150	<u>Incident Management</u>	3
EPT 230	<u>Emergency Planning</u>	3
<b>Total SHC</b>		<b>6</b>

### First Year Summer

EPT 220	<u>Terrorism and Emergency Management</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Emergency Management (55460) CIP 43.0302 Fire Investigations Certificate (C55460FI)

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### First Year Fall

CJC	131	<u>Criminal Law</u>	3
FIP	128	<u>Detection and Investigation</u>	3
<b>Total SHC</b>			<b>6</b>

### First Year Spring

CJC	132	<u>Court Procedure &amp; Evidence</u>	3
CJC	221	<u>Investigative Principles</u>	4
FIP	132	<u>Building Construction</u>	3
<b>Total SHC</b>			<b>10</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302 for Policing Certificate (C55460LE)

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### First Year Fall

EPT 120	<u>Sociology of Disaster</u>	3
EPT 210	<u>Response &amp; Recovery</u>	3
<b>Total SHC</b>		<b>6</b>

### First Year Spring

CJC 170	<u>Critical Incident Mgmt for Public Safety</u>	3
EPT 150	<u>Incident Management</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302

### Medical Technician Certificate (C55460MT)

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#### First Year Spring

EMS 110	<u>EMT</u>	9
EPT 230	<u>Emergency Planning</u>	3
WBL 110	<u>World of Work</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

This entry was posted in [Business, Engineering Technologies and Public Services, Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302 Rescue Certificate (C55460RS)

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### First Year Fall

EMS 140	<u>Rescue Scene Management</u>	2
EPT 120	<u>Sociology of Disaster</u>	3
<b>Total SHC</b>		<b>5</b>

### First Year Spring

EMS 150	<u>Emergency Vehicles and EMS Communication</u>	2
EPT 150	<u>Incident Management</u>	3
EPT 225	<u>Hazard Analysis/Risk Assessment</u>	3
<b>Total SHC</b>		<b>8</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302 Response and Recovery Certificate (C55460RR)

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### First Year Fall

EPT 120	<u>Sociology of Disaster</u>	3
EPT 140	<u>Emergency Management</u>	3
EPT 210	<u>Response &amp; Recovery</u>	3
EPT 275	<u>Emergency Operations Center Management</u>	3
<b>Total SHC</b>		<b>12</b>

### First Year Spring

EPT 150	<u>Incident Management</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Management (55460) CIP 43.0302 Volunteer Services & NGO Certificate (C55460VS)

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### First Year Fall

EMS 140	<u>Rescue Scene Management</u>	2
EPT 120	<u>Sociology of Disaster</u>	3
EPT 210	<u>Response &amp; Recovery</u>	3
FIP 256	<u>Municipal Public Relations</u>	3
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>12</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Emergency Management \(55460\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Emergency Medical Science (45340) CIP 51.0904

### Description

The Emergency Medical Science curriculum provides individuals with the knowledge, skills and attributes to provide advanced emergency medical care as a paramedic for critical and emergent patients who access the emergency medical system and prepares graduates to enter the workforce

Students will gain complex knowledge, competency, and experience while employing evidence based practice under medical oversight, and serve as a link from the scene into the healthcare system.

Graduates of this program may be eligible to take state and/or national certification examinations. Employment opportunities include providers of emergency medical services, fire departments, rescue agencies, hospital specialty areas, industry, educational and government agencies.

### *Bridge Program for NC Paramedics*

### Awards

- Associate in Applied Science Degree (A45340)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/24/associate-in-applied-science-bridge-program-a45320/>).

### Additional Information

This program is intended for currently certified North Carolina Paramedics. Students provide a copy of their current North Carolina Paramedic certification and must interview with the EMS Program Director prior to being accepted into the program. Upon successful completion students will graduate with an Associate in Applied Science degree in Emergency Medical Science

### Contact Information

The Emergency Medical Science (45340) CIP 51.0904 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the director, Alan Thompson ([alan.thompson@rccc.edu](mailto:alan.thompson@rccc.edu) (<mailto:alan.thompson@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

##### Alan Thompson

Director in Corporate and Continuing Education[+]

Program Chair in Academic Programs[+]

alan.thompson@rccc.edu

(<mailto:alan.thompson@rccc.edu>)

(704) 216-7141

North

This entry was posted in Business, Engineering Technologies and Public Services, Emergency Medical Science (A45340), and tagged Applied Sciences Program, Program Description. Bookmark the permalink.

## Emergency Medical Science (45340) CIP 51.0904

### Associate in Applied Science Degree (A45340)

## *Bridge Program for NC Paramedics*

### Course Requirements

The following is a suggested program of study for completing this degree in two semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

### First Year Fall

BIO 168	<u>Anatomy and Physiology I</u>	4
COM 140	<u>Introduction to Intercultural Communication</u>	3
EMS 140	<u>Rescue Scene Management</u>	2
EMS 280	<u>EMS Bridging Course</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
<b>Total SHC</b>		<b>15</b>

### First Year Spring

• BIO 169	<u>Anatomy and Physiology II</u>	4
ENG 112	<u>Writing and Research in the Disciplines</u>	3
PSY 150	<u>General Psychology</u>	3

Take one of the following EMS courses.

EMS 125	<u>EMS Instructor Methodology</u>	3
EMS 235	<u>EMS Management</u>	2
<b>Total SHC</b>		<b>12</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 27*

### Required Current North Carolina Paramedic Certification

Credit for the following courses will be awarded after students submit their required current North Carolina Paramedic Certification to the program chair prior to admission to the program.

• EMS 110	<u>EMT</u>	9
• EMS 122	<u>EMS Clinical Practicum I</u>	1
• EMS 130	<u>Pharmacology</u>	4
• EMS 131	<u>Advanced Airway Management</u>	2
• EMS 160	<u>Cardiology I</u>	3
• EMS 220	<u>Cardiology II</u>	3
• EMS 221	<u>EMS Clinical Practicum II</u>	2
• EMS 231	<u>EMS Clinical Practicum III</u>	3
• EMS 240	<u>Patients with Special Challenges</u>	2
• EMS 241	<u>EMS Clinical Practicum IV</u>	4
• EMS 250	<u>Medical Emergencies</u>	4



• EMS 260	<u>Trauma Emergencies</u>	2
• EMS 270	<u>Life Span Emergencies</u>	4
• EMS 285	<u>EMS Capstone</u>	2
• OST 141	<u>Med Office Terms I</u>	3
• OST 142	<u>Med Office Terms II</u>	3
<b>Total SHC</b>		<b>51</b>

This entry was posted in [Emergency Medical Science \(A45340\)](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Esthetics Technology (55230) CIP 12.0409

### Description

The esthetics technology curriculum provides competency-based knowledge, scientific and artistic principles and hands-on fundamentals associated with the art of skin care. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional esthetics technology, business and human relations, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and cosmetic and skin care salons, as a platform artist, and in related businesses.

### Awards

- CCPP Certificate (C55230PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c55230p/>).
- Certificate (C55230) (<https://legacy.rccc.edu/catalog-2019-2020/2018/08/30/certificate-c55230/>).

### Additional Information

- Admission Requirements for Cosmetology Programs (<https://www.rccc.edu/cosmetology/admission-requirements-for-cosmetology-programs/>)
- Esthetics Technology Ed Plan (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2017/05/Esthetics-Technology-C55230-2018-2019-Ed-Plans.pdf>).

### Contact Information

The Esthetics Technology (55230) CIP 12.0409 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Ronald Wolfe ([ronald.wolfe@rccc.edu](mailto:ronald.wolfe@rccc.edu) (<mailto:ronald.wolfe@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Amanda Harris</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:amanda.harris@rccc.edu">amanda.harris@rccc.edu</a> (<a href="mailto:amanda.harris@rccc.edu">mailto:amanda.harris@rccc.edu</a>)</p> <p>☎ (704) 216-3930</p> <p>📍 College Station</p>
<p><b>Michelle Sofia</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:michelle.sofia@rccc.edu">michelle.sofia@rccc.edu</a> (<a href="mailto:michelle.sofia@rccc.edu">mailto:michelle.sofia@rccc.edu</a>)</p> <p>☎ (704) 216-3928</p> <p>📍 College Station</p>
<p><b>Ronald Wolfe</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:ronald.wolfe@rccc.edu">ronald.wolfe@rccc.edu</a> (<a href="mailto:ronald.wolfe@rccc.edu">mailto:ronald.wolfe@rccc.edu</a>)</p> <p>☎ (704) 216-3927</p> <p>📍 College Station</p>

## Esthetics Technology\_(55230)\_CIP 12.0409 Certificate (C55230)

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### First Year Fall

• COS 119	<u>Esthetics Concepts I</u>	2
• COS 120	<u>Esthetics Salon I</u>	6
<b>Total SHC</b>		<b>8</b>

### First Year Spring

• COS 125	<u>Esthetics Concepts II</u>	2
• COS 126	<u>Esthetics Salon II</u>	6
<b>Total SHC</b>		<b>8</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Business, Engineering Technologies and Public Services, Esthetics Technology\\_\(55230\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

### Program Costs

- Tuition & Fees – \$1,214.00
- Books & Supplies – \$839.00

### Length of Program

- Credit Hours – 16
- Intended Time to Complete – 2 Semesters

### Program Completion

- On Time Completion Rate – 0

### Occupation Information (O\*NET/SOC)

- [39-5094](#)

### Career Titles

- Skincare Specialists

*Rowan-Cabarrus Community College had less than ten completers with loan debt. Student employment data is not collected.*

## Esthetics Technology\_(55230)\_CIP 12.0409

### CCPP Certificate (C55230PB)

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#### Courses

COS 119	<u>Esthetics Concepts I</u>	2
COS 120	<u>Esthetics Salon I</u>	6
COS 125	<u>Esthetics Concepts II</u>	2
COS 126	<u>Esthetics Salon II</u>	6

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Esthetics Technology\\_\(55230\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Fire Protection Technology (55240) CIP 43.0201

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### Description

The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration.

Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies.

Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations.

### Awards

- Associate in Applied Science Degree (A55240)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/29/associate-in-applied-science-a55240/>).
- Diploma (D55240) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/fire-protection-technology-diploma-d55240fo/>).
- Fire Service Leadership & Management Certificate (C55240LM) (<https://legacy.rccc.edu/catalog-2019-2020/2015/12/04/fire-service-leadership-management-certificate-c55240d/>).
- Firefighter Health & Wellness Certificate (C55240FH)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/firefighter-health-wellness-certificate-c55240b/>).
- Human Relations in Fire & Government Certificate (C55240HR) (<https://legacy.rccc.edu/catalog-2019-2020/2016/01/21/human-relations-in-fire-government-service-certificate-c255240a/>).
- Supervision & HR Certificate (C55240SH)  
(<https://legacy.rccc.edu/catalog-2019-2020/2016/01/21/fire-service-supervision-human-resource-certificate-c55240c/>).

### Contact Information

The Fire Protection Technology (55240) CIP 43.0201 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the , ([lee.ennis@rccc.edu](mailto:lee.ennis@rccc.edu)) (<mailto:lee.ennis@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

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## Lee Ennis

Assistant Director in Corporate and Continuing Education[+]

Program Chair in Academic Programs[+]

✉ lee.ennis@rccc.edu (mailto:lee.ennis@rccc.edu)

☎ (704) 216-3466

📍 North

This entry was posted in [Business, Engineering Technologies and Public Services, Fire Protection Technology \(55240\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Fire Protection Technology (55240) CIP 43.0201

### Associate in Applied Science Degree (A55240)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
COM 140	<u>Introduction to Intercultural Communication</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• FIP 120	<u>Introduction to Fire Protection</u>	3
• FIP 152	<u>Fire Protection Law</u>	3
HSE 245	<u>Stress Management</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Spring

• FIP 124	<u>Fire Prevention &amp; Public Education</u>	3
• FIP 132	<u>Building Construction</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>12</b>

#### First Year Summer

—	Major Electives	3
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Take one of the following social/behavioral sciences courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

• FIP 220	<u>Fire Fighting Strategies</u>	3
• FIP 228	<u>Local Government Finance</u>	3
FIP 277	<u>Fire and Social Behavior</u>	3
—	Major Electives	6
<b>Total SHC</b>		<b>15</b>

#### Second Year Spring

FIP 232	<u>Hydraulics and Water Distribution</u>	3
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## Major Electives

Select a minimum of 21 SHC from the following courses. EPT courses are limited to no more than 9 semester hour credits.

EMS 110	<u>EMT</u>	9
EPT 120	<u>Sociology of Disaster</u>	3
EPT 140	<u>Emergency Management</u>	3
EPT 150	<u>Incident Management</u>	3
EPT 230	<u>Emergency Planning</u>	3
EPT 275	<u>Emergency Operations Center Management</u>	3
FIP 128	<u>Detection and Investigation</u>	3
FIP 136	<u>Inspections and Codes</u>	3
FIP 140	<u>Industrial Fire Protection</u>	3
FIP 146	<u>Fire Protection Systems</u>	4
FIP 162	<u>Firefighter Safety &amp; Wellness</u>	3
FIP 164	<u>OSHA Standards</u>	3
FIP 176	<u>HazMat: Operations</u>	4
FIP 180	<u>Wildland Fire Behavior</u>	3
FIP 184	<u>Wildland Fire Safety</u>	3
FIP 221	<u>Advanced Fire Fighting Strategies</u>	3
FIP 224	<u>Fire Instructor I &amp; II</u>	4
FIP 226	<u>Fire Officer I &amp; II</u>	4
FIP 229	<u>Fire Dynamics and Combustion</u>	3
FIP 230	<u>Chemistry of Hazardous Materials I</u>	5
FIP 240	<u>Fire Service Supervision</u>	3
FIP 248	<u>Fire Service Personnel Administration</u>	3
FIP 256	<u>Municipal Public Relations</u>	3
FIP 264	<u>Flame Properties and Materials Rating</u>	3
FIP 276	<u>Managing Fire Services</u>	3
PED 110	<u>Fit and Well for Life</u>	2
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
WBL 114	<u>Work-Based Learning I</u>	4
WBL 123	<u>Work-Based Learning II</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 66*

This entry was posted in [Fire Protection Technology \(55240\)](#) and tagged [Degree](#). Bookmark the [permalink](#).



## Fire Protection Technology\_(55240)\_CIP 43.0201 Diploma (D55240)

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### First Fall Semester

• FIP 120	<u>Introduction to Fire Protection</u>	3
• FIP 152	<u>Fire Protection Law</u>	3
FIP 240	<u>Fire Service Supervision</u>	3
HSE 245	<u>Stress Management</u>	3
<b>Total SHC</b>		<b>12</b>

### First Spring Semester

• FIP 124	<u>Fire Prevention &amp; Public Education</u>	3
• FIP 132	<u>Building Construction</u>	3
FIP 248	<u>Fire Service Personnel Administration</u>	3
FIP 276	<u>Managing Fire Services</u>	3
<b>Total SHC</b>		<b>12</b>

### First Summer Term

ENG 111	<u>Writing and Inquiry</u>	3
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Take one of the following social/behavioral sciences courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3
<b>Total SHC</b>		<b>6</b>

### Second Fall Semester

• FIP 220	<u>Fire Fighting Strategies</u>	3
• FIP 228	<u>Local Government Finance</u>	3
FIP 256	<u>Municipal Public Relations</u>	3
FIP 277	<u>Fire and Social Behavior</u>	3
<b>Total SHC</b>		<b>12</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 42*

This entry was posted in [Fire Protection Technology\\_\(55240\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Fire Protection Technology\_(55240)\_CIP 43.0201

### Fire Service Leadership & Management Certificate (C55240LM)

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#### Fall Semester

FIP	220	<u>Fire Fighting Strategies</u>	3
FIP	228	<u>Local Government Finance</u>	3
<b>Total SHC</b>			<b>6</b>

#### Spring Semester

FIP	132	<u>Building Construction</u>	3
FIP	248	<u>Fire Service Personnel Administration</u>	3
FIP	276	<u>Managing Fire Services</u>	3
<b>Total SHC</b>			<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Fire Protection Technology\\_\(55240\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Fire Protection Technology\_(55240)\_CIP 43.0201

### Firefighter Health & Wellness Certificate (C55240FH)

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#### Fall Semester

FIP	220	<u>Fire Fighting Strategies</u>	3
FIP	228	<u>Local Government Finance</u>	3
<b>Total SHC</b>			<b>6</b>

#### Spring Semester

FIP	132	<u>Building Construction</u>	3
HSE	245	<u>Stress Management</u>	3
<b>Total SHC</b>			<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Fire Protection Technology\\_\(55240\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Fire Protection Technology\_(55240)\_CIP 43.0201

### Human Relations in Fire & Government Certificate (C55240HR)

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#### Fall Semester

FIP	220	<u>Fire Fighting Strategies</u>	3
FIP	228	<u>Local Government Finance</u>	3
FIP	256	<u>Municipal Public Relations</u>	3
<b>Total SHC</b>			<b>9</b>

#### Spring Semester

FIP	132	<u>Building Construction</u>	3
FIP	277	<u>Fire and Social Behavior</u>	3
<b>Total SHC</b>			<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Fire Protection Technology\\_\(55240\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Fire Protection Technology\_(55240)\_CIP 43.0201 Supervision & HR Certificate (C55240SH)

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### Fall Semester

FIP	152	<u>Fire Protection Law</u>	3
FIP	220	<u>Fire Fighting Strategies</u>	3
FIP	228	<u>Local Government Finance</u>	3
<b>Total SHC</b>			<b>9</b>

### Spring Semester

FIP	132	<u>Building Construction</u>	3
FIP	240	<u>Fire Service Supervision</u>	3
<b>Total SHC</b>			<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Fire Protection Technology\\_\(55240\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Healthcare Management Technology (25200) CIP 51.0701

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### Description

The Healthcare Management Technology curriculum prepares individuals for employment in healthcare business and financial operations in areas such as general healthcare management, entrepreneurship, and long-term care.

Course work includes medical office management, financial management, legal aspects of healthcare, medical insurance and billing analysis, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of healthcare settings including hospitals, medical offices, outpatient clinics, long-term care facilities, and insurance companies. Industry recognized certifications may be available for graduates with work experience.

### Awards

- Associate in Applied Science Degree (A25200)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/06/25/10683/>).
- Diploma (D25200) (<https://legacy.rccc.edu/catalog-2019-2020/2019/06/25/diploma-d25200/>).
- Billing and Coding Essentials Certificate (C25200BE)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/06/25/billing-and-coding-essentials-certificate-c25200be/>).

### Contact Information

The Healthcare Management Technology (25200) CIP 51.0701 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Zackary Hubbard ([zackary.hubbard@rccc.edu](mailto:zackary.hubbard@rccc.edu) (<mailto:zackary.hubbard@rccc.edu>)).

This entry was posted in [Business, Engineering Technologies and Public Services, Healthcare Management Technology \(25200\)](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Healthcare Management Technology (25200) CIP 51.0701

### Associate in Applied Science Degree (A25200)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

• CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• HMT 110	<u>Intro to Healthcare Mgt</u>	3
• OST 141	<u>Med Office Terms I</u>	3
OST 181	<u>Office Procedures</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

Take the following courses.

OST 136	<u>Word Processing</u>	3
• OST 142	<u>Med Office Terms II</u>	3
• OST 148	<u>Medical Insurance &amp; Billing</u>	3
• OST 149	<u>Medical Legal Issues</u>	3

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
HUM 110	<u>Technology and Society</u>	3
MUS 110	<u>Music Appreciation</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Summer

Take the following courses.

CTS 115	<u>Information Systems Business Concepts</u>	3
DBA 110	<u>Database Concepts</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4

Take one of the following social/behavioral sciences courses.

ECO 151	<u>Survey of Economics</u>	3
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>12-13</b>

#### Second Year Fall

Take the following courses.

• ACC 120	<u>Principles of Financial Accounting</u>	4
BUS 137	<u>Principles of Management</u>	3
CTS 130	<u>Spreadsheet</u>	3
OST 247	<u>Procedure Coding</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>16</b>

## Second Year Spring

Take the following courses.

• ACC 121	<u>Principles of Managerial Accounting</u>	4
CTS 230	<u>Advanced Spreadsheet</u>	3
OST 243	<u>Med Office Simulation</u>	3
OST 248	<u>Diagnostic Coding</u>	3

Take one of the following WBL courses.

WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
<b>Total SHC</b>		<b>14</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 72-73*

This entry was posted in [Business, Engineering Technologies and Public Services, Healthcare Management Technology\\_\(25200\)](#) and tagged [Degree](#). Bookmark the [permalink](#).



## Healthcare Management Technology\_(25200)\_CIP 51.0701 Diploma (D25200)

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### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

• CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• HMT 110	<u>Intro to Healthcare Mgt</u>	3
• OST 141	<u>Med Office Terms I</u>	3
• OST 148	<u>Medical Insurance &amp; Billing</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

Take the following courses.

CTS 115	<u>Information Systems Business Concepts</u>	3
OST 142	<u>Med Office Terms II</u>	3
OST 149	<u>Medical Legal Issues</u>	3
OST 181	<u>Office Procedures</u>	3
OST 247	<u>Procedure Coding</u>	3
<b>Total SHC</b>		<b>15</b>

#### Second Year Fall

Take the following courses.

OST 243	<u>Med Office Simulation</u>	3
OST 248	<u>Diagnostic Coding</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 39*

This entry was posted in [Business, Engineering Technologies and Public Services, Healthcare Management Technology\\_\(25200\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Healthcare Management Technology\_(25200)\_CIP 51.0701

### Billing and Coding Essentials Certificate (C25200BE)

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#### Course Requirements

The following is a suggested program of study for completing this degree in two semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

OST 141	<u>Med Office Terms I</u>	3
OST 148	<u>Medical Insurance &amp; Billing</u>	3
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

Take the following courses.

OST 142	<u>Med Office Terms II</u>	3
OST 149	<u>Medical Legal Issues</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Healthcare Management Technology\\_\(25200\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Industrial Engineering Technology (40240) CIP 15.0612

### Description

The industrial engineering technology curriculum prepares students through the study and application of the principles for developing, implementing and improving integrated systems involving people, materials, equipment and information as leaders in an industrial or manufacturing setting. Students are prepared to use basic engineering principles and technical skills to develop, implement, and improve industrial and service systems.

Course work includes mathematics, leadership and management skills, manufacturing materials and processes, and computerized production methods and instruction in systems analysis, quality and productivity improvement techniques for process development, cost analysis, facilities planning, organizational behavior, industrial processes, industrial planning procedures, computer applications, and report and presentation preparation.

Graduates should qualify as quality improvement technicians, front-line supervisors, production planners, inventory supervisors, and manufacturing technicians. Graduates should qualify for employment as industrial process technicians, quality assurance and control technicians, and facilities managers. Certification is available through organizations such as ASQC, SME and APICS.

### Awards

- **Associate in Applied Science Degree (A40240)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/associate-in-applied-science-degree-a40240/>).
- **Diploma (D40240)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/30/industrial-engineering-technology-diploma-d40240/>).
- **Certificate (C40240IE)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/industrial-engineering-certificate-c40240ie/>).
- **Management Certificate (C40240MC)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/management-certificate-c40240mc/>).

### Additional Information

- **ASQ Certification Information** (<http://asq.org/cert>)
- **SME Certification Information** (<http://www.sme.org/about-sme/>).
- **APICS Certification Information**  
(<http://www.apics.org/careers-education-professional-development/certification>)

### Contact Information

The Industrial Engineering Technology (40240) CIP 15.0612 program is in the RCCC Department of **Business, Engineering Technologies and Public Services** ([/industrialengineering/](#)). For additional information regarding this program, contact the chair, Tony Bean ([tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

#### Adrian McManus

Instructor in Academic Programs[+]

✉ [adrian.mcmanus@rccc.edu](mailto:adrian.mcmanus@rccc.edu)

(<mailto:adrian.mcmanus@rccc.edu>)

☎ (704) 216-3772

📍 North

#### Tony Bean

✉ [tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)

This entry was posted in [\*Business, Engineering Technologies and Public Services, Industrial Engineering Technology \(40240\)\*](#), and tagged [\*Applied Sciences Program, Program Description\*](#). Bookmark the [\*permalink\*](#).

## Industrial Engineering Technology (40240) CIP 15.0612

### Associate in Applied Science Degree (A40240)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• DFT 151	<u>CAD I</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• ISC 112	<u>Industrial Safety</u>	2
— —	Major Electives	4

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4

**Total SHC 15-16**

#### First Year Spring

• ISC 135	<u>Principles of Industrial Management</u>	4
• ISC 136	<u>Productivity Analysis I</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
— —	Major Electives	4

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

**Total SHC 17**

#### First Year Summer

— —	Major Electives	3
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Take one of the following economics courses.

ECO 251	<u>Principles of Microeconomics</u>	3
ECO 252	<u>Principles of Macroeconomics</u>	3

**Total SHC 6**

#### Second Year Fall

• ISC 132	<u>Manufacturing Quality Control</u>	3
• ISC 243	<u>Production and Operations Management I</u>	3
— —	Major Electives	9

**Total SHC 15**

#### Second Year Spring

• MEC 145	<u>Manufacturing Materials I</u>	3
— —	Major Electives	8

**Total SHC 11**

## Major Electives

Select 28 SHC from the following courses. No more than 9 SHC may be selected from the following prefixes: ACC, BIO, BTC, BUS, CHM, CMT, CSC, CST, CTI, CTS, ELC, ELN, MAC, MAT, PHY, or WLD. No more than 4 SHC from WBL course/combination of courses may be selected.

ACC 115	<u>College Accounting</u>	4
ACC 120	<u>Principles of Financial Accounting</u>	4
ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 129	<u>Individual Income Taxes</u>	3
ACC 132	<u>NC Business Taxes</u>	2
ACC 140	<u>Payroll Accounting</u>	2
ACC 149	<u>Intro to ACC Spreadsheets</u>	2
ACC 150	<u>Accounting Software Applications</u>	2
ACC 175	<u>Hotel and Restaurant Accounting</u>	4
ACC 215	<u>Ethics in Accounting</u>	3
ACC 220	<u>Intermediate Accounting I</u>	4
ACC 221	<u>Intermediate Accounting II</u>	4
ACC 225	<u>Cost Accounting</u>	3
ACC 227	<u>Practices in Accounting</u>	3
ACC 240	<u>Gov &amp; Not-For-Profit Acct</u>	3
ACC 250	<u>Advanced Accounting</u>	3
ACC 268	<u>Information Systems &amp; Internal Controls</u>	3
ACC 269	<u>Auditing &amp; Assurance Services</u>	3
ACC 270	<u>International Accounting</u>	3
ALT 120	<u>Renewable Energy Technologies</u>	3
ATR 112	<u>Intro to Automation</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4
BIO 112	<u>General Biology II</u>	4
BIO 140	<u>Environmental Biology</u>	3
BIO 140A	<u>Environmental Biology Lab</u>	1
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
BIO 175	<u>General Microbiology</u>	3
BIO 250	<u>Genetics</u>	4
BIO 275	<u>Microbiology</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
BTC 181	<u>Basic Laboratory Techniques</u>	4
BTC 270	<u>Recombinant DNA Technology</u>	4
BTC 285	<u>Cell Culture</u>	3
BTC 286	<u>Immunological Techniques</u>	4
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 125	<u>Personal Finance</u>	3
BUS 137	<u>Principles of Management</u>	3
BUS 153	<u>Human Resource Management</u>	3

BUS 217	<u>Employment Law and Regulations</u>	3
BUS 225	<u>Business Finance</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
BUS 260	<u>Business Communication</u>	3
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 132	<u>Organic and Biochemistry</u>	4
CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4
CHM 251	<u>Organic Chemistry I</u>	4
CHM 252	<u>Organic Chemistry II</u>	4
CHM 263	<u>Analytical Chemistry</u>	5
CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CIV 240	<u>Project Management</u>	3
CMT 120	<u>Codes and Inspections</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CMT 214	<u>Planning and Scheduling</u>	3
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 153	<u>C# Programming</u>	3
CSC 239	<u>Advanced Visual BASIC Programming</u>	3
CSC 251	<u>Advanced JAVA Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
CST 110	<u>Intro to Construction</u>	2
CST 131	<u>OSHA/Safety/Certification</u>	3
CST 231	<u>Soils &amp; Site Work</u>	4
CST 241	<u>Planning/Estimating I</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
CTI 140	<u>Virtualization Concepts</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
CTS 120	<u>Hardware/Software Support</u>	3
CTS 130	<u>Spreadsheet</u>	3
CTS 155	<u>Tech Support Functions</u>	3
CTS 230	<u>Advanced Spreadsheet</u>	3
CTS 240	<u>Project Management</u>	3
DBA 110	<u>Database Concepts</u>	3
DBA 120	<u>Database Programming I</u>	3
DFT 111	<u>Technical Drafting I</u>	2

DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
ECO 151	<u>Survey of Economics</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 130	<u>Advanced Motors/Controls</u>	3
ELC 138	<u>DC Circuit Analysis</u>	4
ELC 139	<u>AC Circuit Analysis</u>	4
ELC 213	<u>Instrumentation</u>	4
ELC 215	<u>Electrical Maintenance</u>	3
ELN 131	<u>Analog Electronics I</u>	4
ELN 132	<u>Analog Electronics II</u>	4
ELN 133	<u>Digital Electronics</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 232	<u>Introduction to Microprocessors</u>	4
ELN 234	<u>Communication Systems</u>	4
ELN 260	<u>Prog Logic Controllers</u>	4
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety</u>	2
ISC 121	<u>Environmental Health &amp; Safety</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 255	<u>Engineering Economy</u>	3
MAC 111	<u>Machining Technology I</u>	6
MAC 112	<u>Machining Technology II</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAC 143	<u>Machining Applications III</u>	4
MAC 151	<u>Machining Calculations</u>	2
MAC 152	<u>Advanced Machining Calculations</u>	2



MAC 222	<u>Advanced CNC Turning</u>	2
MAC 224	<u>Advanced CNC Milling</u>	2
MAC 229	<u>CNC Programming</u>	2
MAC 233	<u>Appl in CNC Machining</u>	6
MAC 234	<u>Advanced Multi-Axis Machining</u>	3
MAC 248	<u>Production Procedures</u>	2
MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
MAT 273	<u>Calculus III</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy</u>	2
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
MEC 275	<u>Engineering Mechanisms</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
OMT 240	<u>Customers and Products</u>	3
OMT 241	<u>Logistics</u>	3
OMT 243	<u>Support Functions</u>	3
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
SST 140	<u>Green Building and Design Concepts</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3

WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 143	<u>Welding Metallurgy</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64*

## Transfer Students

Students planning to transfer to a four-year school should select MAT 171 for the math requirement, and PHY 151 as a Major Elective.

## Major Electives CHM-151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as one of your Major Electives, you must also select MAT 171 as either your math course or as another of your Major Electives, or have credit for MAT 171.

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## Industrial Engineering Technology (40240) CIP 15.0612 Diploma (D40240)

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### First Year Fall

Take the following courses.

• DFT 151	<u>CAD I</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• ISC 112	<u>Industrial Safety</u>	2
— —	Major Electives	3

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>14</b>

### First Year Spring

Take the following courses.

• ISC 135	<u>Principles of Industrial Management</u>	4
• ISC 136	<u>Productivity Analysis I</u>	3
— —	Major Electives	9
<b>Total SHC</b>		<b>16</b>

### First Year Summer

Take the following course.

• ISC 132	<u>Manufacturing Quality Control</u>	3
— —	Major Electives	3
<b>Total SHC</b>		<b>6</b>

### Major Electives

Take 15 semester hour credits from the following courses. ACC, BIO, BPR, BTC, BUS, CHM, CIV, CMT, CSC, CST, CTI, CTS, ELC, ELN, MAC, MAT, PHY, and WLD are limited to a program total of 9 SHC each. WBL is limited to a total of 4 SHC.

ACC 115	<u>College Accounting</u>	4
ACC 120	<u>Principles of Financial Accounting</u>	4
ACC 121	<u>Principles of Managerial Accounting</u>	4
ACC 129	<u>Individual Income Taxes</u>	3
ACC 132	<u>NC Business Taxes</u>	2
ACC 140	<u>Payroll Accounting</u>	2
ACC 149	<u>Intro to ACC Spreadsheets</u>	2
ACC 150	<u>Accounting Software Applications</u>	2
ACC 175	<u>Hotel and Restaurant Accounting</u>	4
ACC 215	<u>Ethics in Accounting</u>	3
ACC 220	<u>Intermediate Accounting I</u>	4
ACC 221	<u>Intermediate Accounting II</u>	4
ACC 225	<u>Cost Accounting</u>	3
ACC 227	<u>Practices in Accounting</u>	3

ACC 240	<u>Gov &amp; Not-For-Profit Acct</u>	3
ACC 250	<u>Advanced Accounting</u>	3
ACC 268	<u>Information Systems &amp; Internal Controls</u>	3
ACC 269	<u>Auditing &amp; Assurance Services</u>	3
ACC 270	<u>International Accounting</u>	3
ALT 120	<u>Renewable Energy Technologies</u>	3
ATR 112	<u>Intro to Automation</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
BIO 110	<u>Principles of Biology</u>	4
BIO 111	<u>General Biology I</u>	4
BIO 112	<u>General Biology II</u>	4
BIO 140	<u>Environmental Biology</u>	3
BIO 140A	<u>Environmental Biology Lab</u>	1
BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
BIO 175	<u>General Microbiology</u>	3
BIO 250	<u>Genetics</u>	4
BIO 275	<u>Microbiology</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
BTC 181	<u>Basic Laboratory Techniques</u>	4
BTC 270	<u>Recombinant DNA Technology</u>	4
BTC 285	<u>Cell Culture</u>	3
BTC 286	<u>Immunological Techniques</u>	4
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 125	<u>Personal Finance</u>	3
BUS 137	<u>Principles of Management</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 225	<u>Business Finance</u>	3
BUS 230	<u>Small Business Management</u>	3
BUS 234	<u>Training and Development</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
BUS 256	<u>Recruiting, Selection, &amp; Personnel Planning</u>	3
BUS 258	<u>Compensation and Benefits</u>	3
BUS 259	<u>HRM Applications</u>	3
BUS 260	<u>Business Communication</u>	3
CHM 131	<u>Introduction to Chemistry</u>	3
CHM 131A	<u>Introduction to Chemistry Lab</u>	1
CHM 132	<u>Organic and Biochemistry</u>	4
CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4
CHM 251	<u>Organic Chemistry I</u>	4
CHM 252	<u>Organic Chemistry II</u>	4
CHM 263	<u>Analytical Chemistry</u>	5

CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CIV 240	<u>Project Management</u>	3
CMT 120	<u>Codes and Inspections</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CMT 214	<u>Planning and Scheduling</u>	3
CMT 216	<u>Costs and Productivity</u>	3
CMT 218	<u>Human Relations Issues</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CSC 153	<u>C# Programming</u>	3
CSC 239	<u>Advanced Visual BASIC Programming</u>	3
CSC 251	<u>Advanced JAVA Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
CST 110	<u>Intro to Construction</u>	2
CST 131	<u>OSHA/Safety/Certification</u>	3
CST 231	<u>Soils &amp; Site Work</u>	4
CST 241	<u>Planning/Estimating I</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
CTI 140	<u>Virtualization Concepts</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
CTS 120	<u>Hardware/Software Support</u>	3
CTS 130	<u>Spreadsheet</u>	3
CTS 155	<u>Tech Support Functions</u>	3
CTS 230	<u>Advanced Spreadsheet</u>	3
CTS 240	<u>Project Management</u>	3
DBA 110	<u>Database Concepts</u>	3
DBA 120	<u>Database Programming I</u>	3
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
ECO 151	<u>Survey of Economics</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2

ELC 125	<u>Diagrams and Schematics</u>	2
ELC 126	<u>Electrical Computations</u>	3
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 130	<u>Advanced Motors/Controls</u>	3
ELC 138	<u>DC Circuit Analysis</u>	4
ELC 139	<u>AC Circuit Analysis</u>	4
ELC 213	<u>Instrumentation</u>	4
ELC 215	<u>Electrical Maintenance</u>	3
ELN 131	<u>Analog Electronics I</u>	4
ELN 132	<u>Analog Electronics II</u>	4
ELN 133	<u>Digital Electronics</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 232	<u>Introduction to Microprocessors</u>	4
ELN 234	<u>Communication Systems</u>	4
ELN 260	<u>Prog Logic Controllers</u>	4
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety</u>	2
ISC 121	<u>Environmental Health &amp; Safety</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy</u>	3
MAC 111	<u>Machining Technology I</u>	6
MAC 112	<u>Machining Technology II</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAC 143	<u>Machining Applications III</u>	4
MAC 151	<u>Machining Calculations</u>	2
MAC 152	<u>Advanced Machining Calculations</u>	2
MAC 222	<u>Advanced CNC Turning</u>	2
MAC 224	<u>Advanced CNC Milling</u>	2
MAC 229	<u>CNC Programming</u>	2
MAC 233	<u>Appl in CNC Machining</u>	6
MAC 234	<u>Advanced Multi-Axis Machining</u>	3
MAC 248	<u>Production Procedures</u>	2
MAT 143	<u>Quantitative Literacy</u>	3
MAT 152	<u>Statistical Methods I</u>	4
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MAT 272	<u>Calculus II</u>	4
MAT 273	<u>Calculus III</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy</u>	2

MEC 145	<u>Manufacturing Materials I</u>	3
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
MEC 275	<u>Engineering Mechanisms</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
OMT 240	<u>Customers and Products</u>	3
OMT 241	<u>Logistics</u>	3
OMT 243	<u>Support Functions</u>	3
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
PHY 252	<u>General Physics II</u>	4
SST 140	<u>Green Building and Design Concepts</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 143	<u>Welding Metallurgy</u>	2
WLD 151	<u>Fabrication I</u>	4
WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 251	<u>Fabrication II</u>	3
WLD 261	<u>Certification Practices</u>	2
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 36*

## Major Electives-CHM 151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as one of your Major Electives, you must also select MAT 171 as either your math course or as another of your Major Electives, or have credit for MAT 171.

## Transfer Students

Students planning to transfer to a four-year school should select MAT 171 for the math requirement, and PHY 151 as a Major Elective.

This entry was posted in [\*Business, Engineering Technologies and Public Services, Industrial Engineering Technology \(40240\)\*](#) and tagged [\*Diploma\*](#). Bookmark the [\*permalink\*](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Industrial Engineering Technology\_(40240)\_CIP 15.0612 Certificate (C40240IE)

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### First Year Fall

EGR 125	<u>Appl Software for Tech</u>	2
ISC 112	<u>Industrial Safety</u>	2
ISC 132	<u>Manufacturing Quality Control</u>	3
<b>Total SHC</b>		<b>7</b>

### First Year Spring

ISC 136	<u>Productivity Analysis I</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
<b>Total SHC</b>		<b>10</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Business, Engineering Technologies and Public Services, Industrial Engineering Technology\\_\(40240\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Industrial Engineering Technology (40240) CIP 15.0612 Management Certificate (C40240MC)

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### First Year Fall

CIV 240	<u>Project Management</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
ISC 243	<u>Production and Operations Management I</u>	3
<b>Total SHC</b>		<b>8</b>

### First Year Spring

ISC 255	<u>Engineering Economy</u>	3
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Take one of the following ISC courses.

ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 225	<u>Facility Layout</u>	4
<b>Total SHC</b>		<b>6-7</b>

### First Year Summer

ISC 214	<u>Job Analysis/Wages &amp; Salary</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17-18*

This entry was posted in [Business, Engineering Technologies and Public Services, Industrial Engineering Technology \(40240\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Infant/Toddler Care (55290) CIP 19.0706

### Description

The curriculum prepares individuals to work with children from infancy to three years of age in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with infants and toddlers.

Course work includes infant and toddler growth and development; physical and nutritional needs of infants and toddlers; safety issues in the care of infants and toddlers; care and guidance; communication skills with families and children; design an implementation of appropriate curriculum; and other related topics.

Graduates should be prepared to plan and implement developmentally appropriate infant and toddler programs in early childhood settings. Employment opportunities include child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start Programs, and other infant and toddler programs.

### Awards

- Certificate (C55290) (<https://legacy.rccc.edu/catalog-2019-2020/2016/01/21/certificate-c55290/>)

### Additional Information

- See Early Childhood Education Programs (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/early-childhood-education-55220/>)

### Contact Information

The Infant/Toddler Care (55290) CIP 19.0706 program is in the RCCC Department of Health and Education ([/healthpublicservices/](https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/early-childhood-education-55220/)). For additional information regarding this program, contact the program chair, Waynett Taylor ([waynett.taylor@rccc.edu](mailto:waynett.taylor@rccc.edu)) (<mailto:waynett.taylor@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

<p><b>Kelly Neymen</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:kelly.neymen@rccc.edu">kelly.neymen@rccc.edu</a> (<a href="mailto:kelly.neymen@rccc.edu">mailto:kelly.neymen@rccc.edu</a>)</p> <p>☎ (704) 216-3735</p> <p>📍 South</p>
<p><b>Terri Pickett</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:terri.pickett@rccc.edu">terri.pickett@rccc.edu</a> (<a href="mailto:terri.pickett@rccc.edu">mailto:terri.pickett@rccc.edu</a>)</p> <p>☎ (704) 216-3728</p> <p>📍 North</p>
<p><b>Waynett Taylor</b></p> <p>Program Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:waynett.taylor@rccc.edu">waynett.taylor@rccc.edu</a> (<a href="mailto:waynett.taylor@rccc.edu">mailto:waynett.taylor@rccc.edu</a>)</p> <p>☎ (704) 216-3699</p> <p>📍 North</p>
<p><b>Jennifer Rosalino</b></p>	<p>✉ <a href="mailto:jennifer.rosalino@rccc.edu">jennifer.rosalino@rccc.edu</a> (<a href="mailto:jennifer.rosalino@rccc.edu">mailto:jennifer.rosalino@rccc.edu</a>)</p>

This entry was posted in [Health and Education, Infant/Toddler Care \(55290\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Infant/Toddler Care (55290) CIP 19.0706

### Certificate (C55290)

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#### Fall Semester

•	EDU 119	<u>Introduction to Early Childhood Education</u>	4
•	EDU 144	<u>Child Development I</u>	3
•	EDU 153	<u>Health, Safety and Nutrition</u>	3
<b>Total SHC</b>			<b>10</b>

#### Spring Semester

•	EDU 131	<u>Child, Family, and Community</u>	3
•	EDU 234	<u>Infants, Toddlers, &amp; Twos</u>	3
<b>Total SHC</b>			<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

This entry was posted in [Health and Education](#), [Infant/Toddler Care \(55290\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology (25590) CIP 11.0103

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### Description

The Information Technology (IT) curriculum prepares graduates for employment in the technology sector as designers, testers, support technicians, system administrators, developers, or programmers who use computer software and/or hardware to design, process, implement and manage information systems in specialties such as database services, security, business intelligence, healthcare informatics and others depending on the technical path selected within this curriculum.

Course work includes development of a student's ability to create, store, communicate, exchange and use information to solve technical issues related to information support and services, interactive media, network systems, programming and software development, information security and other emerging technologies based on the selected area of study.

Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to design and manage information. The program will incorporate the competencies of industry-recognized certification exams.

### Awards

- Associate in Applied Science Degree Computer Programming and Development (A25590CP)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/02/14/associate-in-applied-science-information-technology-a25590it/>).
- Associate in Applied Science Degree Cyber Security (A25590SC) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/associate-in-applied-science-cyber-security-a25590sc/>).
- Associate in Applied Science Degree Information Systems (A25590IT) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/associate-in-applied-science-informatin-systems-a25590it/>).
- Associate in Applied Science Degree Networking and Virtualization (A25590NT) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/associate-in-applied-science-networking-and-virtualization-a25590nt/>).
- Diploma (D25590IT) (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/23/diploma-d25590it/>).
- System Administration Diploma (D25590HW)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/23/system-administration-diploma-d25590hw/>).
- CCPP Essentials Certificate (C25590PE)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-essentials-certificate-c25590pe/>).
- Cisco Networking Certificate (C25590CN)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/23/cisco-networking-c25590cn/>).
- Database Administration Certificate (C25590DA)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/23/dba-certificate-c25590da/>).

[2020/2017/11/30/information-technology-database-admin-c25590da/](https://legacy.rccc.edu/catalog-2019-2020/2017/11/30/information-technology-database-admin-c25590da/)

- **Dot Net Programming Certificate (C25590DN)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/11/30/dot-net-programming-c25590dn/>)
- **Essentials Certificate (C25590ES)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/23/essentials-certificate-c25590es/>)
- **Network Security Administration Certificate (C25590NS)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/network-security-administration-c25590ns/>)
- **Productivity Software Certificate (C25590SF)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/11/30/productivity-software-c25590sf/>)
- **Security Essentials Certificate (C25590SE)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/11/30/security-essentials-c25590se/>)
- **Systems Administration Certificate (C25590SA)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/systems-administration-c25590sa/>)
- **Windows Administration Certificate (C25590WA)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/windows-administration-certificate-c25590wa/>)
- **Workforce Essentials Certificate (C25590WE)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/22/workforce-essentials-c25590we/>)

## Contact Information

The Information Technology (25590) CIP 11.0103 program is in the RCCC Department of **Business, Engineering Technologies and Public Services** ([/industrialengineering/](https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/business-engineering-technologies-and-public-services/)). For additional information regarding this program, contact the chair, Zackary Hubbard ([zackary.hubbard@rccc.edu](mailto:zackary.hubbard@rccc.edu) (<mailto:zackary.hubbard@rccc.edu>)).

## Program Advising

### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

Jackie Allen <small>Instructor in Academic Programs[+]</small>	 <a href="mailto:jackie.allen@rccc.edu">jackie.allen@rccc.edu</a>
	( <a href="mailto:jackie.allen@rccc.edu">mailto:jackie.allen@rccc.edu</a> )
	 (704) 216-3759
	 North
John Brand <small>Instructor in Academic Programs[+]</small>	 <a href="mailto:john.brand@rccc.edu">john.brand@rccc.edu</a>
	( <a href="mailto:john.brand@rccc.edu">mailto:john.brand@rccc.edu</a> )
	 (704) 216-3751
	 CBTC
Ken Clifton <small>Instructor in Academic Programs[+]</small>	 <a href="mailto:ken.clifton@rccc.edu">ken.clifton@rccc.edu</a>
	( <a href="mailto:ken.clifton@rccc.edu">mailto:ken.clifton@rccc.edu</a> )

	<div>(704) 216-3591</div> <div>North</div>
<b>Sharon Craig</b> Instructor in Academic Programs[+]	<div> sharon.craig@rccc.edu  (mailto:sharon.craig@rccc.edu) </div> <div>CBTC</div>
<b>Linda Cooper</b> Instructor in Academic Programs[+]	<div> linda.cooper@rccc.edu  (mailto:linda.cooper@rccc.edu) </div> <div> (704) 216-7219  CBTC </div>
<b>Anne Curlee</b> Instructor in Academic Programs[+]	<div> anne.curlee@rccc.edu  (mailto:anne.curlee@rccc.edu) </div> <div> (704) 216-3758  North </div>
<b>Keith Grubb</b> Instructor in Academic Programs[+]	<div> keith.grubb@rccc.edu  (mailto:keith.grubb@rccc.edu) </div> <div> (704) 216-3752  North </div>
<b>Shynlie Simmons</b> Instructor in Academic Programs[+]	<div> shynlie.simmons@rccc.edu  (mailto:shynlie.simmons@rccc.edu) </div> <div> (704) 216-3762  South </div>
<b>Donna White-Cook</b> Instructor in Academic Programs[+]	<div> donna.whitecook@rccc.edu  (mailto:donna.whitecook@rccc.edu) </div> <div> (704) 216-3763  South </div>

This entry was posted in [\*Business, Engineering Technologies and Public Services, Information Technology \(25590\)\*](#) and tagged [\*Applied Sciences Program, Program Description\*](#). Bookmark the [\*permalink\*](#).



## Information Technology (25590) CIP 11.0103

### Associate in Applied Science Degree Computer Programming and Development (A25590CP)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### Fall Semester

Take the following courses.

• CIS 110	<u>Introduction to Computers</u>	3
• CIS 115	<u>Intro to Programming &amp; Logic</u>	3
• CTI 110	<u>Web, Programming, and Database Foundation</u>	3
• CTI 120	<u>Network and Security Foundation</u>	3
• CTS 115	<u>Information Systems Business Concepts</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

Take the following courses.

CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
WEB 110	<u>Internet/Web Fundamentals</u>	3

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
HUM 110	<u>Technology and Society</u>	3
MUS 110	<u>Music Appreciation</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Summer

Take the following courses.

DBA 110	<u>Database Concepts</u>	3
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Take one of the following social/behavioral sciences courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>9-10</b>

#### Second Year Fall

Take the following courses.

CSC 121	<u>Python Programming</u>	3
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• CSC 151	<u>JAVA Programming</u>	3
CSC 153	<u>C# Programming</u>	3
DBA 120	<u>Database Programming I</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

**Total SHC 15**

## Second Year Spring

Take the following courses.

• CSC 251	<u>Advanced JAVA Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
CTS 240	<u>Project Management</u>	3

**Total SHC 15**

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

This entry was posted in [Information Technology \(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Information Technology (25590) CIP 11.0103

### Associate in Applied Science Degree Cyber Security (A25590SC)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

• CIS 110	<u>Introduction to Computers</u>	3
• CTI 110	<u>Web, Programming, and Database Foundation</u>	3
• CTI 120	<u>Network and Security Foundation</u>	3
NET 125	<u>Introduction to Networks</u>	3
NET 126	<u>Routing Basics</u>	3
<b>Total SHC</b>		<b>15</b>

Note NET 125 will be taught in the first 8-weeks; NET 126 will be taught in the second 8-weeks.

#### First Year Spring

Take the following courses.

CTI 130	<u>Os and Device Foundation</u>	6
• CTS 115	<u>Information Systems Business Concepts</u>	3
NET 225	<u>Routing &amp; Switching I</u>	3
NET 226	<u>Routing and Switching II</u>	3
<b>Total SHC</b>		<b>15</b>

Note NET 225 will be taught in the first 8-weeks; NET 226 will be taught in the second 8-weeks.

#### First Year Summer

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
• SEC 110	<u>Security Concepts</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>9-10</b>

#### Second Year Fall

Take the following courses.

CCT 112	<u>Ethics &amp; High Technology</u>	3
CTI 140	<u>Virtualization Concepts</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3

- SEC 150      Secure Communications      3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>15</b>

## Second Year Spring

Take the following courses.

CTS 240	<u>Project Management</u>	3
SEC 160	<u>Security Administration I</u>	3
SEC 210	<u>Intrusion Detection</u>	3

Take one of the following social/behavioral science courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
HUM 110	<u>Technology and Society</u>	3
MUS 110	<u>Music Appreciation</u>	3
<b>Total SHC</b>		<b>15</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Information Technology (25590) CIP 11.0103

### Associate in Applied Science Degree Information Systems (A25590IT)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

• CIS 110	<u>Introduction to Computers</u>	3
• CTI 110	<u>Web, Programming, and Database Foundation</u>	3
• CTI 120	<u>Network and Security Foundation</u>	3
• CTS 115	<u>Information Systems Business Concepts</u>	3

Take one of the following social/behavioral sciences courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

**Total SHC 15**

#### First Year Spring

Take the following courses.

CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
ENG 111	<u>Writing and Inquiry</u>	3
WEB 110	<u>Internet/Web Fundamentals</u>	3

**Total SHC 15**

#### First Year Summer

Take the following courses.

• DBA 110	<u>Database Concepts</u>	3
NET 110	<u>Networking Concepts</u>	3
SEC 110	<u>Security Concepts</u>	3

**Total SHC 9**

#### Second Year Fall

Take the following courses.

• CTS 130	<u>Spreadsheet</u>	3
CTS 155	<u>Tech Support Functions</u>	3
DBA 120	<u>Database Programming I</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
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## Second Year Spring

Take the following courses.

CTS 230	<u>Advanced Spreadsheet</u>	3
CTS 240	<u>Project Management</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
HUM 110	<u>Technology and Society</u>	3
MUS 110	<u>Music Appreciation</u>	3

**Total SHC    15**

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Note     NOS 130 will be taught in the first 8-weeks; NOS 230 will be taught in the second 8-weeks.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

This entry was posted in [Information Technology \(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Information Technology (25590) CIP 11.0103

### Associate in Applied Science Degree Networking and Virtualization (A25590NT)

#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

• CIS 110	<u>Introduction to Computers</u>	3
• CTI 110	<u>Web, Programming, and Database Foundation</u>	3
• CTI 120	<u>Network and Security Foundation</u>	3
• NET 125	<u>Introduction to Networks</u>	3
• NET 126	<u>Routing Basics</u>	3
<b>Total SHC</b>		<b>15</b>

Note NET 125 will be taught in the first 8-weeks; NET 126 will be taught in the second 8-weeks.

#### First Year Spring

Take the following courses.

CTI 130	<u>Os and Device Foundation</u>	6
• CTS 115	<u>Information Systems Business Concepts</u>	3
NET 225	<u>Routing &amp; Switching I</u>	3
NET 226	<u>Routing and Switching II</u>	3
<b>Total SHC</b>		<b>15</b>

Note NET 225 will be taught in the first 8-weeks; NET 226 will be taught in the second 8-weeks.

#### First Year Summer

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
SEC 110	<u>Security Concepts</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>9-10</b>

#### Second Year Fall

Take the following courses.

CTI 140	<u>Virtualization Concepts</u>	3
NET 175	<u>Wireless Technology</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

Take one of the following humanities/fine arts courses.

ART 111	<u>Art Appreciation</u>	3
HUM 110	<u>Technology and Society</u>	3
MUS 110	<u>Music Appreciation</u>	3

**Total SHC 15**

## Second Year Spring

Take the following courses.

CTS 240	<u>Project Management</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
SEC 160	<u>Security Administration I</u>	3

Take one of the following social/behavioral science courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

**Total SHC 15**

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Note NOS 130 will be taught in the first 8-weeks; NOS 230 will be taught in the second 8-weeks.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

This entry was posted in [Information Technology \(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Degree](#). Bookmark the [permalink](#).



## Information Technology\_(25590)\_CIP 11.0103

### Diploma (D25590IT)

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### Course Requirements

The following is a suggested program of study for completing this degree in three semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

### Fall Semester

Take the following courses

- |           |  |   |
|-----------|--|---|
| • CIS 110 | <u>Introduction to Computers</u>                 | 3 |
| CIS 115   | <u>Intro to Programming &amp; Logic</u>          | 3 |
| • CTI 110 | <u>Web, Programming, and Database Foundation</u> | 3 |
| • CTI 120 | <u>Network and Security Foundation</u>           | 3 |

Take one of the following math courses.

- |         |  |   |
|---------|--|---|
| MAT 110 | <u>Mathematical Measurement and Literacy</u> | 3 |
| MAT 171 | <u>Precalculus Algebra</u>                   | 4 |

**Total SHC 15-16**

### Spring Semester

Take the following courses.

- |           |  |   |
|-----------|--|---|
| CTI 130   | <u>Os and Device Foundation</u>              | 6 |
| • CTS 115 | <u>Information Systems Business Concepts</u> | 3 |
| WEB 110   | <u>Internet/Web Fundamentals</u>             | 3 |

Take one of the following courses.

- |         |                                 |   |
|---------|---------------------------------|---|
| CSC 139 | <u>Visual BASIC Programming</u> | 3 |
| NOS 130 | <u>Windows Single User</u>      | 3 |

**Total SHC 15**

### Summer Term

Take the following courses.

- |           |                            |   |
|-----------|----------------------------|---|
| • DBA 110 | <u>Database Concepts</u>   | 3 |
| ENG 111   | <u>Writing and Inquiry</u> | 3 |

**Total SHC 6**

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 36-37*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science](#), [Biotechnology](#), [Mathematics and Information Technologies](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Information Technology (25590) CIP 11.0103

### System Administration Diploma (D25590HW)

---

## Course Requirements

The following is a suggested program of study for completing this degree in three semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

### Fall Semester

Take the following courses

• CIS 110	<u>Introduction to Computers</u>	3
• CTI 110	<u>Web, Programming, and Database Foundation</u>	3
• CTI 120	<u>Network and Security Foundation</u>	3
NET 125	<u>Introduction to Networks</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
<b>Total SHC</b>		<b>15</b>

### Spring Semester

Take the following courses.

CTI 130	<u>Os and Device Foundation</u>	6
CTI 140	<u>Virtualization Concepts</u>	3
• CTS 115	<u>Information Systems Business Concepts</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>15-16</b>

### Summer Term

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
SEC 110	<u>Security Concepts</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 36-37*

This entry was posted in [Information Technology \(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Information Technology\_(25590)\_CIP 11.0103

### Cisco Networking Certificate (C25590CN)

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#### First Year Fall

NET 125	<u>Introduction to Networks</u>	3
NET 126	<u>Routing Basics</u>	3
<b>Total SHC</b>		<b>6</b>

Note NET 125 will be taught in the first 8-weeks; NET 126 will be taught in the second 8-weeks.

#### First Year Spring

NET 225	<u>Routing &amp; Switching I</u>	3
NET 226	<u>Routing and Switching II</u>	3
<b>Total SHC</b>		<b>6</b>

Note NET 225 will be taught in the first 8-weeks; NET 226 will be taught in the second 8-weeks.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### Database Administration Certificate (C25590DA)

---

#### First Year Summer

CIS 110	<u>Introduction to Computers</u>	3
<b>Total SHC</b>		<b>3</b>

#### First Year Fall

CIS 115	<u>Intro to Programming &amp; Logic</u>	3
DBA 110	<u>Database Concepts</u>	3
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

DBA 120	<u>Database Programming I</u>	3
WEB 110	<u>Internet/Web Fundamentals</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science](#), [Biotechnology](#), [Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### Dot Net Programming Certificate (C25590DN)

---

#### First Year Summer

CIS 115	<u>Intro to Programming &amp; Logic</u>	3
<b>Total SHC</b>		<b>3</b>

#### First Year Fall

CSC 153	<u>C# Programming</u>	3
<b>Total SHC</b>		<b>3</b>

#### First Year Spring

CSC 139	<u>Visual BASIC Programming</u>	3
CSC 253	<u>Advanced C# Programming</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103 Essentials Certificate (C25590ES)

---

### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
<b>Total SHC</b>		<b>9</b>

### First Year Spring

CTS 115	<u>Information Systems Business Concepts</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Information Technology\\_\(25590\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### Network Security Administration Certificate (C25590NS)

---

#### First Year Summer

CTI 120	<u>Network and Security Foundation</u>	3
<b>Total SHC</b>		<b>3</b>

#### First Year Fall

NET 125	<u>Introduction to Networks</u>	3
NET 126	<u>Routing Basics</u>	3
SEC 110	<u>Security Concepts</u>	3
<b>Total SHC</b>		<b>9</b>

---

Note NET 125 will be taught in the first 8-weeks. NET 126 will be taught in the second 8-weeks.

#### First Year Spring

SEC 150	<u>Secure Communications</u>	3
SEC 160	<u>Security Administration I</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### Productivity Software Certificate (C25590SF)

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#### First Year Summer

CIS 110	<u>Introduction to Computers</u>	3
<b>Total SHC</b>		<b>3</b>

#### First Year Fall

CTS 130	<u>Spreadsheet</u>	3
DBA 110	<u>Database Concepts</u>	3
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

CTS 230	<u>Advanced Spreadsheet</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science](#), [Biotechnology](#), [Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Information Technology\_(25590)\_CIP 11.0103

### Security Essentials Certificate (C25590SE)

---

#### First Year Summer

CTI 120	<u>Network and Security Foundation</u>	3
<b>Total SHC</b>		<b>3</b>

#### First Year Fall

CCT 112	<u>Ethics &amp; High Technology</u>	3
SEC 110	<u>Security Concepts</u>	3
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

CTI 130	<u>Os and Device Foundation</u>	6
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Information Technology\\_\(25590\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### Systems Administration Certificate (C25590SA)

---

#### First Year Fall

CTI 120	<u>Network and Security Foundation</u>	3
NOS 130	<u>Windows Single User</u>	3
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

CTI 130	<u>Os and Device Foundation</u>	6
CTI 140	<u>Virtualization Concepts</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Information Technology\\_\(25590\)](#). [Science](#), [Biotechnology](#), [Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### Windows Administration Certificate (C25590WA)

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#### First Year Fall

CTI 120	<u>Network and Security Foundation</u>	3
CTI 130	<u>Os and Device Foundation</u>	6
<b>Total SHC</b>		<b>9</b>

#### First Year Spring

NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
<b>Total SHC</b>		<b>6</b>

---

Note NOS 130 will be taught in the first 8-weeks. NOS 230 will be taught in the second 8-weeks.

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Information Technology\\_\(25590\)](#). [Science](#), [Biotechnology](#), [Mathematics and Information Technologies](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology (25590) CIP 11.0103

### Workforce Essentials Certificate (C25590WE)

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#### First Year Fall

CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

CTI 130	<u>Os and Device Foundation</u>	6
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Take one of the following Work-Based Learning courses.

WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
<b>Total SHC</b>		<b>7-10</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13-16*

This entry was posted in [Business, Engineering Technologies and Public Services, Information Technology \(25590\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Information Technology\_(25590)\_CIP 11.0103

### CCPP Essentials Certificate (C25590PE)

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#### Courses

CIS	110	<u>Introduction to Computers</u>	3
CTI	110	<u>Web, Programming, and Database Foundation</u>	3
CTI	120	<u>Network and Security Foundation</u>	3
CTS	115	<u>Information Systems Business Concepts</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Information Technology\\_\(25590\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Manicuring/Nail Technology (55400) CIP 12.0410

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### Description

The manicuring/nail technology curriculum provides competency-based knowledge, scientific and artistic principles, and hands-on fundamentals associated with the nail technology industry. The curriculum provides a simulated salon environment which enables students to develop manipulative skills.

Course work includes instruction in all phases of professional nail technology, business and computer principles, product knowledge, and other related topics.

Graduates should be prepared to take the North Carolina Cosmetology State Board Licensing Exam and upon passing be licensed and qualify for employment in beauty and nail salons, as a platform artist, and in related businesses.

### Awards

- CCPP Certificate (C55400PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c55400p/>).
- Certificate (C55400) (<https://legacy.rccc.edu/catalog-2019-2020/2016/01/21/certificate-program-c55380-2/>).

### Additional Information

- Admission Requirements for Cosmetology Programs (<https://www.rccc.edu/cosmetology/admission-requirements-for-cosmetology-programs/>)
- Manicuring/Nail Technology Ed Plan (<http://legacy.rccc.edu/catalog-2018-2019/wp-content/uploads/sites/80/2017/05/Manicuring-Nail-Technology-C55400-2018-2019-Ed-Plan.pdf>)

### Contact Information

The Manicuring/Nail Technology (55400) CIP 12.0410 program is in the RCCC Department of Business, Engineering Technologies and Public Services ([/industrialengineering/](#)). For additional information regarding this program, contact the chair, Ronald Wolfe ([ronald.wolfe@rccc.edu](mailto:ronald.wolfe@rccc.edu) (<mailto:ronald.wolfe@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Michelle Sofia</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:michelle.sofia@rccc.edu">michelle.sofia@rccc.edu</a> (<a href="mailto:michelle.sofia@rccc.edu">mailto:michelle.sofia@rccc.edu</a>)</p> <p>☎ (704) 216-3928</p> <p>📍 College Station</p>
<p><b>Ronald Wolfe</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:ronald.wolfe@rccc.edu">ronald.wolfe@rccc.edu</a> (<a href="mailto:ronald.wolfe@rccc.edu">mailto:ronald.wolfe@rccc.edu</a>)</p> <p>☎ (704) 216-3927</p> <p>📍 College Station</p>

## Manicuring/Nail Technology\_(55400)\_CIP 12.0410 Certificate (C55400)

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### First 8 Weeks

• COS 121	<u>Manicure/Nail Technology I</u>	6
<b>Total SHC</b>		<b>6</b>

### Second 8 Weeks

• COS 222	<u>Manicure/Nail Technology II</u>	6
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Health and Education](#), [Manicuring/Nail Technology\\_\(55400\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Manicuring/Nail Technology\_(55400)\_CIP 12.0410

### CCPP Certificate (C55400PB)

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#### Courses

COS 121	<u>Manicure/Nail Technology I</u>	6
COS 222	<u>Manicure/Nail Technology II</u>	6

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Manicuring/Nail Technology \(55400\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Mechanical Drafting Technology (50340) CIP 15.1306

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### Description

The mechanical drafting technology curriculum prepares students to apply technical skills and advanced computer software and hardware to create working drawings, graphic representations and computer simulations for mechanical and industrial designs.

Course work includes mathematics, natural sciences, engineering sciences and technology and instruction in engineering graphics, specification interpretation, geometric dimensioning and tolerancing, drafting calculations, two dimensional and three dimensional engineering design, solids modeling, engineering animation, computer-aided drafting (CAD), computer-aided design (CADD) and manufacturing materials and processes.

Graduates should qualify to obtain occupations such as technical service providers, engineering technicians, CAD systems managers, industrial and technology managers, research technicians and graphic technicians. Graduates should qualify for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

### Awards

- CCPP Certificate (C50340PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c50340p/>).
- Certificate (C50340) (<https://legacy.rccc.edu/catalog-2019-2020/2015/12/01/certificate-c50340/>).

### Contact Information

The Mechanical Drafting Technology (50340) CIP 15.1306 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Tony Bean ([tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Tony Bean</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:tony.bean@rccc.edu">tony.bean@rccc.edu</a> (<a href="mailto:tony.bean@rccc.edu">mailto:tony.bean@rccc.edu</a>)</p> <p>☎ (704) 216-3917</p> <p>📍 North</p>
<p><b>Aaron Cameron</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:aaron.cameron@rccc.edu">aaron.cameron@rccc.edu</a> (<a href="mailto:aaron.cameron@rccc.edu">mailto:aaron.cameron@rccc.edu</a>)</p> <p>☎ (704) 216-3822</p> <p>📍 North</p>

This entry was posted in [Business, Engineering Technologies and Public Services, Mechanical Drafting Technology \(50340\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Mechanical Drafting Technology\_(50340)\_CIP 15.1306 Certificate (C50340)

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### First Year Fall

• DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
• DFT 151	<u>CAD I</u>	3
• MEC 111	<u>Machine Processes I</u>	3
<b>Total SHC</b>		<b>9</b>

### First Year Spring

• DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
• DFT 154	<u>Intro to Solid Modeling</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

This entry was posted in [Business, Engineering Technologies and Public Services, Mechanical Drafting Technology\\_\(50340\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Mechanical Drafting Technology\_(50340)\_CIP 15.1306

### CCPP Certificate (C50340PB)

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#### Courses

DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
MEC 111	<u>Machine Processes I</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Mechanical Drafting Technology\\_\(50340\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Mechanical Engineering Technology (40320) CIP 15.0805

### Description

The mechanical engineering technology curriculum prepares students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Students are prepared through the study and application of principles from mathematics, natural sciences, and technology and applied processes in mechanical engineering.

Coursework includes mathematics, natural sciences, engineering sciences and technology. Instruction covers principles of mechanics, applications to specific engineering systems, design testing procedures, prototype and operational testing and inspection procedures, manufacturing system-testing procedures, test equipment operation and maintenance, computer applications, critical thinking, planning and problem solving, and oral and written communications.

Graduates of the curriculum will find employment opportunities in the manufacturing or service sectors of engineering technology. Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, industrial and technology managers, or research technicians. Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME and NICET.

### Awards

- Associate in Applied Science Degree (A40320)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/12/14/associate-in-applied-science-degree-a40320/>).
- Diploma (D40320) (<https://legacy.rccc.edu/catalog-2019-2020/2019/02/14/3793/>).

### Contact Information

The Mechanical Engineering Technology (40320) CIP 15.0805 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Tony Bean ([tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

<p><b>Tony Bean</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:tony.bean@rccc.edu">tony.bean@rccc.edu</a> (<a href="mailto:tony.bean@rccc.edu">mailto:tony.bean@rccc.edu</a>)</p> <p>☎ (704) 216-3917</p> <p>📍 North</p>
<p><b>Aaron Cameron</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:aaron.cameron@rccc.edu">aaron.cameron@rccc.edu</a> (<a href="mailto:aaron.cameron@rccc.edu">mailto:aaron.cameron@rccc.edu</a>)</p> <p>☎ (704) 216-3822</p> <p>📍 North</p>

## Mechanical Engineering Technology (40320) CIP 15.0805

### Associate in Applied Science Degree (A40320)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
• DFT 151	<u>CAD I</u>	3
MAC 114	<u>Introduction to Metrology.</u>	2
MEC 111	<u>Machine Processes I</u>	3

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4

**Total SHC 14-15**

#### First Year Spring

DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
• DFT 154	<u>Intro to Solid Modeling</u>	3
ENG 111	<u>Writing and Inquiry.</u>	3
— —	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>		<b>14</b>

#### First Year Summer

DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
— —	Major Electives	4
<b>Total SHC</b>		<b>7</b>

#### Second Year Fall

• EGR 251	<u>Statics</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
— —	Major Electives	3

Take one of the following communication courses.

ENG 112	<u>Writing and Research in the Disciplines</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3

Take one of the following physics courses.

• PHY 131	<u>Physics-Mechanics</u>	4
• PHY 151	<u>College Physics I</u>	4

**Total SHC 16**

#### Second Year Spring

• EGR 252	<u>Strength of Materials</u>	3
• MEC 145	<u>Manufacturing Materials I</u>	3
• MEC 275	<u>Engineering Mechanisms</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
— —	Major Electives	3
<b>Total SHC</b>		<b>15</b>

## Major Electives

Select a minimum of 10 semester hour credits from the following courses. This may include up to 4 SHC from WBL course/combination of courses. MAT courses are limited to 5-6 SHC for a total of no more than 9 SHC in Other Major Hours. ELC and WLD courses are limited to a total of 9 SHC each.

ATR 112	<u>Intro to Automation</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
CHM 151	<u>General Chemistry I</u>	4
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 117	<u>Motors and Controls</u>	4
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 112	<u>Industrial Safety</u>	2
ISC 132	<u>Manufacturing Quality Control</u>	3
MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAT 152	<u>Statistical Methods I</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 131	<u>GTAW (TIG) Plate</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 65-66*

## BSET/MEET Transfer Courses

CHM 151, CIS 115, CSC 134, CSC 139, ELC 112, MAT 152, MAT 172, MAT 263, MAT 271, and PHY 132 are recommended for Major Electives for students pursuing a transfer degree. MAT courses are limited to 5-6 SHC for a total of no more than 9 SHC total for Major Electives MAT courses.

## Manufacturing Courses

ATR 112, ATR 281, ELC 117, ELC 125, ELC 128, HYD 110, ISC 112, ISC 132, MAC 122, MAC 124, MEC 110, WLD 110, WLD 121, and WLD 131 are recommended for Major Electives for students not pursuing a transfer degree.

## Major Electives-CHM 151

Beginning Fall 2018, CHM 151 has a corequisite of MAT 171; if you select CHM 151 as one of your Major Electives, you must also select MAT 171 as either your math course or as another of your Major Electives, or have credit for MAT 171.

This entry was posted in [\*Business, Engineering Technologies and Public Services, Mechanical Engineering Technology \(40320\)\*](#), and tagged [\*Degree\*](#). Bookmark the [\*permalink\*](#).

## Mechanical Engineering Technology (40320) CIP 15.0805

### Diploma (D40320)

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#### First Year Fall

DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
• DFT 151	<u>CAD I</u>	3
MAC 114	<u>Introduction to Metrology</u>	2
MEC 111	<u>Machine Processes I</u>	3

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
• DFT 154	<u>Intro to Solid Modeling</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• MEC 145	<u>Manufacturing Materials I</u>	3
<b>Total SHC</b>		<b>14</b>

#### First Year Summer

DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
— —	Major Electives	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

PHY 131	<u>Physics-Mechanics</u>	4
<b>Total SHC</b>		<b>4</b>

#### Major Electives

Select a minimum of 3 semester hour credits from the following courses.

ATR 112	<u>Intro to Automation</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
CHM 151	<u>General Chemistry I</u>	4
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
ELC 112	<u>DC/AC Electricity</u>	5
ELC 117	<u>Motors and Controls</u>	4
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3



ELC 130	<u>Advanced Motors/Controls</u>	3
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 112	<u>Industrial Safety</u>	2
ISC 132	<u>Manufacturing Quality Control</u>	3
MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2
MAT 152	<u>Statistical Methods I</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 263	<u>Brief Calculus</u>	4
MAT 271	<u>Calculus I</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 131	<u>GTAW (TIG) Plate</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 38*

This entry was posted in [Business, Engineering Technologies and Public Services, Mechanical Engineering Technology \(40320\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Mechatronics Engineering Technology (40350) CIP 15.0403

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### Description

A course of study that prepares the students through the study and application of principles from mathematics, natural sciences, technology, and applied processes to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems.

Course work includes instruction in mathematics, natural sciences, engineering sciences, technology, prototype testing, manufacturing and operational testing, systems analysis and maintenance procedures.

Graduates should be qualified for employment in industrial maintenance and manufacturing including assembly, testing, startup, troubleshooting, repair, process improvement, and control systems, and should qualify to sit for Packaging Machinery Manufacturers Institute (PMMI) mechatronics or similar industry examinations.

### Awards

- Associate in Applied Science Degree (A40350) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/10/associate-in-applied-science-degree-a40350-2/>).
- Diploma (D40350) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/10/diploma-d40350-2/>).
- CCPP Certificate (C40350PB) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/11/ccpp-certificate-c40350pb-2/>).
- Certificate (C40350) (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/05/certificate-c40350/>).

### Contact Information

The Mechatronics Engineering Technology (40350) CIP 15.0403 program is in the RCCC Department of Business, Engineering Technologies and Public Services (</industrialengineering/>). For additional information regarding this program, contact the chair, Tony Bean ([tony.bean@rccc.edu](mailto:tony.bean@rccc.edu) (<mailto:tony.bean@rccc.edu>)).

This entry was posted in [Business, Engineering Technologies and Public Services, Mechatronics Engineering Technology \(40350\)](#) and tagged [Program Description](#). Bookmark the [permalink](#).

## Mechatronics Engineering Technology (40350) CIP 15.0403

### Associate in Applied Science Degree (A40350)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

- ELC 138     DC Circuit Analysis     4
- ISC 112     Industrial Safety     2

Take one of the following computer application courses.

- CIS 110     Introduction to Computers     3
- EGR 125     Appl Software for Tech     2

Take one of the following fluid mechanics courses.

- HYD 110     Hydraulics/Pneumatics I     3
- MEC 265     Fluid Mechanics     3

Take one of the following math courses.

- MAT 121     Algebra/Trigonometry I     3
- MAT 171     Precalculus Algebra     4

**Total SHC    14-16**

#### First Year Spring

- ATR 112     Intro to Automation     3
- ELC 128     Introduction to Programmable Logic  
Controller     3
- ELC 139     AC Circuit Analysis     4
- ENG 111     Writing and Inquiry     3

Take one of the following drawing courses.

- DFT 151     CAD I     3
- DFT 154     Intro to Solid Modeling     3

**Total SHC    16**

#### First Year Summer

- —     Humanities/Fine Arts Elective     3
- —     Social/Behavioral Sciences Elective     3

**Total SHC    6**

#### Second Year Fall

- ELC 130     Advanced Motors/Controls     3
- ENG 114     Professional Research & Reporting     3
- —     Major Electives     5

Take one of the following physics courses.

- PHY 131     Physics-Mechanics     4

•	PHY 151	<u>College Physics I</u>	4
<b>Total SHC</b>			<b>15</b>

## Second Year Spring

•	ELC 213	<u>Instrumentation</u>	4
•	MEC 275	<u>Engineering Mechanisms</u>	3
—	—	Major Electives	6
<b>Total SHC</b>			<b>13</b>

## Major Electives

Select a minimum of 11 semester hour credits from the following courses. No more than a total of 9 SHC of MAT may be taken for this program, including General Education and Major Electives. Up to 4 SHC of WBL courses/combination of courses may be taken. Courses selected for CORE courses cannot count toward the required Major Electives.

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
ALT 120	<u>Renewable Energy Technologies</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2
BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
CCT 112	<u>Ethics &amp; High Technology</u>	3
CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4
CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CIV 240	<u>Project Management</u>	3
CMT 120	<u>Codes and Inspections</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
CTI 140	<u>Virtualization Concepts</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
CTS 120	<u>Hardware/Software Support</u>	3
CTS 130	<u>Spreadsheet</u>	3
DBA 110	<u>Database Concepts</u>	3
DBA 120	<u>Database Programming I</u>	3
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3

DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology.</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
EGR 150	<u>Introduction to Engineering</u>	2
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 215	<u>Electrical Maintenance</u>	3
ELN 131	<u>Analog Electronics I</u>	4
ELN 132	<u>Analog Electronics II</u>	4
ELN 133	<u>Digital Electronics</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2
ELN 232	<u>Introduction to Microprocessors</u>	4
ELN 234	<u>Communication Systems</u>	4
ELN 260	<u>Prog Logic Controllers</u>	4
EPT 120	<u>Sociology of Disaster</u>	3
EPT 140	<u>Emergency Management</u>	3
EPT 150	<u>Incident Management</u>	3
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety.</u>	2
ISC 121	<u>Environmental Health &amp; Safety.</u>	3
ISC 132	<u>Manufacturing Quality Control</u>	3
ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary.</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy.</u>	3
MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology.</u>	2
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry.</u>	4
MAT 271	<u>Calculus I</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy.</u>	2
MEC 145	<u>Manufacturing Materials I</u>	3
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
MKT 120	<u>Principles of Marketing</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3

MKT 220	<u>Advertising and Sales Promotion</u>	3
MSM 110	<u>Intro to Motorsports Mgmt</u>	3
MSM 210	<u>Motorsports Marketing</u>	3
MSM 216	<u>Organization Mobility</u>	2
NET 125	<u>Introduction to Networks</u>	3
NET 126	<u>Routing Basics</u>	3
NET 175	<u>Wireless Technology</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
OMT 240	<u>Customers and Products</u>	3
OMT 241	<u>Logistics</u>	3
OMT 243	<u>Support Functions</u>	3
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4
PHY 251	<u>General Physics I</u>	4
SEC 110	<u>Security Concepts</u>	3
SEC 150	<u>Secure Communications</u>	3
SEC 160	<u>Security Administration I</u>	3
SST 140	<u>Green Building and Design Concepts</u>	3
TRN 110	<u>Introduction to Transport Technology</u>	2
TRN 120	<u>Basic Transportation Electricity</u>	5
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WEB 110	<u>Internet/Web Fundamentals</u>	3
WEB 111	<u>Introduction to Web Graphics</u>	3
WEB 115	<u>Web Markup and Scripting</u>	3
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 64-65*

This entry was posted in [Business, Engineering Technologies and Public Services, Mechatronics Engineering Technology \(40350\)](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Mechatronics Engineering Technology (40350) CIP 15.0403 Diploma (D40350)

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### Course Requirements

The following is a suggested program of study for completing this degree in three semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• ELC 138	<u>DC Circuit Analysis</u>	4
• ISC 112	<u>Industrial Safety</u>	2
— —	Major Electives	4

Take one of the following computer application courses.

• CIS 110	<u>Introduction to Computers</u>	3
• EGR 125	<u>Appl Software for Tech</u>	2

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 171	<u>Precalculus Algebra</u>	4

**Total SHC 15-17**

#### First Year Spring

• ATR 112	<u>Intro to Automation</u>	3
• ELC 139	<u>AC Circuit Analysis</u>	4
• ELC 213	<u>Instrumentation</u>	4

Take one of the following physics courses.

• PHY 131	<u>Physics-Mechanics</u>	4
• PHY 151	<u>College Physics I</u>	4

**Total SHC 15**

#### First Year Summer

ENG 111	<u>Writing and Inquiry</u>	3
— —	Major Electives	3

**Total SHC 6**

### Major Electives

Select a minimum of 7 semester hour credits from the following courses. This may include up to 4 SHC from WBL course/combination of courses. Courses selected for CORE courses cannot count toward the required Major Electives.

AHR 110	<u>Introduction to Refrigeration</u>	5
AHR 112	<u>Heating Technology</u>	4
ALT 120	<u>Renewable Energy Technologies</u>	3
ATR 281	<u>Automated Manufacturing</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BPR 130	<u>Print Reading-Construction</u>	3
BPR 230	<u>Commercial Blueprints</u>	2

BUS 110	<u>Introduction to Business</u>	3
BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
CCT 112	<u>Ethics &amp; High Technology</u>	3
CHM 151	<u>General Chemistry I</u>	4
CHM 152	<u>General Chemistry II</u>	4
CIS 110	<u>Introduction to Computers</u>	3
CIS 115	<u>Intro to Programming &amp; Logic</u>	3
CIV 240	<u>Project Management</u>	3
CMT 120	<u>Codes and Inspections</u>	3
CMT 210	<u>Construction Management Fundamentals</u>	3
CMT 212	<u>Total Safety Performance</u>	3
CSC 134	<u>C++ Programming</u>	3
CSC 139	<u>Visual BASIC Programming</u>	3
CSC 151	<u>JAVA Programming</u>	3
CTI 110	<u>Web, Programming, and Database Foundation</u>	3
CTI 120	<u>Network and Security Foundation</u>	3
CTI 140	<u>Virtualization Concepts</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
CTS 120	<u>Hardware/Software Support</u>	3
CTS 130	<u>Spreadsheet</u>	3
DBA 110	<u>Database Concepts</u>	3
DBA 120	<u>Database Programming I</u>	3
DFT 111	<u>Technical Drafting I</u>	2
DFT 111A	<u>Technical Drafting I Lab</u>	1
DFT 112	<u>Technical Drafting II</u>	2
DFT 112A	<u>Technical Drafting II Lab</u>	1
DFT 121	<u>Introduction to GD&amp;T</u>	2
DFT 151	<u>CAD I</u>	3
DFT 154	<u>Intro to Solid Modeling</u>	3
DFT 254	<u>Intermediate Solid Modeling &amp; Rendering</u>	3
EGR 110	<u>Intro to Engineering Tech</u>	2
EGR 115	<u>Intro to Technology</u>	3
EGR 125	<u>Appl Software for Tech</u>	2
EGR 150	<u>Introduction to Engineering</u>	2
EGR 251	<u>Statics</u>	3
EGR 252	<u>Strength of Materials</u>	3
ELC 113	<u>Residential Wiring</u>	4
ELC 115	<u>Industrial Wiring</u>	4
ELC 117	<u>Motors and Controls</u>	4
ELC 118	<u>National Electrical Code</u>	2
ELC 119	<u>NEC Calculations</u>	2
ELC 125	<u>Diagrams and Schematics</u>	2
ELC 128	<u>Introduction to Programmable Logic Controller</u>	3
ELC 130	<u>Advanced Motors/Controls</u>	3
ELC 215	<u>Electrical Maintenance</u>	3
ELN 131	<u>Analog Electronics I</u>	4
ELN 132	<u>Analog Electronics II</u>	4
ELN 133	<u>Digital Electronics</u>	4
ELN 150	<u>Computer-Aided Drafting for Electronics</u>	2



ELN 232	<u>Introduction to Microprocessors</u>	4
ELN 234	<u>Communication Systems</u>	4
ELN 260	<u>Prog Logic Controllers</u>	4
EPT 120	<u>Sociology of Disaster</u>	3
EPT 140	<u>Emergency Management</u>	3
EPT 150	<u>Incident Management</u>	3
HYD 110	<u>Hydraulics/Pneumatics I</u>	3
ISC 113	<u>Industrial Specifications</u>	1
ISC 115	<u>Construction Safety</u>	2
ISC 121	<u>Environmental Health &amp; Safety</u>	3
ISC 132	<u>Manufacturing Quality Control</u>	3
ISC 135	<u>Principles of Industrial Management</u>	4
ISC 136	<u>Productivity Analysis I</u>	3
ISC 214	<u>Job Analysis/Wages &amp; Salary</u>	3
ISC 220	<u>Lean Manufacturing</u>	3
ISC 225	<u>Facility Layout</u>	4
ISC 237	<u>Quality Management</u>	3
ISC 243	<u>Production and Operations Management I</u>	3
ISC 255	<u>Engineering Economy</u>	3
MAC 111	<u>Machining Technology I</u>	6
MAC 114	<u>Introduction to Metrology</u>	2
MAT 171	<u>Precalculus Algebra</u>	4
MAT 172	<u>Precalculus Trigonometry</u>	4
MAT 271	<u>Calculus I</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 111	<u>Machine Processes I</u>	3
MEC 142	<u>Physical Metallurgy</u>	2
MEC 145	<u>Manufacturing Materials I</u>	3
MEC 231	<u>Computer-Aided Manufacturing I</u>	3
MEC 232	<u>Computer-Aided Manufacturing II</u>	3
MEC 265	<u>Fluid Mechanics</u>	3
MEC 275	<u>Engineering Mechanisms</u>	3
MKT 120	<u>Principles of Marketing</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
MKT 220	<u>Advertising and Sales Promotion</u>	3
MSM 110	<u>Intro to Motorsports Mgmt</u>	3
MSM 210	<u>Motorsports Marketing</u>	3
MSM 216	<u>Organization Mobility</u>	2
NET 125	<u>Introduction to Networks</u>	3
NET 126	<u>Routing Basics</u>	3
NET 175	<u>Wireless Technology</u>	3
NOS 120	<u>Linux/UNIX Single User</u>	3
NOS 130	<u>Windows Single User</u>	3
NOS 230	<u>Windows Administration I</u>	3
OMT 240	<u>Customers and Products</u>	3
OMT 241	<u>Logistics</u>	3
OMT 243	<u>Support Functions</u>	3
PHY 131	<u>Physics-Mechanics</u>	4
PHY 132	<u>Physics-Electricity &amp; Magnetism</u>	4
PHY 151	<u>College Physics I</u>	4
PHY 152	<u>College Physics II</u>	4

PHY 251	<u>General Physics I</u>	4
SEC 110	<u>Security Concepts</u>	3
SEC 150	<u>Secure Communications</u>	3
SEC 160	<u>Security Administration I</u>	3
SST 140	<u>Green Building and Design Concepts</u>	3
TRN 110	<u>Introduction to Transport Technology</u>	2
TRN 120	<u>Basic Transportation Electricity</u>	5
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WEB 110	<u>Internet/Web Fundamentals</u>	3
WEB 111	<u>Introduction to Web Graphics</u>	3
WEB 115	<u>Web Markup and Scripting</u>	3
WLD 110	<u>Cutting Processes</u>	2
WLD 112	<u>Basic Welding Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 36-37*

This entry was posted in [Business, Engineering Technologies and Public Services, Mechatronics Engineering Technology \(40350\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Mechatronics Engineering Technology\_(40350)\_CIP 15.0403 Certificate (C40350)

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### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
ELC 138	<u>DC Circuit Analysis</u>	4
ISC 112	<u>Industrial Safety</u>	2
<b>Total SHC</b>		<b>9</b>

### First Year Spring

ATR 112	<u>Intro to Automation</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Mechatronics Engineering Technology\\_\(40350\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Mechatronics Engineering Technology\_(40350)\_CIP 15.0403 CCPP Certificate (C40350PB)

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### Courses

ATR 112	<u>Intro to Automation</u>	3
CIS 110	<u>Introduction to Computers</u>	3
ELC 138	<u>DC Circuit Analysis</u>	4
ISC 112	<u>Industrial Safety</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Mechatronics Engineering Technology\\_\(40350\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Medical Office Administration (25310) CIP 51.0705

### Description

The Medical Office Administration curriculum prepares individuals for employment as medical administrative personnel in the areas of medical office, medical billing and coding, dental office, patient services, and medical documents.

Course work includes medical terminology, computer applications, medical office management, medical coding, medical insurance and billing, medical legal and ethical issues, oral and written communication, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of medical office positions in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other healthcare related organizations. Upon graduation, students may be eligible to sit for industry recognized certification exams.

*Effective Fall 2019,  
Medical Office  
Administration has  
been replaced by  
Healthcare  
Management  
Technology.*

### Awards

- Associate in Applied Science Degree (A25310)  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/24/associate-in-applied-science-a25310/>).

### Additional Information

This program does not certify students to be medical transcriptionists but may provide students with medical transcribing skills to transcribe medical documents.

- Healthcare Management Technology  
(<https://catalog.rccc.edu/programs/2019-2020/25310/>)

### Contact Information

The Medical Office Administration (25310) CIP 51.0705 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Zackary Hubbard ([zackary.hubbard@rccc.edu](mailto:zackary.hubbard@rccc.edu) (<mailto:zackary.hubbard@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

##### Kathy Knight

Lead Faculty in Academic Programs[+]

✉ [kathy.knight@rccc.edu](mailto:kathy.knight@rccc.edu)  
(<mailto:kathy.knight@rccc.edu>)

☎ (704) 216-3753

📍 CBTC

##### Cheryl Cooke

Instructor in Academic Programs[+]

✉ [cheryl.cooke@rccc.edu](mailto:cheryl.cooke@rccc.edu)  
(<mailto:cheryl.cooke@rccc.edu>)

☎ (704) 216-3853

📍 CBTC

##### Brandie McHale

Instructor in Academic Programs[+]

✉ brandie.mchale@rccc.edu  
(mailto:brandie.mchale@rccc.edu)

☎ (704) 216-7240

💡 CBTC

## Theresa Leflore

Instructor in Academic Programs[+]

✉ theresa.leflore@rccc.edu  
(mailto:theresa.leflore@rccc.edu)

☎ (704) 216-3798

□

This entry was posted in [Business, Engineering Technologies and Public Services, Medical Office Administration \(25310\)](#) and tagged [Applied Sciences Program, Program Description](#). Bookmark the [permalink](#).

## Medical Office Administration (25310) CIP 51.0705

### Associate in Applied Science Degree (A25310)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• CIS 110	<u>Introduction to Computers</u>	3
OST 130	<u>Comprehensive Keyboarding</u>	3
OST 136	<u>Word Processing</u>	3
• OST 141	<u>Med Office Terms I</u>	3
• OST 181	<u>Office Procedures</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

OST 134	<u>Text Entry &amp; Formatting</u>	3
• OST 142	<u>Med Office Terms II</u>	3
• OST 148	<u>Medical Insurance &amp; Billing</u>	3
• OST 149	<u>Medical Legal Issues</u>	3
OST 236	<u>Advanced Word Processsing</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Summer

ENG 111	<u>Writing and Inquiry</u>	3
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Take one of the following communication courses.

COM 110	<u>Introduction to Communication</u>	3
COM 231	<u>Public Speaking</u>	3

Take one of the following Humanities/Fine Arts courses.

HUM 110	<u>Technology and Society</u>	3
PHI 240	<u>Introduction to Ethics</u>	3

Take one of the following Social/Behavioral Sciences courses.

PSY 150	<u>General Psychology</u>	3
SOC 210	<u>Introduction to Sociology</u>	3

**Total SHC 12**

#### Second Year Fall

CTS 130	<u>Spreadsheet</u>	3
• OST 164	<u>Office Editing</u>	3
• OST 247	<u>Procedure Coding</u>	3
• OST 248	<u>Diagnostic Coding</u>	3
<b>Total SHC</b>		<b>12</b>

#### Second Year Spring

CTS 230	<u>Advanced Spreadsheet</u>	3
• OST 184	<u>Records Management</u>	3
OST 243	<u>Med Office Simulation</u>	3
— —	Major Electives	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4

**Total SHC 15-16**

## Major Electives

Select 3 SHC from the following courses.

BUS 137	<u>Principles of Management</u>	3
CTS 115	<u>Information Systems Business Concepts</u>	3
OST 135	<u>Advanced Text Entry &amp; Formatting</u>	3
OST 249	<u>Med Coding Certification Prep</u>	3
OST 289	<u>Office Administrative Capstone</u>	3
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 69-70*

This entry was posted in [Medical Office Administration \(25310\)](#), [Science, Biotechnology, Mathematics and Information Technologies](#) and tagged [Degree](#). Bookmark the [permalink](#).



## Motorsports (60270) CIP 52.0299

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### Description

The motorsports curriculum is designed to provide students with the knowledge and skills necessary to perform mid-management level functions in motorsports related companies.

Course work includes instruction in general studies, motorsports fundamentals, principles of management, computer applications, accounting, business mathematics, marketing, advertising and sales promotion, and human relations.

Graduates should qualify for employment or advancement in jobs related to management of motorsports teams, events and activities, as well as production and distribution of motorsports products and services.

### Awards

- Associate in Applied Science Degree (A60270)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/04/04/associate-in-applied-science-a60270/>).
- Management Diploma (D60270MT)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/04/04/management-diploma-d60270mt/>).
- Marketing Diploma (D60270MK)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/04/03/marketing-diploma-d60270mk/>).
- CCPP Advanced Certificate (C60270PA)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-advanced-certificate-c60270pa/>).
- CCPP Basic Certificate (C60270PB)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-basic-certificate-c25590pb/>).
- Certificate (C60270) (<https://legacy.rccc.edu/catalog-2019-2020/2018/09/19/certificate-c60270/>).

### Contact Information

The Motorsports (60270) CIP 52.0299 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Patrick Wood ([patrick.wood@rccc.edu](mailto:patrick.wood@rccc.edu) (<mailto:patrick.wood@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

#### Patrick Wood

Chair in Academic Programs[+]

✉ [patrick.wood@rccc.edu](mailto:patrick.wood@rccc.edu)

(<mailto:patrick.wood@rccc.edu>)

☎ (704) 216-7265

📍 CBTC

## Motorsports (60270) CIP 52.0299

### Associate in Applied Science Degree (A60270)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• BUS 137	<u>Principles of Management</u>	3
CIS 110	<u>Introduction to Computers</u>	3
ENG 111	<u>Writing and Inquiry.</u>	3
• MSM 110	<u>Intro to Motorsports Mgmt</u>	3
• MSM 112	<u>Engine/Drivetrain Fundamentals</u>	2
<b>Total SHC</b>		<b>14</b>

#### First Year Spring

BUS 121	<u>Business Math</u>	3
CTS 130	<u>Spreadsheet</u>	3
• MSM 216	<u>Organization Mobility.</u>	2

Take one of the following math courses.

MAT 121	<u>Algebra/Trigonometry I</u>	3
MAT 143	<u>Quantitative Literacy.</u>	3

Take one of the following communication courses.

COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>14</b>

#### First Year Summer

BUS 110	<u>Introduction to Business</u>	3
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Take one of the following Humanities/Fine Arts Electives.

ART 111	<u>Art Appreciation</u>	3
ART 114	<u>Art History Survey I</u>	3
ART 115	<u>Art History Survey II</u>	3
HUM 110	<u>Technology and Society.</u>	3
MUS 110	<u>Music Appreciation</u>	3
PHI 240	<u>Introduction to Ethics</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

GRD 281	<u>Design of Advertising</u>	2
• MSM 210	<u>Motorsports Marketing</u>	3
• MSM 212	<u>Chassis Handling Fundamentals</u>	3
— —	Major Elective	4

Take one of the following Social/Behavioral Sciences Electives.

PSY 118	<u>Interpersonal Psychology.</u>	3
PSY 150	<u>General Psychology.</u>	3
SOC 210	<u>Introduction to Sociology.</u>	3
SOC 240	<u>Social Psychology.</u>	3
<b>Total SHC</b>		<b>15</b>

Note Students wishing to pursue a BS degree in Manufacturing Systems, Motorsports, through North Carolina A&T State University are strongly recommended to take PHY 151 as a major elective.

## Second Year Spring

ACC 120	<u>Principles of Financial Accounting</u>	4
BUS 253	<u>Leadership and Management Skills</u>	3
• MSM 214	<u>Fabrication Fundamentals</u>	2
• MSM 218	<u>Safety/Environment</u>	2
— —	Major Electives	5
<b>Total SHC</b>		<b>16</b>

## Major Electives

Select 9 SHC from the following courses.

AUT 141	<u>Suspension &amp; Steering Systems</u>	3
AUT 141A	<u>Suspension &amp; Steering Lab</u>	1
AUT 151	<u>Brake Systems</u>	3
AUT 151A	<u>Brakes Systems Lab</u>	1
AUT 163	<u>Advanced Automotive Electricity.</u>	3
AUT 163A	<u>Advanced Automotive Electricity Lab</u>	1
AUT 181	<u>Engine Performance 1</u>	3
AUT 181A	<u>Engine Performance 1 Lab</u>	1
AUT 183	<u>Engine Performance 2</u>	4
BPR 111	<u>Print Reading</u>	2
BPR 121	<u>Blueprint Reading-Mechanical</u>	2
BUS 115	<u>Business Law I</u>	3
BUS 153	<u>Human Resource Management</u>	3
BUS 217	<u>Employment Law and Regulations</u>	3
BUS 240	<u>Business Ethics</u>	3
BUS 260	<u>Business Communication</u>	3
CSC 120	<u>Computing Fundamentals I</u>	4
CSC 130	<u>Computing Fundamentals II</u>	4
CSC 284	<u>Emerging Computer Programming Technologies</u>	3
CTS 287	<u>Emerging Technologies</u>	3
LDD 112	<u>Intro Light-Duty Diesel</u>	3
LDD 116	<u>Diesel Electric-Drive</u>	4
LDD 181	<u>LDD Fuel Systems</u>	4
LDD 183	<u>Air, Exhaust, Emissions</u>	4
LDD 284	<u>LDD Test and Diagnosis</u>	3
MAC 111	<u>Machining Technology I</u>	6
MAC 112	<u>Machining Technology II</u>	6
MAC 114	<u>Introduction to Metrology.</u>	2
MAC 122	<u>CNC Turning</u>	2
MAC 124	<u>CNC Milling</u>	2

MAC 143	<u>Machining Applications III</u>	4
MAC 151	<u>Machining Calculations</u>	2
MAC 152	<u>Advanced Machining Calculations</u>	2
MAT 171	<u>Precalculus Algebra</u>	4
MEC 110	<u>Introduction to CAD/CAM</u>	2
MEC 142	<u>Physical Metallurgy</u>	2
MKT 120	<u>Principles of Marketing</u>	3
MKT 123	<u>Fundamentals of Selling</u>	3
MKT 220	<u>Advertising and Sales Promotion</u>	3
MKT 223	<u>Customer Service</u>	3
MKT 232	<u>Social Media Marketing</u>	4
MSM 220	<u>Advanced Chassis Analysis</u>	2
MSM 285	<u>Motorsport Capstone Project</u>	2
PHY 151	<u>College Physics I</u>	4
TRN 110	<u>Introduction to Transport Technology</u>	2
TRN 120	<u>Basic Transportation Electricity</u>	5
TRN 130	<u>Intro to Sustainable Transportation</u>	3
TRN 140	<u>Transportation Climate Control</u>	2
TRN 140A	<u>Transportation Climate Control Lab</u>	2
TRN 170	<u>Pc Skills for Transportation</u>	2
WBL 110	<u>World of Work</u>	1
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 121	<u>Work-Based Learning II</u>	1
WLD 110	<u>Cutting Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 151	<u>Fabrication I</u>	4
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 65*

This entry was posted in [Business, Engineering Technologies and Public Services, Motorsports Management Technology \(60270\)](#) and tagged [Degree](#). Bookmark the [permalink](#). [Edit](#)

## Motorsports (60270) CIP 52.0299 Management Diploma (D60270MT)

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### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

BUS 217	<u>Employment Law and Regulations</u>	3
BUS 240	<u>Business Ethics</u>	3
• MSM 110	<u>Intro to Motorsports Mgmt</u>	3
• MSM 210	<u>Motorsports Marketing</u>	3
<b>Total SHC</b>		<b>12</b>

#### First Year Spring

Take the following courses.

BUS 115	<u>Business Law I</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
• MSM 216	<u>Organization Mobility</u>	2
• MSM 218	<u>Safety/Environment</u>	2
<b>Total SHC</b>		<b>10</b>

#### First Year Summer

Take the following courses.

BUS 110	<u>Introduction to Business</u>	3
CIS 110	<u>Introduction to Computers</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

Take the following courses.

• BUS 137	<u>Principles of Management</u>	3
BUS 253	<u>Leadership and Management Skills</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 37*

## Motorsports (60270) CIP 52.0299

### Marketing Diploma (D60270MK)

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#### Course Requirements

The following is a suggested program of study for completing this degree in four semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

Take the following courses.

MKT 123	<u>Fundamentals of Selling</u>	3
MKT 223	<u>Customer Service</u>	3
• MSM 110	<u>Intro to Motorsports Mgmt</u>	3
• MSM 210	<u>Motorsports Marketing</u>	3
<b>Total SHC</b>		<b>12</b>

#### First Year Spring

Take the following courses.

ENG 111	<u>Writing and Inquiry</u>	3
GRD 281	<u>Design of Advertising</u>	2
MKT 120	<u>Principles of Marketing</u>	3
• MSM 216	<u>Organization Mobility</u>	2
• MSM 218	<u>Safety/Environment</u>	2
<b>Total SHC</b>		<b>12</b>

#### First Year Summer

Take the following courses.

BUS 110	<u>Introduction to Business</u>	3
CIS 110	<u>Introduction to Computers</u>	3
<b>Total SHC</b>		<b>6</b>

#### Second Year Fall

Take the following courses.

• BUS 137	<u>Principles of Management</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MKT 232	<u>Social Media Marketing</u>	4
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 40*

## Motorsports (60270) CIP 52.0299

### Certificate (C60270)

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#### First Year Fall

MSM 110	<u>Intro to Motorsports Mgmt</u>	3
MSM 112	<u>Engine/Drivetrain Fundamentals</u>	2
MSM 212	<u>Chassis Handling Fundamentals</u>	3
<b>Total SHC</b>		<b>8</b>

#### First Year Spring

MSM 214	<u>Fabrication Fundamentals</u>	2
MSM 218	<u>Safety/Environment</u>	2
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Motorsports Management Technology \(60270\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Motorsports (60270) CIP 52.0299

### CCPP Basic Certificate (C60270PB)

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#### Courses

MSM 110	<u>Intro to Motorsports Mgmt</u>	3
MSM 112	<u>Engine/Drivetrain Fundamentals</u>	2
MSM 210	<u>Motorsports Marketing</u>	3
MSM 212	<u>Chassis Handling Fundamentals</u>	3
MSM 214	<u>Fabrication Fundamentals</u>	2
MSM 216	<u>Organization Mobility</u>	2
MSM 218	<u>Safety/Environment</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Motorsports Management Technology \(60270\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Motorsports (60270) CIP 52.0299

### CCPP Advanced Certificate (C60270PA)

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#### Courses

MSM 110	<u>Intro to Motorsports Mgmt</u>	3
MSM 112	<u>Engine/Drivetrain Fundamentals</u>	2
MSM 212	<u>Chassis Handling Fundamentals</u>	3
MSM 214	<u>Fabrication Fundamentals</u>	2
MSM 216	<u>Organization Mobility</u>	2
MSM 218	<u>Safety/Environment</u>	2
MSM 220	<u>Advanced Chassis Analysis</u>	2

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 16*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services, Motorsports Management Technology \(60270\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Nurse Aide (C45840) CIP 51.3902

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### Description

The Nurse Aide curriculum prepares individuals to work under the supervision of licensed nursing professionals in performing nursing care and services for persons of all ages.

Topics include growth and development, personal care, vital signs, communication, nutrition, medical asepsis, therapeutic activities, accident and fire safety, household environment and equipment management, family resources and services, and employment skills.

Upon completion, the student may be eligible for listing as a Nurse Aide I and other selected Nurse Aide registries as determined by the local program of study.

*Currently available  
only for Career and  
College Promise*

### Awards

- CCPP Certificate (C45840PB) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c45840p/>).

### Additional Information

Currently the C45840 Nurse Aide Certificate is available only for Career and College Promise students. Please see the link below for the Continuing Education Nurse Aide I program, open to any qualified student.

- Continuing Education Nurse Aide I  
(<https://www.rccc.edu/healthoccupations/nurse-aide-i-program/>).

### Contact Information

The Nurse Aide (C45840) CIP 51.3902 program is in the RCCC Department of Health and Education (</healthpublicservices/>). For additional information regarding this program, contact the chair, Emily Fink ([emily.fink@rccc.edu](mailto:emily.fink@rccc.edu) (<mailto:emily.fink@rccc.edu>)).

This entry was posted in [Health and Education](#), [Nurse Aide \(C45840\)](#), and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Nurse Aide (C45840) CIP 51.3902

### CCPP Certificate (C45840PB)

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#### Courses

MED 130	<u>Admin Office Proc I</u>	2
NAS 101	<u>Nurse Aide I</u>	6
NAS 102	<u>Nurse Aide II</u>	6
WBL 110	<u>World of Work</u>	1

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 15*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Health and Education](#), [Nurse Aide \(C45840\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Occupational Therapy Assistant (45500) CIP 51.0803

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### Description

The Occupational Therapy Assistant curriculum prepares individuals to work under the supervision of a registered/licensed occupational therapist in screening, assessing, planning, and implementing treatment and documenting progress for clients receiving occupational therapy services.

Course work includes human growth and development, conditions which interfere with activities of daily living, theory and process of occupational therapy, individual/group treatment activities, therapeutic use of self, activity analysis, and grading/adapting activities and environments

**Graduates of this program will be eligible to sit for the National Certification Examination for the Occupational Therapy Assistant, administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the graduate will be a Certified Occupational Therapy Assistant (COTA). In addition, all states require licensure to practice; however, state licenses are usually based on the results of the NBCOT certification examination. A felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.** Employment opportunities include hospitals, rehabilitation facilities, longterm/extended care facilities, sheltered workshops, schools, home health programs, and community programs.

### Awards

- Associate in Applied Science Degree (A45500)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/11/27/associate-in-applied-science-degree-a45500/>)
- CCPP Therapeutic & Diagnostic Services/Nurse Aide-Pre-OTA Diploma (D45970PC) CIP 51.0803  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-therapeutic-diagnostic-servicesnurse-aide-ota-diploma-d45970pc/>)

### Additional Information

1. The Rowan-Cabarrus Community College Occupational Therapy Assistant Program is currently a Developing Program (Step 2 of the initial accreditation process) by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD, 20814-3449. ACOTE's telephone number, c/o AOTA, is (301) 652-AOTA, and its web address is [www.acoteonline.org](http://www.acoteonline.org).
2. Students must maintain a "B" (80%) final average for all OTA courses, and a "C" (70) for all non-OTA prefix courses in the program of study to remain in the OTA program.

- Admissions Process Information  
(<https://www.rccc.edu/healtheducation/occupational-therapy-assistant-program-information/>)
- Information Sessions  
(<https://www.rccc.edu/healtheducation/occupational-therapy-assistant-information-sessions/>)

### Contact Information

The Occupational Therapy Assistant (45500) CIP 51.0803 program is in the RCCC Department of Health and Education ([/healthpublicservices/](http://healthpublicservices/)). For additional information regarding this program, contact the chair, Amy Mahle ([amy.mahle@rccc.edu](mailto:amy.mahle@rccc.edu)) (<mailto:amy.mahle@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

## Sherry Stancliff

Instructor in Academic Programs[+]

✉ sherry.stancliff@rccc.edu

(mailto:sherry.stancliff@rccc.edu)

☎ (704) 216-3672

📍 North

## Carolyn Sithong

Academic Fieldwork Coordinator in Academic Programs[+]

✉ carolyn.sithong@rccc.edu

(mailto:carolyn.sithong@rccc.edu)

☎ (704) 216-7183

📍 North

## Amy Mahle

Chair in Academic Programs[+]

✉ amy.mahle@rccc.edu

(mailto:amy.mahle@rccc.edu)

☎ (704) 216-3948

📍 North

This entry was posted in [Health and Education](#), [Occupational Therapy Assistant \(45500\)](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Occupational Therapy Assistant (45500) CIP 51.0803

### Associate in Applied Science Degree (A45500)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

• BIO 168	<u>Anatomy and Physiology I</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
• OTA 110	<u>Fundamentals of OT</u>	3
• OTA 120	<u>OT Media I</u>	2
• OTA 140	<u>Professional Skills I</u>	1
PSY 150	<u>General Psychology</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Spring

BIO 169	<u>Anatomy and Physiology II</u>	4
ENG 112	<u>Writing and Research in the Disciplines</u>	3
• OTA 130	<u>Assessment Skills</u>	3
OTA 135	<u>Kinesiology</u>	1
• OTA 161	<u>Fieldwork I-Placement 1</u>	1
• OTA 170	<u>Physical Conditions</u>	3
• PSY 281	<u>Abnormal Psychology</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Summer

• OTA 150	<u>Pediatric Concepts and Interventions</u>	3
• OTA 162	<u>Fieldwork I-Placement 2</u>	1
• OTA 240	<u>Professional Skills II</u>	1
• PSY 241	<u>Developmental Psychology</u>	3

Take one of the following communication courses.

COM 110	<u>Introduction to Communication</u>	3
COM 120	<u>Intro to Interpersonal Communication</u>	3
COM 231	<u>Public Speaking</u>	3
<b>Total SHC</b>		<b>11</b>

#### Second Year Fall

HUM 115	<u>Critical Thinking</u>	3
• OTA 163	<u>Fieldwork I-Placement 3</u>	1
• OTA 180	<u>Psychosocial Conditions</u>	3
• OTA 220	<u>OT Media II</u>	3
OTA 245	<u>Professional Skills III</u>	1
• OTA 250	<u>Adult Concepts &amp; Interventions</u>	3

**Total SHC    14**

## Second Year Spring

• OTA 260	<u>Level II Fieldwork Placement 1</u>	6
• OTA 261	<u>Level II Fieldwork Placement 2</u>	6
OTA 280	<u>Professional Transitions</u>	1
<b>Total SHC</b>		<b>13</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 74*

This entry was posted in [Health and Education](#), [Occupational Therapy Assistant \(45500\)](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Occupational Therapy Assistant (45500) CIP 51.0803

### CCPP Therapeutic & Diagnostic Services/Nurse Aide-Pre-OTA Diploma (D45970PC) CIP 51.0803

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#### Courses

ACA 118	<u>College Study Skills</u>	2
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
COM 110	<u>Introduction to Communication</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
HSC 120	<u>CPR</u>	1
HUM 115	<u>Critical Thinking</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
NAS 101	<u>Nurse Aide I</u>	6
NAS 102	<u>Nurse Aide II</u>	6
PSY 150	<u>General Psychology</u>	3
PSY 241	<u>Developmental Psychology</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 40*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Health and Education](#), [Occupational Therapy Assistant \(45500\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Office Administration (25370) CIP 52.0204

### Description

The Office Administration curriculum prepares individuals for employment as administrative office personnel who use skills in the areas of office management, office finance, legal office, virtual office, customer service, and office software.

Course work includes computer applications, oral and written communication, analysis and coordination of office tasks and procedures, records management, and other topics depending on the subject area selected within this curriculum.

Graduates should qualify for employment opportunities in a variety of office positions in business, government, and industry. Upon graduation, students may be eligible to sit for industry recognized certification exams.

### Awards

- Associate in Applied Science Degree (A25370)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/10/associate-in-applied-science-a25370/>).

### Additional Information

This program does not certify students to be medical transcriptionists but may provide students with medical transcribing skills to transcribe medical documents.

### Contact Information

The Office Administration (25370) CIP 52.0204 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Zackary Hubbard ([zackary.hubbard@rccc.edu](mailto:zackary.hubbard@rccc.edu) (<mailto:zackary.hubbard@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

#### Kathy Knight

Lead Faculty in Academic Programs[+]

✉ [kathy.knight@rccc.edu](mailto:kathy.knight@rccc.edu)  
(<mailto:kathy.knight@rccc.edu>)

☎ (704) 216-3753

📍 CBTC

#### Cheryl Cooke

Instructor in Academic Programs[+]

✉ [cheryl.cooke@rccc.edu](mailto:cheryl.cooke@rccc.edu)  
(<mailto:cheryl.cooke@rccc.edu>)

☎ (704) 216-3853

📍 CBTC

#### Brandie McHale

Instructor in Academic Programs[+]

✉ [brandie.mchale@rccc.edu](mailto:brandie.mchale@rccc.edu)  
(<mailto:brandie.mchale@rccc.edu>)

☎ (704) 216-7240

📍 CBTC

#### Theresa Leflore

Instructor in Academic Programs[+]

✉ [theresa.leflore@rccc.edu](mailto:theresa.leflore@rccc.edu)  
(<mailto:theresa.leflore@rccc.edu>)

☎ (704) 216-3798

## Office Administration (25370) CIP 52.0204

### Associate in Applied Science Degree (A25370)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

BUS 137	<u>Principles of Management</u>	3
• CIS 110	<u>Introduction to Computers</u>	3
OST 130	<u>Comprehensive Keyboarding</u>	3
OST 136	<u>Word Processing</u>	3
• OST 181	<u>Office Procedures</u>	3
<b>Total SHC</b>		<b>15</b>

#### First Year Spring

ENG 111	<u>Writing and Inquiry.</u>	3
• OST 134	<u>Text Entry &amp; Formatting</u>	3
OST 236	<u>Advanced Word Processsing</u>	3

Take one of the following math courses.

MAT 110	<u>Mathematical Measurement and Literacy.</u>	3
MAT 143	<u>Quantitative Literacy.</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>12-13</b>

#### First Year Summer

CTS 115	<u>Information Systems Business Concepts</u>	3
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Take one of the following Humanities/Fine Arts courses.

HUM 110	<u>Technology and Society.</u>	3
PHI 240	<u>Introduction to Ethics</u>	3

Take one of the following Social/Behavioral Sciences courses.

PSY 150	<u>General Psychology.</u>	3
SOC 210	<u>Introduction to Sociology.</u>	3

Take one of the following Communication courses.

COM 110	<u>Introduction to Communication</u>	3
COM 231	<u>Public Speaking</u>	3
<b>Total SHC</b>		<b>12</b>

#### Second Year Fall

CTS 130	<u>Spreadsheet</u>	3
OST 135	<u>Advanced Text Entry &amp; Formatting</u>	3
• OST 164	<u>Office Editing</u>	3
WBL 110	<u>World of Work</u>	1
— —	Major Electives	3

Total SHC 12

## Second Year Spring

CTS 230	<u>Advanced Spreadsheet</u>	3
• OST 184	<u>Records Management</u>	3
OST 289	<u>Office Administrative Capstone</u>	3
— —	Major Electives	3
Total SHC		12

## Major Electives

Select 6 SHC from the following courses.

BUS 115	<u>Business Law I</u>	3
BUS 121	<u>Business Math</u>	3
BUS 230	<u>Small Business Management</u>	3
DBA 110	<u>Database Concepts</u>	3
OST 141	<u>Med Office Terms I</u>	3
OST 142	<u>Med Office Terms II</u>	3
OST 148	<u>Medical Insurance &amp; Billing</u>	3
OST 149	<u>Medical Legal Issues</u>	3
OST 243	<u>Med Office Simulation</u>	3
OST 247	<u>Procedure Coding</u>	3
OST 248	<u>Diagnostic Coding</u>	3
OST 249	<u>Med Coding Certification Prep</u>	3
WBL 111	<u>Work-Based Learning I</u>	1
WBL 112	<u>Work-Based Learning I</u>	2
WBL 113	<u>Work-Based Learning I</u>	3
WBL 114	<u>Work-Based Learning I</u>	4
WBL 121	<u>Work-Based Learning II</u>	1
WBL 122	<u>Work-Based Learning II</u>	2
WBL 123	<u>Work-Based Learning II</u>	3
WBL 131	<u>Work-Based Learning III</u>	1
WBL 132	<u>Work-Based Learning III</u>	2
WBL 211	<u>Work-Based Learning IV</u>	1

The • symbol denotes a core course that may not be substituted.

Total semester hour credits to complete degree: 64-65

This entry was posted in [Office Administration \(25370\)](#), [Science](#), [Biotechnology](#), [Mathematics and Information Technologies](#) and tagged [Degree](#). Bookmark the [permalink](#).

## Physical Therapist Assistant – 2-year program (45620) CIP 51.0806

### Description

The Physical Therapist Assistant curriculum prepares graduates to work in direct patient care settings under the supervision of physical therapists.

Assistants work to improve or restore function by alleviation or prevention of physical impairment and perform other essential activities in a physical therapy department.

Course work includes normal human anatomy and physiology, the consequences of disease or injury, and physical therapy treatment of a variety of patient conditions affecting humans throughout the life span.

Graduates may be eligible to take the licensure examination administered by the NC Board of Physical Therapy Examiners. Employment is available in general hospitals, rehabilitation centers, extended care facilities, specialty hospitals, home health agencies, private clinics, and public school systems.

*Approved by SACSCOC  
for Spring 2019*

### Awards

- Associate in Applied Science Degree A45620  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/09/04/associate-in-applied-science-degree-a45620-2/>).
- CCPP Therapeutic & Diagnostic Services/Nurse Aide-PTA Diploma (D45970PP) (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-therapeutic-diagnostic-servicesnurse-aide-pta-diploma-d45970pp/>).

### Additional Information

Students must maintain a 'B' (80%) final average for all PTA courses, and a 'C' (70%) for all non-PTA prefix courses in the program of study to remain in the PTA program.

- Program Information for PTA (<https://www.rccc.edu/healtheducation/physical-therapist-assistant-program-information/>).
- About the PTA Program  
(<https://www.rccc.edu/healtheducation/about-physical-therapist-assistant-program/>).

### Contact Information

The Physical Therapist Assistant - 2-year program (45620) CIP 51.0806 program is in the RCCC Department of Health and Education ([/healthpublicservices/](http://healthpublicservices/)). For additional information regarding this program, contact the program chair, Anna Marie Prado ([annamarie.prado@rccc.edu](mailto:annamarie.prado@rccc.edu)) (<mailto:annamarie.prado@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

Anna Marie Prado

Program Chair in Academic Programs[+]

✉ [annamarie.prado@rccc.edu](mailto:annamarie.prado@rccc.edu)

(<mailto:annamarie.prado@rccc.edu>)

☎ (704) 216-7180

📍 North

### Accreditation

Effective November 14, 2018, Rowan-Cabarrus Community College has been granted Candidate for Accreditation status by the Commission on Accreditation in Physical Therapy Education (1111 North Fairfax Street, Alexandria, VA, 22314; phone: 703-706-

3245; email: accreditation@apta.org). If needing to contact the program/institution directly, please call Anna Marie Prado, PTA, M.Ed., Program Director at (704) 216-7180 or email at annamarie.prado@rccc.edu. Candidate for Accreditation is a pre-accreditation status of affiliation with the Commission on Accreditation in Physical Therapy Education that indicates that the program is progressing toward accreditation and may matriculate students in technical/professional courses. Candidate for Accreditation is not an accreditation status nor does it assure eventual accreditation.

This entry was posted in [Health and Education](#), [Physical Therapist Assistant \(2-year program\) \(45620\)](#) and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Physical Therapist Assistant – 2-year program (45620) CIP 51.0806

### Associate in Applied Science Degree A45620

*Approved by SACSCOC  
for Spring 2019*

### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Spring

• BIO 168	<u>Anatomy and Physiology I</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
HUM 115	<u>Critical Thinking</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
• PTA 110	<u>Intro to Physical Therapy</u>	3
• PTA 130	<u>Physical Therapy Proc I</u>	3
<b>Total SHC</b>		<b>18</b>

#### First Year Fall

• BIO 169	<u>Anatomy and Physiology II</u>	4
• PTA 120	<u>Functional Anatomy</u>	3
• PTA 140	<u>Therapeutic Exercise</u>	4
• PTA 150	<u>Physical Therapy Proc II</u>	3
• PTA 222	<u>Professional Interactions</u>	2
<b>Total SHC</b>		<b>16</b>

#### Second Year Spring

MAT 143	<u>Quantitative Literacy</u>	3
• PTA 160	<u>Physical Therapy Proc III</u>	3
• PTA 170	<u>Pathophysiology</u>	3
• PTA 212	<u>Health Care/Resources</u>	2
• PTA 240	<u>Physical Therapy Proc IV</u>	5
<b>Total SHC</b>		<b>16</b>

#### Second Year Summer

• PTA 180	<u>PTA Clinical Ed Intro</u>	3
PTA 252	<u>Geriatrics for the PTA</u>	2
PTA 254	<u>Pediatrics for the PTA</u>	1

Take one of the following communication courses.

COM 120	<u>Intro to Interpersonal Communication</u>	3
COM 231	<u>Public Speaking</u>	3
<b>Total SHC</b>		<b>9</b>

Note PTA 180 will be taught the 1st 4 weeks. PTA 252 and PTA 254 will be taught the 2nd 4 weeks.

## Second Year Fall

	PSY 150	<u>General Psychology</u>	3
•	PTA 260	<u>Adv. PTA Clinical Ed.</u>	10
	PTA 270	<u>PTA Topics</u>	1
	PTA 280	<u>PTA Issues I</u>	1
		<b>Total SHC</b>	<b>15</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 74*

This entry was posted in [Health and Education](#), [Physical Therapist Assistant \(2-year program\)](#)\_(45620) and tagged [Degree](#). Bookmark the [permalink](#).

## Physical Therapist Assistant – 2-year program (45620) CIP 51.0806

### CCPP Therapeutic & Diagnostic Services/Nurse Aide-PTA Diploma (D45970PP)

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#### Courses

ACA 118	<u>College Study Skills</u>	2
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
COM 231	<u>Public Speaking</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
HSC 120	<u>CPR</u>	1
HUM 115	<u>Critical Thinking</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
NAS 101	<u>Nurse Aide I</u>	6
NAS 102	<u>Nurse Aide II</u>	6
PSY 150	<u>General Psychology</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 40*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Health and Education, Physical Therapist Assistant \(2-year program\) \(45620\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.



## Practical Nursing (45660) CIP 51.3901

### Description

The Practical Nursing curriculum provides knowledge and skills to integrate safety and quality into nursing care to meet the needs of the holistic individual which impact health, quality of life, and achievement of potential.

Course work includes and builds upon the domains of healthcare, nursing practice, and the holistic individual. Content emphasizes safe, individualized nursing care and participation in the interdisciplinary team while employing evidence-based practice, quality improvement, and informatics.

Graduates are eligible to apply to take the National Council Licensure Examination (NCLEX-PN), which is required for practice as a Licensed Practical Nurse. Employment opportunities include hospitals, rehabilitation/long term care/home health facilities, clinics, and physicians' offices.

### Awards

- [CCPP Therapeutic & Diagnostic Services/Nurse Aide-Nursing Diploma \(D45970PU\)](https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-therapeutic-diagnostic-servicesnurse-aide-nursing-diploma-d45970pu-2/)  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-therapeutic-diagnostic-servicesnurse-aide-nursing-diploma-d45970pu-2/>).
- [Diploma \(D45660\)](https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/diploma-program-d45660/) (<https://legacy.rccc.edu/catalog-2019-2020/2018/10/04/diploma-program-d45660/>).

### Additional Information

- [Comprehensive List of Nursing Education Admission and Program Information](https://www.rccc.edu/healtheducation/nursing-education-program-information/)  
(<https://www.rccc.edu/healtheducation/nursing-education-program-information/>)

### Contact Information

The Practical Nursing (45660) CIP 51.3901 program is in the RCCC Department of [Health and Education \(/healthpublicservices/\)](/healthpublicservices/). For additional information regarding this program, contact the chair, Emily Fink ([emily.fink@rccc.edu](mailto:emily.fink@rccc.edu) (<mailto:emily.fink@rccc.edu>)).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

Students whose last name begins with A-C are assigned to Hope Yost; D-E are assigned to Samantha Neely; F-H are assigned to Carol Beaver; I-J are assigned to Maria Atkinson; K-M are assigned to Leigh Anne Walker; Q-S are assigned to Renee Hyde; T-V are assigned to Suzanne Rumble; W-X are assigned to Phyllis Buie; Y-Z are assigned to Emily Fink.

### Program Advisors

<p><b>Renee Hyde</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:renee.hyde@rccc.edu">renee.hyde@rccc.edu</a> (<a href="mailto:renee.hyde@rccc.edu">mailto:renee.hyde@rccc.edu</a>)</p> <p>☎ (704) 216-3698</p> <p>📍 NCRC</p>
<p><b>Hope Yost</b></p> <p>Instructor in Academic Programs[+]</p>	<p>✉ <a href="mailto:hope.yost@rccc.edu">hope.yost@rccc.edu</a> (<a href="mailto:hope.yost@rccc.edu">mailto:hope.yost@rccc.edu</a>)</p> <p>☎ (704) 216-7228</p> <p>📍 NCRC</p>
<p><b>Leigh-Anne Walker</b></p>	<p>✉ <a href="mailto:leighanne.walker@rccc.edu">leighanne.walker@rccc.edu</a> (<a href="mailto:leighanne.walker@rccc.edu">mailto:leighanne.walker@rccc.edu</a>)</p>

Instructor in Academic Programs[+]

☎ (704) 216-3715

📍 NCRC

## Emily Fink

Chair in Academic Programs[+]

✉ emily.fink@rccc.edu (mailto:emily.fink@rccc.edu)

☎ (704) 216-3716

📍 NCRC

## Phyllis Buie

Instructor in Academic Programs[+]

✉ phyllis.buie1@rccc.edu  
(mailto:phyllis.buie1@rccc.edu)

☎ (704) 216-3703

📍 NCRC

## Cathy Chandler

Instructor in Academic Programs[+]

✉ cathy.chandler@rccc.edu  
(mailto:cathy.chandler@rccc.edu)

☎ (704) 216-3530

📍 NCRC

## Samantha Neely

Instructor in Corporate and Continuing Education[+]

✉ samantha.neely@rccc.edu  
(mailto:samantha.neely@rccc.edu)

## Suzanne Rumble

Instructor in Academic Programs[+]

✉ suzanne.rumble@rccc.edu  
(mailto:suzanne.rumble@rccc.edu)

☎ (704) 216-7288

📍 NCRC

## Carol Beaver

Instructor in Academic Programs[+]

✉ carol.beaver@rccc.edu  
(mailto:carol.beaver@rccc.edu)

☎ (704) 216-3646

📍 NCRC

## Maria Atkinson

Instructor in Academic Programs[+]

✉ maria.atkinson@rccc.edu  
(mailto:maria.atkinson@rccc.edu)

☎ (704) 216-3701

📍 NCRC

This entry was posted in [Health and Education](#), [Practical Nursing \(45660\)](#), and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Practical Nursing (45660) CIP 51.3901

### Diploma (D45660)

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#### Fall Semester

BIO 163	<u>Basic Anatomy &amp; Physiology</u>	5
• NUR 101	<u>Practical Nursing I</u>	11
PSY 110	<u>Life Span Development</u>	3
<b>Total SHC</b>		<b>19</b>

#### Spring Semester

ENG 111	<u>Writing and Inquiry</u>	3
• NUR 102	<u>Practical Nursing II</u>	10
<b>Total SHC</b>		<b>13</b>

#### Summer Term

• NUR 103	<u>Practical Nursing III</u>	9
<b>Total SHC</b>		<b>9</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 41*

#### Note 1

Class sessions and clinical rotations in NUR courses may be scheduled during weekdays, evenings, or weekends.

#### Note 2

For students enrolled in the Associate Degree Nursing or the Practical Nursing programs, numerical grades below 'B' in all required nursing courses are considered unsatisfactory attainment of course competencies.

#### Note 3

Students considering entering the Associate Degree Nursing (ADN) Program should take the following: Complete the sequence of BIO 168 and BIO 169 instead of BIO-163; and complete the sequence of PSY 150 and PSY 241 instead of PSY 110. The sequence of these courses is required to be completed no later than the fall semester of program entry. Students should request a substitution form prior to registering.

This entry was posted in [Health and Education](#), [Practical Nursing \(45660\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

### Program Costs

- Tuition & Fees – \$3,385.00
- Books & Supplies – \$888.00

## Length of Program

- Credit Hours – 44
- Intended Time to Complete – 3 Semesters

## Program Completion

- On Time Completion Rate – 0

## Occupation Information (O\*NET/SOC)

- 29-2061

## Career Titles

- Licensed Practical Nurses

*Rowan-Cabarrus Community College had less than ten completers with loan debt. Student employment data is not collected.*

## Practical Nursing (45660) CIP 51.3901

### CCPP Therapeutic & Diagnostic Services/Nurse Aide-Nursing Diploma (D45970PU)

#### Courses

ACA 118	<u>College Study Skills</u>	2
BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
ENG 112	<u>Writing and Research in the Disciplines</u>	3
HSC 120	<u>CPR</u>	1
HUM 115	<u>Critical Thinking</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
NAS 101	<u>Nurse Aide I</u>	6
NAS 102	<u>Nurse Aide II</u>	6
PSY 150	<u>General Psychology</u>	3
PSY 241	<u>Developmental Psychology</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 40*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Health and Education](#), [Practical Nursing \(45660\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Radiography (45700) CIP 51.0911

### Description

The Radiography curriculum prepares the graduate to be a radiographer, a skilled health care professional who uses radiation to produce images of the human body

Course work includes clinical rotations to area health care facilities, radiographic exposure, image processing, radiographic procedures, physics, pathology, patient care and management, radiation protection, quality assurance, anatomy and physiology, and radiobiology.

Graduates of accredited programs are eligible to apply to take the American Registry of Radiologic Technologists' national examination for certification and registration as medical radiographers. Graduates may be employed in hospitals, clinics, physicians' offices, medical laboratories, government agencies, and industry.

### Awards

- Associate in Applied Science Degree (A45700)  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/12/18/associate-in-applied-science-a45700/>).
- CCPP Therapeutic & Diagnostic Services/Nurse Aide-Radiography (D45970PR) CIP 51.3902  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-therapeutic-diagnostic-servicesnurse-aide-radiography-d45970pr-cip-51-3902/>).

### Additional Information

- Comprehensive List of Radiography Admission and Program Information  
(<https://www.rccc.edu/healtheducation/radiography-program-information/>).

### Contact Information

The Radiography (45700) CIP 51.0911 program is in the RCCC Department of Health and Education (</healthpublicservices/>). For additional information regarding this program, contact the chair, Kelly McCowan ([kelly.mccowan@rccc.edu](mailto:kelly.mccowan@rccc.edu)) (<mailto:kelly.mccowan@rccc.edu>).

### Program Advising

#### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

#### Program Advisors

<p><b>Kelly McCowan</b></p> <p>Chair in Academic Programs[+]</p>	<p>✉ <a href="mailto:kelly.mccowan@rccc.edu">kelly.mccowan@rccc.edu</a> (<a href="mailto:kelly.mccowan@rccc.edu">mailto:kelly.mccowan@rccc.edu</a>)</p> <p>☎ (704) 216-7185</p> <p>📍 North</p>
<p><b>Melissa Bell</b></p> <p>Clinical Coordinator in Academic Programs[+]</p>	<p>✉ <a href="mailto:melissa.bell@rccc.edu">melissa.bell@rccc.edu</a> (<a href="mailto:melissa.bell@rccc.edu">mailto:melissa.bell@rccc.edu</a>)</p> <p>☎ (704) 216-3724</p> <p>📍 North</p>

## Radiography\_(45700)\_CIP 51.0911

### Associate in Applied Science Degree (A45700)

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#### Course Requirements

The following is a suggested program of study for completing this degree in five semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

BIO 168	<u>Anatomy and Physiology I</u>	4
• RAD 110	<u>Rad Intro &amp; Patient Care</u>	3
• RAD 111	<u>RAD Procedures I</u>	4
• RAD 151	<u>RAD Clinical Ed I</u>	2

Take one of the following math courses.

MAT 143	<u>Quantitative Literacy</u>	3
MAT 171	<u>Precalculus Algebra</u>	4
<b>Total SHC</b>		<b>16</b>

#### First Year Spring

BIO 169	<u>Anatomy and Physiology II</u>	4
ENG 111	<u>Writing and Inquiry</u>	3
• RAD 112	<u>RAD Procedures II</u>	4
• RAD 121	<u>Image Production I</u>	3
• RAD 161	<u>RAD Clinical Ed II</u>	5
<b>Total SHC</b>		<b>19</b>

#### First Year Summer

• RAD 122	<u>Image Production II</u>	2
• RAD 141	<u>Radiation Safety</u>	2
• RAD 171	<u>RAD Clinical Ed III</u>	3
<b>Total SHC</b>		<b>7</b>

#### Second Year Fall

PSY 150	<u>General Psychology</u>	3
• RAD 211	<u>RAD Procedures III</u>	3
• RAD 231	<u>Image Production III</u>	2
• RAD 251	<u>RAD Clinical Ed IV</u>	7
<b>Total SHC</b>		<b>15</b>

#### Second Year Spring

COM 231	<u>Public Speaking</u>	3
• RAD 261	<u>RAD Clinical Education V</u>	7
• RAD 271	<u>Radiography Capstone</u>	3
— —	<u>Humanities/Fine Arts Elective</u>	3
<b>Total SHC</b>		<b>16</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 73*

This entry was posted in [Health and Education, Radiography\\_\(45700\)](#) and tagged [Degree](#). Bookmark the [permalink](#).



## Radiography\_(45700)\_CIP 51.0911

CCPP Therapeutic & Diagnostic Services/Nurse Aide-Radiography (D45970PR) CIP 51.3902

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### Courses

BIO 168	<u>Anatomy and Physiology I</u>	4
BIO 169	<u>Anatomy and Physiology II</u>	4
COM 231	<u>Public Speaking</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
HSC 120	<u>CPR</u>	1
HUM 115	<u>Critical Thinking</u>	3
MAT 143	<u>Quantitative Literacy</u>	3
MED 120	<u>Survey of Medical Terminology</u>	2
NAS 101	<u>Nurse Aide I</u>	6
NAS 102	<u>Nurse Aide II</u>	6
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1
PSY 150	<u>General Psychology</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 42*

### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Radiography\\_\(45700\)](#) and tagged [Diploma](#). Bookmark the [permalink](#).

### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology (50420) CIP 48.0508

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### Description

The welding technology curriculum provides students with a sound understanding of the science, technology, and applications essential for successful employment in the welding and metalworking industry.

Instruction includes consumable and non-consumable electrode welding and cutting processes. Courses may include math, print reading, metallurgy, welding inspection, and destructive and non-destructive testing providing students with industry-standard skills developed through classroom training and practical application.

Graduates of the welding technology curriculum may be employed as entry-level technicians in welding and metalworking industries. Career opportunities also exist in construction, manufacturing, fabrication, sales, quality control, supervision, and welding-related self-employment.

### Awards

- **Associate in Applied Science Degree (A50420)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2018/07/23/associate-in-applied-science-degree-a50420/>)
- **CCPP Diploma (D50420PB)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-diploma-d50420p/>)
- **Diploma (D50420)** (<https://legacy.rccc.edu/catalog-2019-2020/2019/01/30/diploma-program-d50420/>)
- **Basic Certificate (C50420BC)** (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/03/basic-welding-certificate-c50420bc/>)
- **CCPP Basic Certificate (C50420PB)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/28/ccpp-certificate-c50420p/>)
- **Certificate (C50420)** (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/02/certificate-c50420/>)
- **High Performance Fabrication Certificate (C50420HP)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2017/10/03/high-performance-fabrication-welding-certificate-c50420hp/>)
- **MIG Certificate (C50420MI)** (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/03/mig-welding-certificate-c50420mi/>)
- **Orbital GTAW Pipe Certificate (C50420RB)**  
(<https://legacy.rccc.edu/catalog-2019-2020/2019/01/08/orbital-gtaw-pipe-certificate-c50420rb/>)
- **Stick Certificate (C50420ST)** (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/03/stick-welding-certificate-c50420st/>)
- **TIG Certificate (C50420TI)** (<https://legacy.rccc.edu/catalog-2019-2020/2017/10/03/tig-welding-certificate-c50420ti/>)

### Additional Information

At the end of each semester, students will take a qualification test (certification test). They will need to complete the Certification form that will be made available in the welding area by their instructors and submit the completed Certification form to their instructors. Students will be given the certification test during the last 2 weeks of the semester for a 16 week course and the last week of an 8 week course.

The welding technology program follows the AWS SENSE welding program. Upon completing and passing the requirements of SENSE, students will be required to pay the \$15 fee for each of the certifications to be registered with the AWS SENSE program.

There are personal tools students will have to supply. Contact any of the welding instructors for a complete list of tools needed while completing the A.A.S. degree.

### Contact Information

The Welding Technology (50420) CIP 48.0508 program is in the RCCC Department of Business, Engineering Technologies and Public Services (/industrialengineering/). For additional information regarding this program, contact the chair, Robert Simpson
















([robert.simpson@rccc.edu](mailto:robert.simpson@rccc.edu) (<mailto:robert.simpson@rccc.edu>)).

## Program Advising

### Advising Details

*Students seeking advising during the summer term should contact the program chair.*

### Program Advisors

<b>Brandon Hoffner</b> Lead Instructor in Academic Programs[+]	 <a href="mailto:brandon.hoffner@rccc.edu">brandon.hoffner@rccc.edu</a> ( <a href="mailto:brandon.hoffner@rccc.edu">mailto:brandon.hoffner@rccc.edu</a> )  (704) 216-3922  North
<b>Robert Simpson</b> Chair in Academic Programs[+]	 <a href="mailto:robert.simpson@rccc.edu">robert.simpson@rccc.edu</a> ( <a href="mailto:robert.simpson@rccc.edu">mailto:robert.simpson@rccc.edu</a> )  (704) 216-3921  North
<b>Lori Safrit</b> Instructor in Academic Programs[+]	 <a href="mailto:lori.safrit@rccc.edu">lori.safrit@rccc.edu</a> ( <a href="mailto:lori.safrit@rccc.edu">mailto:lori.safrit@rccc.edu</a> )  (704) 216-7186  North
<b>David Kanipe</b> Instructor in Academic Programs[+]	 <a href="mailto:david.kanipe@rccc.edu">david.kanipe@rccc.edu</a> ( <a href="mailto:david.kanipe@rccc.edu">mailto:david.kanipe@rccc.edu</a> )  (704) 216-3786  North
<b>Mike Huffman</b> Instructor in Academic Programs[+]	 <a href="mailto:mike.huffman@rccc.edu">mike.huffman@rccc.edu</a> ( <a href="mailto:mike.huffman@rccc.edu">mailto:mike.huffman@rccc.edu</a> )  (704) 216-7156  North

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Welding Technology \(50420\)](#), and tagged [Applied Sciences Program](#), [Program Description](#). Bookmark the [permalink](#).

## Welding Technology (50420) CIP 48.0508 Associate in Applied Science Degree (A50420)

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### Course Requirements

The following is a suggested program of study for completing this degree in six semesters. Some students' programs of study may be different, depending on their enrollment status (day, evening, full-time or part-time).

#### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
• WLD 110	<u>Cutting Processes</u>	2
• WLD 115	<u>SMAW (Stick) Plate</u>	5
• WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>17</b>

Note **Earn Basic Welding Certificate:** The Basic Welding Certificate (C50420BC) is earned upon successful completion of the First Year Fall Semester courses.

#### First Year Spring

WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
• WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
• WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>14</b>

#### First Year Summer

ENG 111	<u>Writing and Inquiry</u>	3
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
WLD 151	<u>Fabrication I</u>	4
<b>Total SHC</b>		<b>10</b>

Note **Earn Welding Diploma:** The Welding Diploma (D50420) is earned upon successful completion of the First Year Fall, Spring, and Summer courses.

#### Second Year Fall

DFT 151	<u>CAD I</u>	3
WLD 143	<u>Welding Metallurgy</u>	2
WLD 231	<u>GTAW (TIG) Pipe</u>	3
WLD 261	<u>Certification Practices</u>	2

Take one of the following humanities courses.

HUM 110	<u>Technology and Society</u>	3
HUM 115	<u>Critical Thinking</u>	3
<b>Total SHC</b>		<b>13</b>

## Second Year Spring

WLD 215	<u>SMAW (stick) Pipe</u>	4
WLD 262	<u>Inspection &amp; Testing</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4
— —	<u>Social/Behavioral Sciences Elective</u>	3
<b>Total SHC</b>		<b>14</b>

## Second Year Summer

— —	Major Electives	2
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Take one of the following courses.

WBL 113	<u>Work-Based Learning I</u>	3
WLD 251	<u>Fabrication II</u>	3

Take one of the following communication courses.

COM 110	<u>Introduction to Communication</u>	3
COM 120	<u>Intro to Interpersonal Communication</u>	3
COM 231	<u>Public Speaking</u>	3
ENG 114	<u>Professional Research &amp; Reporting</u>	3
<b>Total SHC</b>		<b>8</b>

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Note WBL coursework is limited to 3 SHC.

## Major Electives

Select a minimum of 2 SHC from the following courses.

DFT 154	<u>Intro to Solid Modeling</u>	3
MEC 111	<u>Machine Processes I</u>	3
PHY 110	<u>Conceptual Physics</u>	3
PHY 110A	<u>Conceptual Physics Lab</u>	1
WLD 270	<u>Orbital Welding TIG/Pipe</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete degree: 76*

This entry was posted in [Business, Engineering Technologies and Public Services, Welding Technology \(50420\)](#), and tagged [Degree](#). Bookmark the [permalink](#).

## Welding Technology (50420) CIP 48.0508 Diploma (D50420)

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### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
• WLD 110	<u>Cutting Processes</u>	2
• WLD 115	<u>SMAW (Stick) Plate</u>	5
• WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>17</b>

Note Earn Basic Welding Certificate: The Basic Welding Certificate (C50420BC) is earned upon successful completion of the Fall Semester courses.

### First Year Spring

WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
• WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
• WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>14</b>

### First Year Summer

ENG 111	<u>Writing and Inquiry</u>	3
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Take one of the following courses. Students who select DFT 151 instead of WLD 122 will take DFT 151 in First Year Fall and CIS 110 OR MAT 121 in First Year Spring.

DFT 151	<u>CAD I</u>	3
WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3

Take one of the following WLD courses. Students who select WLD-265 will take it Second Year Spring.

WLD 151	<u>Fabrication I</u>	4
WLD 265	<u>Automated Welding/Cutting</u>	4
<b>Total SHC</b>		<b>10</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 41*

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Welding Technology \(50420\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

## Welding Technology (50420) CIP 48.0508

### Basic Certificate (C50420BC)

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#### First Year Fall

CIS 110	<u>Introduction to Computers</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
WLD 110	<u>Cutting Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>17</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 17*

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Welding Technology \(50420\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology\_(50420)\_CIP 48.0508 Certificate (C50420)

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### First Year Fall

• WLD 110	<u>Cutting Processes</u>	2
• WLD 115	<u>SMAW (Stick) Plate</u>	5
• WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>11</b>

### First Year Spring

• WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
• WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

This entry was posted in [Business, Engineering Technologies and Public Services, Welding Technology\\_\(50420\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.



## Welding Technology\_(50420)\_CIP 48.0508 High Performance Fabrication Certificate (C50420HP)

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### First Year Fall

WLD 110	<u>Cutting Processes</u>	2
WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>6</b>

### First Year Spring

WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

This entry was posted in [Business, Engineering Technologies and Public Services, Welding Technology\\_\(50420\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology (50420) CIP 48.0508

### MIG Certificate (C50420MI)

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#### First Year Fall

WLD 110	<u>Cutting Processes</u>	2
<b>Total SHC</b>		<b>2</b>

#### First Year Spring

WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>7</b>

#### First Year Summer

WLD 122	<u>GMAW (MIG) Plate/Pipe</u>	3
<b>Total SHC</b>		<b>3</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Welding Technology \(50420\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology (50420) CIP 48.0508 Orbital GTAW Pipe Certificate (C50420RB)

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### First Year Fall

WLD 110	<u>Cutting Processes</u>	2
WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>6</b>

### First Year Spring

WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
<b>Total SHC</b>		<b>3</b>

### First Year Summer

WLD 270	<u>Orbital Welding TIG/Pipe</u>	4
<b>Total SHC</b>		<b>4</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 13*

This entry was posted in [Business, Engineering Technologies and Public Services, Welding Technology \(50420\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology\_(50420)\_CIP 48.0508 Stick Certificate (C50420ST)

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### First Year Fall

WLD 110	<u>Cutting Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
<b>Total SHC</b>		<b>7</b>

### First Year Spring

WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>7</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 14*

This entry was posted in [Business, Engineering Technologies and Public Services, Welding Technology\\_\(50420\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology\_(50420)\_CIP 48.0508

### TIG Certificate (C50420TI)

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#### First Year Fall

WLD 110	<u>Cutting Processes</u>	2
WLD 131	<u>GTAW (TIG) Plate</u>	4
<b>Total SHC</b>		<b>6</b>

#### First Year Spring

WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
<b>Total SHC</b>		<b>6</b>

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 12*

This entry was posted in [Business, Engineering Technologies and Public Services, Welding Technology\\_\(50420\)](#) and tagged [Certificate](#). Bookmark the [permalink](#).

## Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology (50420) CIP 48.0508

### CCPP Diploma (D50420PB)

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#### Courses

CIS 110	<u>Introduction to Computers</u>	3
DFT 151	<u>CAD I</u>	3
ENG 111	<u>Writing and Inquiry</u>	3
MAT 121	<u>Algebra/Trigonometry I</u>	3
WLD 110	<u>Cutting Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 116	<u>SMAW (stick) Plate/Pipe</u>	4
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 132	<u>GTAW (TIG) Plate/Pipe</u>	3
WLD 141	<u>Symbols and Specifications</u>	3
WLD 265	<u>Automated Welding/Cutting</u>	4

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete diploma: 41*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Welding Technology \(50420\)](#), and tagged [Diploma](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.

## Welding Technology (50420) CIP 48.0508

### CCPP Basic Certificate (C50420PB)

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#### Courses

WLD 110	<u>Cutting Processes</u>	2
WLD 115	<u>SMAW (Stick) Plate</u>	5
WLD 121	<u>GMAW (MIG) FCAW/Plate</u>	4
WLD 131	<u>GTAW (TIG) Plate</u>	4
WLD 141	<u>Symbols and Specifications</u>	3

The • symbol denotes a core course that may not be substituted.

*Total semester hour credits to complete certificate: 18*

#### Career and College Promise Programs (CCPP)

For additional information, please see About Career and College Promise on our website by copying and pasting this link into your web browser: <https://www.rccc.edu/highschool/>

This entry was posted in [Business, Engineering Technologies and Public Services](#), [Welding Technology \(50420\)](#), and tagged [Certificate](#). Bookmark the [permalink](#).

#### Gainful Employment Information for 2016-2017

Not currently available for this award.





# Course Descriptions



## Course Information

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The courses listed in this catalog constitute the content of the curriculum programs of the college. The course prefixes are listed in alphabetical order.

### Credit Hours

Credit Hours are awarded as follows:

- Credit of one semester hour is awarded for each 16 hours of “class work”. Class work is lecture and other classroom instructions. Class work is under the supervision of an instructor.
- Credit of one semester hour is awarded for each 32 hours of “experiential laboratory work”. Experiential laboratory work means instruction given to a student by an instructor to increase the student’s knowledge and skills without immediate student application.
- Credit of one semester hour is awarded for each 48 hours of “faculty directed laboratory work”. Faculty directed laboratory work involves structured and coordinated demonstration by an instructor with an immediate student application.
- Credit of one semester hour is awarded for each 48 hours of “clinical practice”. Clinical practice is a structured, faculty-directed learning experience in a health science program which develops job proficiency. Clinical practice requires significant preparation, coordination and scheduling by the facility and is under the supervision of an instructor or preceptor who is qualified for the particular program.
- Credit of one semester hour is awarded for each 160 hours of ‘work experience’ such as cooperative education, practicums, and internships. Work experience involves the development of job skills by providing the student with employment that is directly related to, and coordinated with, the education program. Student activity in work experience is planned and coordinated by a college representative, and the employer is responsible for the control and supervision of the student on the job.

### Contact Hours

The contact hours for a course are the sum of the lecture hours and lab, clinical or work experience.

### Writing Intensive Courses

Writing intensive courses are courses in which students write to learn. Writing assignments may range from highly informal, such as journals, to the highly formal, such as research papers. Normally, a writing intensive course will contain a mixture of informal and formal writing assignments which will account for at least seventy percent of a student’s overall evaluation in the course. It is important to note that the catalog’s designation of a course as “writing intensive” indicates only Rowan-Cabarrus Community College’s internal curriculum designation of that course as writing intensive. Students intending to transfer credit to other colleges and universities should consult with those institutions to determine if the course in question will be accepted as writing intensive.

### Developmental/Non-Credit Courses

Developmental courses are designed to prepare students for college level work and will not satisfy credit hours for any degree, diploma, or certificate program. They will not transfer to a four-year institution, but will transfer to any of the community colleges within the NC Community College System. Credit earned for these courses will only satisfy the prerequisites for entry into a curriculum level course.

Non-Credit courses are numbered below 100. Students may be required to take one or more developmental courses due to level of proficiency, or they may choose developmental courses if they feel the need for review. Students level of proficiency can be evaluated by SAT/ACT, college placement test, or high school GPA. Non-credit courses provide the necessary refresher for success in a given curriculum.

## CHM - Chemistry

Area of Study

Course Prefix  
and Number

### CHM 151 – General Chemistry I

Course Title

Course  
Description

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. High school chemistry or equivalent with a grade of C or higher within the last five years is strongly recommended.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

#### Corequisites

Take MAT-171

#### Prerequisites

Take DRE-098 or ENG-111

## Course Descriptions

or

### ACA – Academic Related

#### ACA 115 – Success & Study Skills

This course provides an orientation to the campus resources and academic skills necessary to achieve educational objectives. Emphasis is placed on an exploration of facilities and services, study skills, library skills, self-assessment, wellness, goal-setting, and critical thinking. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals.

It is highly encouraged that this course be taken during the first year as a "first year" or "freshman" seminar.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

#### ACA 118 – College Study Skills

This course covers skills and strategies designed to improve study behaviors. Topics include time management, note taking, test taking, memory techniques, active reading strategies, critical thinking, communication skills, learning styles, and other strategies for effective learning. Upon completion, students should be able to apply appropriate study strategies and techniques to the development of an effective study plan.

This course is designed for students seeking to enter a healthcare related program and is required for specific healthcare programs as indicated in the college catalog.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

#### ACA 122 – College Transfer Success

This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college policies and culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1



## ACC – Accounting

### ACC 115 – College Accounting

This course introduces basic accounting principles for a business. Topics include the complete accounting cycle with end-of-period statements, bank reconciliation, payrolls, and petty cash. Upon completion, students should be able to demonstrate an understanding of accounting principles and apply those skills to a business organization.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

### ACC 120 – Principles of Financial Accounting

This course introduces business decision-making using accounting information systems. Emphasis is placed on analyzing, summarizing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making and address ethical considerations.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

### ACC 121 – Principles of Managerial Accounting

This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts including product-costing systems.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

#### Prerequisites

Take ACC-120

### ACC 129 – Individual Income Taxes

This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual income tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### ACC 132 – NC Business Taxes

This course introduces the relevant laws governing North Carolina taxes as they apply to business. Topics include sales taxes, income taxes for business entities, payroll taxes, unemployment taxes, and other taxes pertaining to the State of North Carolina. Upon completion, students should be able to maintain a company's records to comply with the laws governing North Carolina business taxes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## ACC 140 – Payroll Accounting

This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take One: ACC-115 or ACC-120

## ACC 149 – Intro to ACC Spreadsheets

This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take One: ACC-115 or ACC-120

## ACC 150 – Accounting Software Applications

This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to accurately solve accounting problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take One: ACC-115 or ACC-120

## ACC 175 – Hotel and Restaurant Accounting

This course covers generally accepted accounting principles and the uniform system of accounts for small hotels and motels of the American Hotel and Motel Association. Emphasis is placed on the accounting cycle, analysis of financial statements, and payroll procedures including treatment of tips. Upon completion, students should be able to demonstrate competence in the accounting principles and procedures used in hotels and restaurants.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## ACC 215 – Ethics in Accounting

This course introduces students to professional codes of conduct and ethics adopted by professional associations and state licensing boards for accountants, auditors, and fraud examiners. Topics include research and discussion of selected historical and contemporary ethical cases and issues as they relate to accounting and business. Upon completion, students should be able to apply codes, interpret facts and circumstances, as they relate to accounting firms and business activities.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ACC-121

## ACC 220 – Intermediate Accounting I

This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and extensive analysis of balance sheet components. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

### Prerequisites

Take ACC-120

## ACC 221 – Intermediate Accounting II

This course is a continuation of ACC 220. Emphasis is placed on special problems which may include leases, bonds, investments, ratio analyses, present value applications, accounting changes, and corrections. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take ACC-220

## ACC 225 – Cost Accounting

This course introduces the nature and purposes of cost accounting as an information system for planning and control. Topics include direct materials, direct labor, factory overhead, process, job order, and standard cost systems. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ACC-121

## ACC 227 – Practices in Accounting

This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics, and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ACC-220

## ACC 240 – Gov & Not-For-Profit Acct

This course introduces principles and procedures applicable to governmental and not-for-profit organizations. Emphasis is placed on various budgetary accounting procedures and fund accounting. Upon completion, students should be able to demonstrate an understanding of the principles involved and display an analytical problem-solving ability for the topics covered.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ACC-121



## ACC 250 – Advanced Accounting

This course is designed to analyze the special accounting issues, which may include business combinations, partnerships, international accounting, estates, and trusts. Emphasis is placed on analyzing transactions and preparing working papers and financial statements. Upon completion, students should be able to solve a wide variety of problems by advanced application of accounting principles and procedures.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ACC-220

## ACC 268 – Information Systems & Internal Controls

This course covers the design and operation of accounting information systems, with emphasis placed upon transaction cycles and the necessary controls for reliable data. Topics include accounting procedures; authorizing, documentation, and monitoring; flowcharting, data flow diagrams, and scheduling; and some auditing concepts. Upon completion, students should be able to demonstrate an analytical problem-solving ability to communicate effectively their analysis in written and oral presentations.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ACC-121

## ACC 269 – Auditing & Assurance Services

This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Topics include planning, conducting and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ACC-220

## ACC 270 – International Accounting

This course includes identifying, recording, and interpreting financial information for accounting systems used in different countries. Topics include currency exchange rates, methods of setting and selecting transfer prices, practices used to account for rates of inflation, and major types

of taxes. Upon completion, students should be able to describe accounting systems and their impacts on different currencies and demonstrate a basic knowledge of international accounting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ACC-120

# AHR – Air Conditioning, Heating and Refrigeration

## AHR 110 – Introduction to Refrigeration

This course introduces the basic refrigeration process used in mechanical refrigeration and air conditioning systems. Topics include terminology, safety, and identification and function of components; refrigeration cycle; and tools and instrumentation used in mechanical refrigeration systems. Upon completion, students should be able to identify refrigeration systems and components, explain the refrigeration process, and use the tools and instrumentation of the trade.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	5

## AHR 112 – Heating Technology

This course covers the fundamentals of heating including oil, gas, and electric heating systems. Topics include safety, tools and instrumentation, system operating characteristics, installation techniques, efficiency testing, electrical power, and control systems. Upon completion, students should be able to explain the basic oil, gas, and electrical heating systems and describe the major components of a heating system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

## AHR 113 – Comfort Cooling

This course covers the installation procedures, system operations, and maintenance of residential and light commercial comfort cooling systems. Topics include terminology, component operation, and testing and repair of equipment used to control and produce assured comfort levels. Upon completion, students should be able to use psychrometrics, manufacturer specifications, and test instruments to determine proper system operation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

## Prerequisites

Take AHR-110

## AHR 114 – Heat Pump Technology

This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

### Prerequisites

Take One: AHR-110 or AHR-113

## AHR 115 – Refrigeration Systems

This course introduces refrigeration systems and applications. Topics include defrost methods, safety and operational control, refrigerant piping, refrigerant recovery and charging, and leak testing. Upon completion, students should be able to assist in installing and testing refrigeration systems and perform simple repairs.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take AHR-110

## AHR 120 – HVACR Maintenance

This course introduces the basic principles of industrial air conditioning and heating systems. Emphasis is placed on preventive maintenance procedures for heating and cooling equipment and related components. Upon completion, students should be able to perform routine preventive maintenance tasks, maintain records, and assist in routine equipment repairs.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## AHR 130 – HVAC Controls

This course covers the types of controls found in residential and commercial comfort systems. Topics include electrical and electronic controls, control schematics and diagrams, test instruments, and analysis and troubleshooting of electrical systems. Upon completion, students should be able to diagnose and repair common residential and commercial comfort system controls.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take One: AHR-111, ELC-111, or ELC-112

## AHR 151 – HVAC Duct Systems I

This course introduces the techniques used to lay out and fabricate duct work commonly found in HVAC systems. Emphasis is placed on the skills required to fabricate duct work. Upon completion, students should be able to lay out and fabricate simple duct work.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## AHR 152 – HVAC Duct Systems II

This course introduces the techniques used to lay out and fabricate more advanced types of duct work found in HVAC systems. Emphasis is placed on the skills required to work with complex rectangular and round fittings and transitions. Upon completion, students should be able to lay out and fabricate complex rectangular and round fittings.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take AHR-151

## AHR 160 – Refrigerant Certification

This course covers the requirements for the EPA certification examinations. Topics include small appliances, high pressure systems, and low pressure systems. Upon completion, students should be able to demonstrate knowledge of refrigerants and be prepared for the EPA certification examinations.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

## AHR 211 – Residential System Design

This course introduces the principles and concepts of conventional residential heating and cooling system design. Topics include heating and cooling load estimating, basic psychrometrics, equipment selection, duct system selection, and system design. Upon completion, students should be able to design a basic residential heating and cooling system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## AHR 212 – Advanced Comfort Systems

This course covers water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pump systems including variable speed drives and controls. Emphasis is placed on the application, installation, and servicing of water-source systems and the mechanical and electronic control components of advanced comfort systems. Upon completion, students should be able to test, analyze, and troubleshoot water-cooled comfort systems, water-source/geothermal heat pumps, and high efficiency heat pumps.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Prerequisites

Take AHR-114

## AHR 213 – HVACR Building Code

This course covers the North Carolina codes that are applicable to the design and installation of HVACR systems. Topics include current North Carolina codes as applied to HVACR design, service, and installation. Upon completion, students should be able to demonstrate the correct usage of North Carolina codes that apply to specific areas of the HVACR trade.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## AHR 215 – Commercial HVAC Controls

This course introduces HVAC control systems used in commercial applications. Topics include electric/electronic control systems, pneumatic control systems, DDC temperature sensors, humidity sensors, pressure sensors, wiring, controllers, actuators, and controlled devices. Upon completion, students should be able to verify or correct the performance of common control systems with regard to sequence of operation and safety.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take One: AHR-111, ELC-111, or ELC 112

## AHR 225 – Commercial System Design

This course covers the principles of designing heating and cooling systems for commercial buildings. Emphasis is placed on commercial heat loss/gain calculations, applied psychometrics, air-flow calculations, air distribution system design, and equipment selection. Upon completion, students should be able to calculate heat loss/gain, design and size air and water distribution systems, and select equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## AHR 235 – Refrigeration Design

This course covers the principles of commercial refrigeration system operation and design. Topics include walk-in coolers, walk-in freezers, system components, load calculations, equipment selection, defrost systems, refrigerant line sizing, and electric controls. Upon completion, students should be able to design, adjust, and perform routine service procedures on a commercial refrigeration system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take AHR-110

## AHR 240 – Hydronic Heating

This course covers the accepted procedures for proper design, installation, and balance of hydronic heating systems for residential or commercial buildings. Topics include heating equipment; pump, terminal unit, and accessory selection; piping system selection and design; and pipe sizing and troubleshooting. Upon completion, students should be able to assist with the proper design, installation, and balance of typical hydronic systems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take AHR-112

## AHR 245 – Chiller Systems

This course introduces the fundamentals of liquid chilling equipment. Topics include characteristics of water, principles of water chilling, the chiller, the refrigerant, water and piping circuits, freeze prevention, purging, and equipment flexibility. Upon completion, students should be able to describe the components, controls, and overall operation of liquid chilling equipment and perform basic maintenance tasks.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take AHR-110

## AHR 255 – Indoor Air Quality

This course introduces the techniques of assessing and maintaining the quality of the indoor environment in residential and commercial structures. Topics include handling and investigating complaints, filter selection, humidity control, testing for sources of carbon monoxide, impact of mechanical ventilation, and building and duct pressures. Upon completion, students should be able to assist in investigating and solving common indoor air quality problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## AHR 263 – Energy Management

This course covers building automation computer programming as currently used in energy management. Topics include night setback, duty cycling, synchronization, schedule optimization, and anticipatory temperature control. Upon completion, students should be able to write programs utilizing the above topics and connect computer systems to HVAC systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take One: AHR-125 or AHR-215

## ALT – Alternative Energy Technology

### ALT 120 – Renewable Energy Technologies

This course provides an introduction to multiple technologies that allow for the production and conservation of energy from renewable sources. Topics include hydro-electric, wind power, passive and active solar energy, tidal energy, appropriate building techniques, and energy conservation methods. Upon completion, students should be able to demonstrate an understanding of renewable energy production and its impact on humans and their environment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## ANT – Anthropology

### ANT 210 – General Anthropology

This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ANT 220 – Cultural Anthropology

This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ANT 230 – Physical Anthropology

This course introduces the scientific study of human evolution and adaptation. Emphasis is placed on evolutionary theory, population genetics, biocultural adaptation and human variation, as well as non-human primate evolution, morphology, and behavior. Upon completion, students should be able to demonstrate an understanding of the biological and cultural processes which have resulted in the formation of the human species.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ANT 230A – Physical Anthropology Lab

This course provides laboratory work that reinforces the material presented in ANT 230. Emphasis is placed on laboratory exercises which may include fossil identification, genetic analysis, skeletal comparisons, forensics, computer simulations, and field observations. Upon completion, students should be able to demonstrate an understanding of the analytical skills employed by anthropologists in the study of primate evolution and variation.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Corequisites

ANT-230

## ANT 240 – Archaeology

This course introduces the scientific study of the unwritten record of the human past. Emphasis is placed on the process of human cultural evolution as revealed through archaeological methods of excavation and interpretation. Upon completion, students should be able to demonstrate an understanding of how archaeologists reconstruct the past and describe the variety of past human cultures.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ANT 240A – Archaeology Field Lab



This course provides practical applications of archaeological methods. Emphasis is placed on basic archaeological methods and techniques required in site surveys, site classification, excavation, recording, processing, presentation, chronometry, and analysis of materials. Upon completion, students should be able to participate in applying archaeological methods and techniques to the excavation of a specific site.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	4	0	0	2

## Corequisites

ANT-240

## ARC – Architecture

### ARC 114 – Architectural CAD

This course introduces basic architectural CAD techniques. Topics include basic commands and system hardware and software. Upon completion, students should be able to prepare and plot architectural drawings to scale within accepted architectural standards.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### ARC 221 – Architectural 3-D CAD

This course introduces architectural three-dimensional CAD applications. Topics include three-dimensional drawing, coordinate systems, viewing, rendering, modeling, and output options. Upon completion, students should be able to prepare architectural three-dimensional drawings and renderings.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## Prerequisites

Take ARC-114

### ARC 225 – Architectural Building Information Modeling I

This course is an introduction to the fundamentals of Building Information Modeling (BIM) as a construction documentation system. Topics include basic parametric modeling, creating new types and families of components, and using 3D models to create design drawings. Upon completion, students should be able to use BIM software to create, edit, and print rudimentary architectural 3D computer models.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## ARC 226 – Architectural Building Information Modeling II

This course covers advanced concepts of Building Information Modeling (BIM) including complex drawing generation and inter-disciplinary collaboration. Topics include advanced parametric modeling and model analysis, inter-disciplinary coordination, design web format models, material take-off, schedules, and rendering. Upon completion, students should be able to apply BIM software to create full 3D project models and convert them to scaled working or presentation drawings.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take ARC-225

## ART – Art

### ART 111 – Art Appreciation

This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### ART 114 – Art History Survey I

This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### ART 115 – Art History Survey II

This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ART 117 – Non-Western Art History

This course introduces non-Western cultural perspectives. Emphasis is placed on, but not limited to, African, Oriental, and Oceanic art forms throughout history. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of non-Western social and cultural development.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ART 118 – Art by Women

This course provides an analytical study of the works of representative female artists. Emphasis is placed on the historical and cultural contexts, themes, and aesthetic features of individual works. Upon completion, students should be able to interpret, analyze, and discuss selected works.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ART 121 – Two-Dimensional Design

This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 122 – Three-Dimensional Design

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 131 – Drawing I

This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 132 – Drawing II

This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-131

## ART 135 – Figure Drawing I

This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-131

## ART 171 – Computer Art I

This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 212 – Gallery Assistantship I

This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 214 – Portfolio and Resume

This course covers resume writing, interview skills, and the preparation and presentation of an art portfolio. Emphasis is placed on the preparation of a portfolio of original artwork, the preparation of a photographic portfolio, approaches to resume writing, and interview techniques. Upon completion, students should be able to photograph and present a digital portfolio and write an effective resume.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## ART 215 – Visual Art Portfolio

This course covers the organization of a comprehensive body of work designed to showcase the visual artist's competencies in selected media and is intended for college transfer or professional advancement. Emphasis includes preparation for gallery exhibition, creation of a digital portfolio, and development of materials associated with best practices for showcasing artistic works, skills, and experience. Upon completion, students should be able to display a professional arrangement of work designed for entry into an advanced visual arts program, application for employment, or presentation to juried gallery exhibitions.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 231 – Printmaking I

This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 232 – Printmaking II

This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART 231.

## ART 235 – Figure Drawing II

This course extends the study and rendering of the draped and undraped human figure. Emphasis is placed on the exploration of materials and approaches to drawing. Upon completion, students should be able to demonstrate creativity in the representation of the figure.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-135

## ART 240 – Painting I

This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 241 – Painting II

This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-240

## ART 244 – Watercolor

This course introduces basic methods and techniques used in watercolor. Emphasis is placed on application, materials, content, and individual expression. Upon completion, students should be able to demonstrate a variety of traditional and nontraditional concepts used in watercolor

media.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 250 – Surface Design: Textiles

This course introduces the basic principles and elements of art as applied to textile surfaces. Emphasis is placed on direct, top-dyed processes that utilize both synthetic and natural dyes, and techniques such as batiking, stenciling, and stamping. Upon completion, students should be able to demonstrate a basic understanding of appropriate materials and techniques as they apply to original design on a variety of textile surfaces.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 261 – Photography I

This course introduces photographic equipment, theory, and processes. Emphasis is placed on camera operation, composition, darkroom technique, and creative expression. Upon completion, students should be able to successfully expose, develop, and print a well-conceived composition.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 262 – Photography II

This course introduces the creative manipulation of alternative photographic materials and processes such as toning, hand coloring, infrared, and multiple exposure. Emphasis is placed on personal vision and modes of seeing. Upon completion, students should be able to create properly exposed images using a variety of photographic materials and processes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-261

## ART 264 – Digital Photography I

This course introduces digital photographic equipment, theory and processes. Emphasis is placed on camera operation, composition, computer photo manipulation and creative expression. Upon completion, students should be able to successfully expose, digitally manipulate, and print a well-conceived composition.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 265 – Digital Photography II

This course provides exploration of the concepts and processes of photo manipulation through complex composite images, special effects, color balancing and image/text integration. Emphasis is placed on creating a personal vision and style. Upon completion, students should be able to produce well-executed images using a variety of photographic and photo manipulative approaches.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

### Prerequisites

Take ART-264

## ART 266 – Videography I

This course introduces various aspects of basic video production including concept development, scripting, camera operation, and post-production. Emphasis is placed on creative expression, camera handling, story boarding, and editing. Upon completion, students should be able to demonstrate a basic understanding of video camera operation and production techniques.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 267 – Videography II

This course is designed to provide a framework for the production of a long-term video project. Emphasis is placed on realization of the unique creative vision. Upon completion, students should be able to produce a thematically coherent, edited video with sound and titling.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

### Prerequisites

Take ART-266

## ART 275 – Introduction to Graphic Design

This course introduces students to the field of graphic design. Emphasis is placed on the basic concepts of visual communication, the design process and the ability to evaluate and discuss design issues in a critical manner. Upon completion, students should be able to use contemporary design software and visual language techniques as they apply to creative visual problem-solving involving typography, image manipulation, symbolic representation and page management while being responsive to the relationship between client, designer and audience.

### Hours



CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 281 – Sculpture I

This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in variety of sculptural approaches.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 282 – Sculpture II

This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-281

## ART 283 – Ceramics I

This course provides an introduction to three-dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## ART 284 – Ceramics II

This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## Prerequisites

Take ART-283

## ART 288 – Studio

This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials, and techniques.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## AST – Astronomy

### AST 111 – Descriptive Astronomy

This course introduces an overall view of modern astronomy. Topics include an overview of the solar system, the sun, stars, galaxies, and the larger universe. Upon completion, students should be able to demonstrate an understanding of the universe around them.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### AST 111A – Descriptive Astronomy Lab

The course is a laboratory to accompany AST 111. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 111 and which provide practical experience. Upon completion, students should be able to demonstrate an understanding of the universe around them.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Corequisites

AST-111

## AST 151 – General Astronomy I

This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take 1 group; # Take MAT-070; # Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060; # Take MAT-003 with a grade of P3.

## AST 151A – General Astronomy I Lab

The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Corequisites

AST-151

## AST 152 – General Astronomy II

This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take AST-151

## AST 152A – General Astronomy II Lab

The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a working knowledge of astronomy.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Corequisites

AST-152

## Prerequisites

Take AST-151; Take AST-151A;

## AST 251 – Observational Astronomy

This course covers the operation of the telescope and related observatory equipment. Emphasis is placed on the use of the telescope and related observatory equipment, including techniques of data collection, measurements, and data analysis. Upon completion, students should be able to set up a telescope and use the coordinate system to locate objects, collect data, and make measurements with the telescope.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take AST-111 or AST-152; Take AST-152A;

## ATR – Automation & Robotics

### ATR 112 – Intro to Automation

This course introduces the basic principles of automated systems and describes the tasks that technicians perform on the job. Topics include the history, development, and current applications of robots and automated systems including their configuration, operation, components, and controls. Upon completion, students should be able to understand the basic concepts of automation and robotic systems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### ATR 281 – Automated Manufacturing

This course introduces the concepts and principles of automation in the manufacturing environment. Emphasis is placed on the devices used in hard and flexible automated systems, including the study of inputs, outputs, and control system integration. Upon completion, students should be able to plan, design, and implement automation to support manufacturing processes.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## AUT – Automotive

### AUT 113 – Automotive Servicing I

This course is a lab used as an alternative to co-op placement. Emphasis is placed on shop operations, troubleshooting, testing, adjusting, repairing, and replacing components using appropriate test equipment and service information. Upon completion, students should be able to

perform a variety of automotive repairs using proper service procedures and to operate appropriate equipment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	2

## Prerequisites

Take AUT-181 AUT-183 AUT-141 AUT-151 AUT-163

## AUT 116 – Engine Repair

This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

AUT-116A

## AUT 116A – Engine Repair Lab

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

AUT-116

## AUT 141 – Suspension & Steering Systems

This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

AUT-141A

## AUT 141A – Suspension & Steering Lab

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

AUT-141

## AUT 151 – Brake Systems

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

AUT-151A

## AUT 151A – Brakes Systems Lab

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

AUT-151

## AUT 163 – Advanced Automotive Electricity

This course covers electronic theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of electronics, lighting, gauges, horn, wiper, accessories, and body modules. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, and troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Corequisites

AUT-163A

### Prerequisites

Take TRN-120

## AUT 163A – Advanced Automotive Electricity Lab

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, troubleshooting and emerging electrical/electronic systems technologies. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

### Corequisites

AUT-163

## AUT 181 – Engine Performance 1

This course covers the introduction, theory of operation, and basic diagnostic procedures required to restore engine performance to vehicles equipped with complex engine control systems. Topics include an overview of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Corequisites

AUT-181A

### Prerequisites

Take TRN-120;

## AUT 181A – Engine Performance 1 Lab

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include overviews of engine operation, ignition components and systems, fuel delivery, injection components and systems and emission control devices and emerging engine performance technologies. Upon completion, students should be able to describe operation and diagnose/repair basic ignition, fuel and emission related driveability problems using appropriate test equipment/service information.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

### Corequisites

AUT-181

## AUT 183 – Engine Performance 2

This course covers study of the electronic engine control systems, the diagnostic process used to locate engine performance concerns, and procedures used to restore normal operation. Topics will include currently used fuels and fuel systems, exhaust gas analysis, emission control components and systems, OBD II (on-board diagnostics) and inter-related electrical/electronic systems. Upon completion, students should be able to diagnose and repair complex engine performance concerns using appropriate test equipment and service information.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Prerequisites

Take AUT-181

## AUT 221 – Automatic Transmissions/Transaxles

This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair automatic drive trains.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Corequisites

AUT-221A

### Prerequisites

Take TRN-120;

## AUT 221A – Automatic Transmissions/Transaxles Lab



This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

AUT-221

## AUT 231 – Manual Transmissions/Transaxles/Drive Trains

This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, driveshafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train servicing and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory, diagnose and repair manual drive trains.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

AUT-231A

## Prerequisites

Take TRN-120;

## AUT 231A – Manual Transmissions/Transaxles/Drive Trains Lab

This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

AUT-231

## BAF – Banking and Finance

### BAF 143 – Financial Planning

This course covers the perspectives, principles, and practices of financial planning. Topics include investment, retirement, tax, and estate planning. Upon completion, students should be able to understand the process that looks at a customer's financial picture and recommend strategies to achieve the customer's objectives.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BIO – Biology

### BIO 106 – Intro to Anatomy/Physiology/Microbiology

This course covers the fundamental and principle concepts of human anatomy and physiology and microbiology. Topics include an introduction to the structure and function of cells, tissues, and human organ systems, and an overview of microbiology, epidemiology, and control of microorganisms. Upon completion, students should be able to identify structures and functions of the human body and describe microorganisms and their significance in health and disease.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### BIO 110 – Principles of Biology

This course provides a survey of fundamental biological principles for non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, evolution, ecology, diversity, and other related topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### BIO 111 – General Biology I

This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, molecular and cellular biology, metabolism and energy transformation, genetics, evolution, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take ENG-002 or ENG-111.

## BIO 112 – General Biology II

This course is a continuation of BIO 111. Emphasis is placed on organisms, evolution, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Prerequisites

Take BIO-111

## BIO 140 – Environmental Biology

This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BIO 140A – Environmental Biology Lab

This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

### Corequisites

BIO-140

## BIO 163 – Basic Anatomy & Physiology

This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	2	0	0	5

## Prerequisites

Take ENG-002 or ENG-111

## BIO 168 – Anatomy and Physiology I

This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take ENG-002 or ENG-111

## BIO 169 – Anatomy and Physiology II

This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take BIO-168; with a grade of "C" or better.

## BIO 175 – General Microbiology

This course covers principles of microbiology with emphasis on microorganisms and human disease. Topics include an overview of microbiology and aspects of medical microbiology, identification and control of pathogens, disease transmission, host resistance, and immunity. Upon completion, students should be able to demonstrate knowledge of microorganisms and the disease process as well as aseptic and sterile techniques.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take One: BIO-110, BIO-111, BIO-163, BIO-165, or BIO-168.

## BIO 250 – Genetics

This course covers principles of prokaryotic and eukaryotic cell genetics. Emphasis is placed on the molecular basis of heredity, chromosome structure, patterns of Mendelian and non-Mendelian inheritance, evolution, and biotechnological applications. Upon completion, students should be able to recognize and describe genetic phenomena and demonstrate knowledge of important genetic principles.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Prerequisites

Take BIO-112

## BIO 275 – Microbiology

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Prerequisites

Take One: BIO 110, BIO 111, BIO 163, BIO 165, or BIO 168

## BPR – Blueprint Reading

### BPR 111 – Print Reading

This course introduces the basic principles of print reading. Topics include line types, orthographic projections, dimensioning methods, and notes. Upon completion, students should be able to interpret basic prints and visualize the features of a part or system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### BPR 121 – Blueprint Reading-Mechanical

This course covers the interpretation of intermediate blueprints. Topics include tolerancing, auxiliary views, sectional views, and assembly drawings. Upon completion, students should be able to read and interpret a mechanical working drawing.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take One: BPR-111 or MAC-131

## BPR 130 – Print Reading-Construction

This course covers the interpretation of prints and specifications that are associated with design and construction projects. Topics include interpretation of documents for foundations, floor plans, elevations, and related topics. Upon completion, students should be able to read and interpret construction prints and documents.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BPR 230 – Commercial Blueprints

This course covers blueprints specific to commercial structures and requires basic blueprint reading skills and/or a commercial construction background. Topics include site, structural, mechanical, electrical, and plumbing blueprints and specifications. Upon completion, students should be able to interpret commercial blueprints and specifications.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take BPR-130

## BTC – Biotechnology

### BTC 181 – Basic Laboratory Techniques

This course introduces the basic skills and knowledge necessary in a biological or chemical laboratory. Emphasis is placed on good manufacturing practices, safety, sustainable lab practices, solution preparation, and equipment operation and maintenance following standard operating procedures. Upon completion, students should be able to prepare and perform basic laboratory procedures using labware, solutions, and equipment according to prescribed protocols.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take 1 group; # Take MAT-070; # Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050;

## BTC 270 – Recombinant DNA Technology

This course covers basic methods in biotechnology for the manipulation of nucleic acids. Emphasis is placed on topics concerning techniques used in recombinant DNA technology, including PCR, restriction digests, mapping, cloning, and forensics. Upon completion, students should be able to demonstrate an understanding of the theory, practice, and application of recombinant DNA techniques.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Prerequisites

Take One Set: Set 1: BTC-181 and BTC-250 Set 2: BTC-181 and BIO-250

## BTC 285 – Cell Culture

This course introduces the theory and practices required to successfully initiate and maintain plant and animal cell cultures. Topics include aseptic techniques, the growth environment, routine maintenance of cell cultures, specialized culture techniques, and various applications. Upon completion, students should be able to demonstrate the knowledge and skills required to grow, maintain, and manipulate cells in culture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take 2 Groups; #Take BIO-175 or BIO-275 or BTC 275 #Take BTC-181

## BTC 286 – Immunological Techniques

This course covers the principles and practices of modern immunology, including the interactions between the various cellular and chemical components of the immune response. Topics include antigens, humoral immunity, cellular immunity, complement, immunological assays, and hybridoma use and production. Upon completion, students should be able to discuss the immune response, perform immunological assays, and make monoclonal antibody-producing hybridomas.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Prerequisites

Take BTC-285

## BUS – Business

### BUS 110 – Introduction to Business

This course provides a survey of the business world. Topics include the basic principles and practices of contemporary business. Upon completion, students should be able to demonstrate an understanding of business concepts as a foundation for studying other business subjects.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 115 – Business Law I

This course introduces the student to the legal and ethical framework of business. Contracts, negotiable instruments, the law of sales, torts, crimes, constitutional law, the Uniform Commercial Code, and the court systems are examined. Upon completion the student should be able to identify legal and ethical issues that arise in business decisions and the laws that apply to them.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 121 – Business Math

This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take 1 group; # Take MAT-060; # Take DMA-010 DMA-020 DMA-030 DMA-040;

## BUS 125 – Personal Finance

This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 137 – Principles of Management

This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3



## BUS 147 – Business Insurance

This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 153 – Human Resource Management

This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 217 – Employment Law and Regulations

This course introduces the principle laws and regulations affecting public and private organizations and their employees or prospective employees. Topics include fair employment practices, EEO, affirmative action, and employee rights and protections. Upon completion, students should be able to evaluate organization policy for compliance and assure that decisions are not contrary to law.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 225 – Business Finance

This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take ACC-120

## BUS 230 – Small Business Management

This course introduces the challenges of entrepreneurship including the startup and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 234 – Training and Development

This course covers developing, conducting, and evaluating employee training with attention to adult learning principles. Emphasis is placed on conducting a needs assessment, using various instructional approaches, designing the learning environment, and locating learning resources. Upon completion, students should be able to design, conduct, and evaluate a training program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 240 – Business Ethics

This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 253 – Leadership and Management Skills

This course includes a study of the qualities, behaviors, and personal styles exhibited by leaders. Emphasis is placed on coaching, counseling, team building, and employee involvement. Upon completion, students should be able to identify and exhibit the behaviors needed for organizational effectiveness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 256 – Recruiting, Selection, & Personnel Planning

This course introduces the basic principles involved in managing the employment process. Topics include personnel planning, recruiting, interviewing and screening techniques, maintaining employee records; and voluntary and involuntary separations. Upon completion, students should be able to acquire and retain employees who match position requirements and fulfill organizational objectives.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 258 – Compensation and Benefits

This course is designed to study the basic concepts of pay and its role in rewarding performance. Topics include wage and salary surveys, job analysis, job evaluation techniques, benefits, and pay-for-performance programs. Upon completion, students should be able to develop and manage a basic compensation system to attract, motivate, and retain employees.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## BUS 259 – HRM Applications

This course provides students in the Human Resource Management concentration the opportunity to reinforce their learning experiences from preceding HRM courses. Emphasis is placed on application of day-to-day HRM functions by completing in-basket exercises and through simulations. Upon completion, students should be able to determine the appropriate actions called for by typical events that affect the status of people at work.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take All: BUS-217, BUS-234, BUS-256, and BUS-258.

## BUS 260 – Business Communication

This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the work place.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take One: ENG-110 or ENG-111

## CCT – Cyber Crime Technology

### CCT 112 – Ethics & High Technology

This course covers ethical considerations and accepted standard practices applicable to technological investigations and computer privacy issues relative to the cyber crime investigator. Topics include illegal and unethical investigative activities, end-justifying-the-means issues, and privacy

issues of massive personal database information gathered by governmental sources. Upon completion, students should be able to examine their own value systems and apply ethical considerations in identifiable cyber crime investigations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CHM – Chemistry

### CHM 121 – Foundations of Chemistry

This course is designed for those who have no previous high school chemistry or a grade of C or less in high school chemistry. Topics include matter, structure of the atom, nomenclature, chemical equations, bonding and reactions; mathematical topics include measurements, scientific notation, and stoichiometry. Upon completion, students should be able to demonstrate an understanding of chemical concepts and an ability to solve related problems in subsequent chemistry courses.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take 2 groups; #Take ENG-002 or ENG-111 #Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 or Take MAT-003 with a grade of P2

### CHM 131 – Introduction to Chemistry

This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

CHM-131A

## Prerequisites

Take 2 groups; # Take ENG-002 or ENG-111 # Take DMA-010 DMA-020 DMA-030 DMA-040 DMA-050 DMA-060 or Take MAT-003 with a grade of P3

### CHM 131A – Introduction to Chemistry Lab

This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

CHM-131

## CHM 132 – Organic and Biochemistry

This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts needed to pursue studies in related professional fields.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take one set: Set 1: CHM-131 and CHM-131A Set 2: CHM-151

## CHM 151 – General Chemistry I

This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. High school chemistry or equivalent with a grade of C or higher within the last five years is strongly recommended.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Corequisites

Take MAT-171

## Prerequisites

Take ENG-002 or ENG-111

## CHM 152 – General Chemistry II

This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take CHM-151; with a grade of "C" or better. Take MAT-171.

## CHM 251 – Organic Chemistry I

This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take CHM-152; minimum grade of "C"

## CHM 252 – Organic Chemistry II

This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take CHM-251; minimum grade "C"

## CHM 263 – Analytical Chemistry

This course covers the knowledge and laboratory skills needed to perform chemical analysis. Emphasis is placed on developing laboratory techniques used in the separation, identification, and quantification of selected substances. Upon completion, students should be able to perform laboratory techniques employed in substance identification and volumetric analysis and interpret the results.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	4	0	0	5

## Prerequisites

Take One: CHM-132 or CHM-152

## CIS – Information Systems

### CIS 110 – Introduction to Computers

This course introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### CIS 115 – Intro to Programming & Logic

This course introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to use top-down algorithm design and implement algorithmic solutions in a programming language.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take One Set: Set 1: DMA-010, DMA-020, DMA-030, and DMA-040; Set 2: DMA-025 and DMA-040; Set 3: MAT-121; Set 4: MAT-171

## CIV – Civil Engineering

### CIV 240 – Project Management

This course introduces construction planning and scheduling techniques and project management software. Topics include construction safety, operation analysis, construction scheduling, construction control systems, claims and dispute resolutions, project records and documentation. Upon completion, students should be able to demonstrate an understanding of the roles of construction project participants, maintain construction records, and prepare construction schedules.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## CJC – Criminal Justice

### CJC 100 – Basic Law Enforcement Training

This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigations, practical application and sheriff-specific.

Upon successful completion, the student will be able to demonstrate competence in the topics and areas required for the state comprehensive certification examination. Additionally, the student must successfully complete the state comprehensive written examination to earn the certificate.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
10	30	0	0	20

## CJC 111 – Introduction to Criminal Justice

This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 112 – Criminology

This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 113 – Juvenile Justice

This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 121 – Law Enforcement Operations

This course introduces fundamental law enforcement operations. Topics include the contemporary evolution of law enforcement operations and related issues. Upon completion, students should be able to explain theories, practices, and issues related to law enforcement operations.

## Hours



CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 131 – Criminal Law

This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 132 – Court Procedure & Evidence

This course covers judicial structure/process/procedure from incident to disposition, kinds and degrees of evidence, and the rules governing admissibility of evidence in court. Topics include consideration of state and federal courts, arrest, search and seizure laws, exclusionary and statutory rules of evidence, and other related issues. Upon completion, students should be able to identify and discuss procedures necessary to establish a lawful arrest/search, proper judicial procedures, and the admissibility of evidence.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 141 – Corrections

This course covers the history, major philosophies, components, and current practices and problems of the field of corrections. Topics include historical evolution, functions of the various components, alternatives to incarceration, treatment programs, inmate control, and other related topics. Upon completion, students should be able to explain the various components, processes, and functions of the correctional system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 160 – Terrorism: Underlying Issues

This course identifies the fundamental reasons why America is a target for terrorists, covering various domestic/international terrorist groups and ideologies from a historical aspect. Emphasis is placed upon recognition of terrorist crime scene; weapons of mass destruction; chemical, biological, and nuclear terrorism; and planning considerations involving threat assessments. Upon completion, students should be able to identify and discuss the methods used in terrorists' activities and complete a threat assessment for terrorists' incidents.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 161 – Introduction to Homeland Security

This course introduces the historical, organizational and practical aspects of Homeland Security. Topics include a historic overview, definitions and concepts, organizational structure, communications, technology, mitigation, prevention and preparedness, response and recovery, and the future of Homeland Security. Upon completion, students should be able to explain essential characteristics of terrorism and Homeland Security, and define roles, functions and interdependency between agencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 162 – Intelligence Analysis and Security Management

This course examines intelligence analysis and its relationship to the security management of terrorist attacks and other threats to national security of the United States. Topics include a historic overview, definitions and concepts, intelligence evolution-politicization-operations-strategies, surveillance, analysis perspectives, covert action, and ethics. Upon completion, students should be able to outline intelligence policies, evaluate source information, implement intelligence techniques and analysis, identify threats, and apply ethical behaviors.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 163 – Transportation and Border Security

This course provides an in-depth view of modern border and transportation security including the technologies used for detecting potential threats from terrorists and weapons. Topics include an overview of security challenges, detection devices and equipment, transportation systems, facilities, threats and counter-measures, and security procedures, policies and agencies. Upon completion, students should be able to describe border security, the technologies used to enforce it, and the considerations and strategies of border security agencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 170 – Critical Incident Mgmt for Public Safety

This course prepares the student to specialize in the direct response, operations, and management of critical incidents. Emphasis is placed upon the theoretical and applied models to understand and manage disasters, terrorism, and school/work place violence. Upon completion, the student should be able to identify and discuss managerial techniques legal issues, and response procedures to critical incidents.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 212 – Ethics & Community Relations

This course covers ethical considerations and accepted standards applicable to criminal justice organizations and professionals. Topics include ethical systems; social change, values, and norms; cultural diversity; citizen involvement in criminal justice issues; and other related topics. Upon

completion, students should be able to apply ethical considerations to the decision-making process in identifiable criminal justice situations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 214 – Victimology

This course introduces the study of victims. Emphasis is placed on roles/characteristics of victims, victim interaction with the criminal justice system and society, current victim assistance programs, and other related topics. Upon completion, students should be able to discuss and identify victims, the uniqueness of victims' roles, and current victim assistance programs.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 221 – Investigative Principles

This course introduces the theories and fundamentals of the investigative process. Topics include crime scene/incident processing, information gathering techniques, collection/preservation of evidence, preparation of appropriate reports, court presentations, and other related topics. Upon completion, students should be able to identify, explain, and demonstrate the techniques of the investigative process, report preparation, and courtroom presentation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## CJC 223 – Organized Crime

This course introduces the evolution of traditional and non-traditional organized crime and its effect on society and the criminal justice system. Topics include identifying individuals and groups involved in organized crime, areas of criminal activity, legal and political responses to organized crime, and other related topics. Upon completion, students should be able to identify the groups and activities involved in organized crime and the responses of the criminal justice system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 231 – Constitutional Law

The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 233 – Correctional Law

This course introduces statutory/case law pertinent to correctional concepts, facilities, and related practices. Topics include examination of major legal issues encompassing incarceration, probation, parole, restitution, pardon, restoration of rights, and other related topics. Upon completion, students should be able to identify/discuss legal issues which directly affect correctional systems and personnel.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 241 – Community-Based Corrections

This course covers programs for convicted offenders that are used both as alternatives to incarceration and in post-incarceration situations. Topics include offenders, diversion, house arrest, restitution, community service, probation and parole, including both public and private participation, and other related topics. Upon completion, students should be able to identify/discuss the various programs from the perspective of the criminal justice professional, the offender, and the community.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CJC 261 – High-Risk Situations

This course prepares students to employ proper response methods, including a risk and attack analysis, when faced with high-risk situations. Emphasis will be placed on cover and evacuation techniques when faced with an active, barricaded shooter, improvised explosive device recognition, and hazardous material impact assessment. Upon completion, students should be able to demonstrate an ability to analyze a high-risk situation and use the proper decision making process to respond.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## CJC 262 – High-Risk Event Planning

This course introduces students to the principles of high-risk executive protection and the planning associated with security during visits from government officials and other dignitaries. Emphasis will be placed on conducting advance surveys, residential security, restaurant and banquet security, surveillance detection, and counter surveillance operations. Upon completion, students should be able to demonstrate the ability to write security plans for high-risk events.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## CMT – Construction Management

### CMT 120 – Codes and Inspections

This course covers building codes and the code inspections process used in the design and construction of residential and commercial buildings. Emphasis is placed on commercial, residential, and accessibility (ADA) building codes. Upon completion, students should understand the building code inspections process and apply building code principals and requirements to construction projects.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### CMT 210 – Construction Management Fundamentals

This course introduces the student to the fundamentals of effective supervision emphasizing professionalism through knowledge and applied skills. Topics include safety, planning and scheduling, contracts, problem-solving, communications, conflict resolution, recruitment, employment laws and regulations, leadership, motivation, teamwork, discipline, setting objectives, and training. Upon completion, students should be able to demonstrate the basic skills necessary to be successful as a supervisor in the construction industry.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### CMT 212 – Total Safety Performance

This course covers the importance of managing safety and productivity equally by encouraging people to take individual responsibility for safety and health in the workplace. Topics include safety management, controlling construction hazards, communicating and enforcing policies, OSHA compliance, personal responsibility and accountability, safety planning, training, and personal protective equipment. Upon completion, the student should be able to properly supervise safety at a construction jobsite and qualify for OSHA Training Certification.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

#### Corequisites

CMT-210

### CMT 214 – Planning and Scheduling

This course covers the need for and the process of planning construction projects, as well as the mechanics and vocabulary of project scheduling. Topics include project preplanning, scheduling formats, planning for production, short interval planning, schedule updating and revising, and computer-based planning and scheduling. Upon completion, the student should be able to understand the need for planning and scheduling, the language and logic of scheduling, and use of planning skills.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take All: CMT-210 and BPR-130

## CMT 216 – Costs and Productivity

This course covers the relationships between time, work completed, work-hours spent, schedule duration, equipment hours, and materials used. Topics include production rates, productivity unit rates, work method improvements, and overall total project cost control. Upon completion, the student should be able to demonstrate an understanding of how costs may be controlled and productivity improved on a construction project.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take CMT-210

## CMT 218 – Human Relations Issues

This course provides instruction on human relations issues as they relate to construction project supervision. Topics include relationships, human behavior, project staffing issues, teamwork, effective communication networks, laws and regulations, and identifying and responding to conflict, crisis, and discipline. Upon completion, the student will demonstrate an understanding of the importance of human relations in the success of a construction project.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take CMT-210

## COM – Communication

### COM 110 – Introduction to Communication

This course provides an overview of the basic concepts of communication and the skills necessary to communicate in various contexts. Emphasis is placed on communication theories and techniques used in interpersonal group, public, intercultural, and mass communication situations. Upon completion, students should be able to explain and illustrate the forms and purposes of human communication in a variety of contexts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## COM 120 – Intro to Interpersonal Communication

This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## COM 140 – Introduction to Intercultural Communication

This course introduces techniques of cultural research, definitions, functions, characteristics, and impacts of cultural differences in public address. Emphasis is placed on how diverse backgrounds influence the communication act and how cultural perceptions and experiences determine how one sends and receives messages. Upon completion, students should be able to demonstrate an understanding of the principles and skills needed to become effective in communicating outside one's primary culture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## COM 150 – Introduction to Mass Communication

This course introduces print and electronic media and the new information technologies in terms of communication theory and as economic, political, and social institutions. Topics include the nature, history, functions, and responsibilities of mass communication industries in a global environment and their role and impact in American society. Upon completion, students should be able to demonstrate awareness of the pervasive nature of mass media and how media operate in an advanced post-industrial society.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## COM 231 – Public Speaking

This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## COS – Cosmetology

### COS 111 – Cosmetology Concepts I

This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

#### Corequisites

COS-112

### COS 111AB – Cosmetology Concepts I-Part A

This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

#### Corequisites

COS-112AB

### COS 111BB – Cosmetology Concepts I-Part B

This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

#### Corequisites

COS-112BB

#### Prerequisites

Take COS-111AB



## COS 112 – Salon I

This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	24	0	0	8

### Corequisites

COS-111

## COS 112AB – Salon I-Part A

This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	12	0	0	4

### Corequisites

COS-111AB

## COS 112BB – Salon I-Part B

This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, haircutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	12	0	0	4

### Corequisites

COS-111BB

### Prerequisites

Take COS-112AB

## COS 113 – Cosmetology Concepts II

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the

salon setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

## Prerequisites

Take All: COS-111 and COS-112

## COS 113AB – Cosmetology Concepts II-Part A

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Prerequisites

Take COS-111 and COS-112

## COS 113BB – Cosmetology Concepts II-Part B

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Prerequisites

Take COS-111 and COS 112. Take COS-113AB.

## COS 114 – Salon II

This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	24	0	0	8

## Corequisites

## Prerequisites

Take All: COS-111 and COS-112

## COS 114AB – Salon II-Part A

This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	12	0	0	4

## Prerequisites

Take COS-111 and COS-112.

## COS 114BB – Salon II-Part B

This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, haircutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	12	0	0	4

## Prerequisites

Take COS-111 and COS-112. Take COS-114AB.

## COS 115 – Cosmetology Concepts III

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

## Corequisites

## Prerequisites

Take All: COS-111 and COS-112

## COS 115AB – Cosmetology Concepts III-Part A

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### Prerequisites

Take COS-111 and COS-112.

## COS 115BB – Cosmetology Concepts III-Part B

This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### Prerequisites

Take COS-111 and COS-112. COS-115AB;

## COS 116 – Salon III

This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	12	0	0	4

### Corequisites

### Prerequisites

Take All: COS-111 and COS-112

## COS 116AB – Salon III-Part A

This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	2

## Prerequisites

Take COS-111 and COS-112.

## COS 116BB – Salon III-Part B

This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, haircutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	2

## Prerequisites

Take COS-111 and COS-112 COS-116AB;

## COS 117 – Cosmetology Concepts IV

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Prerequisites

Take All: COS-111 and COS-112

## COS 117AB – Cosmetology Concepts IV-Part A

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

## Prerequisites

Take All: COS-111 and COS-112

## COS 117BB – Cosmetology Concepts IV-Part B

This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

### Corequisites

### Prerequisites

Take All: COS-111 and COS-112. Take COS-117AB.

## COS 118 – Salon IV

This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	21	0	0	7

### Prerequisites

Take All: COS-111 and COS-112

## COS 118AB – Salon IV-Part A

This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	10.5	0	0	3.5

### Prerequisites

Take All: COS-111 and COS-112

## COS 118BB – Salon IV-Part B

This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	10.5	0	0	3.5

## Prerequisites

Take All: COS-111 and COS-112. Take COS-118AB.

## COS 119 – Esthetics Concepts I

This course covers the concepts of esthetics. Topics include orientation, anatomy, physiology, hygiene, sterilization, first aid, chemistry, basic dermatology, and professional ethics. Upon completion, students should be able to demonstrate an understanding of the concepts of esthetics and meet course requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Corequisites

COS-120

## COS 120 – Esthetics Salon I

This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	18	0	0	6

## Corequisites

COS-119

## COS 121 – Manicure/Nail Technology I

This course covers techniques of nail technology, hand and arm surface manipulation, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, surface manipulation, and other related topics. Upon completion, students should be able to safely and competently perform nail care, including manicures, pedicures, surface manipulations, decorating and artificial applications in a salon setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	6	0	0	6

## COS 125 – Esthetics Concepts II

This course covers more comprehensive esthetics concepts. Topics include nutrition, business management, makeup, and color analysis. Upon completion students should be able to demonstrate an understanding of the advanced esthetics concepts and meet course requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Corequisites

COS-126

## COS 126 – Esthetics Salon II

This course provides experience in a simulated esthetics setting. Topics include machine facials, aromatherapy, surface manipulation in relation to skin care, electricity, and apparatus. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology licensing examination for Estheticians.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	18	0	0	6

## Corequisites

COS-125

## COS 222 – Manicure/Nail Technology II

This course covers advanced techniques of nail technology and hand and arm surface manipulation. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	6	0	0	6

## Prerequisites

Take COS-121

## COS 223 – Contemp Hair Coloring

This course covers basic color concepts, hair coloring problems, and application techniques. Topics include color theory, terminology, contemporary techniques, product knowledge, and other related topics. Upon completion, students should be able to identify a clients color needs and safely and competently perform color applications and correct problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2



## Prerequisites

Take COS-111 COS-112

## COS 240 – Contemporary Design

This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take COS-111 COS-112;

## COS 240AB – Contemporary Design

This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. Upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0.5	1.5	0	0	1

## Prerequisites

Take COS-111 COS-112

## COS 240BB – Contemporary Design

This course covers methods and techniques for contemporary designs. Emphasis is placed on contemporary designs and other related topics. upon completion, students should be able to demonstrate and apply techniques associated with contemporary design.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0.5	1.5	0	0	1

## Prerequisites

Take COS-111 COS-112; COS-240AB;

## COS 271 – Instructor Concepts I

This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

Current North Carolina Cosmetologist License and six months experience as a licensed cosmetologist is required.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
5	0	0	0	5

## Corequisites

COS-272

## COS 271AB – Instructor Concepts I Part A

This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2.5	0	0	0	2.5

## Corequisites

Take COS-272

## Prerequisites

Current North Carolina Cosmetologist License and six months experience as a licensed cosmetologist is required.

## COS 271BB – Instructor Concepts I Part B

This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2.5	0	0	0	2.5

## Prerequisites

Take COS-271AB Current North Carolina Cosmetologist License and six months experience as a licensed cosmetologist is required.

## COS 272 – Instructor Practicum I

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

Current North Carolina Cosmetologist License and six months experience as a licensed cosmetologist is required.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	21	0	0	7

## Corequisites

COS-271

## COS 272AB – Instructor Practicum I Part A

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	10.5	0	0	3.5

## Corequisites

Take COS-271

## Prerequisites

Current North Carolina Cosmetologist License and six months experience as a licensed cosmetologist is required.

## COS 272BB – Instructor Practicum I Part B

This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	10.5	0	0	3.5

## Corequisites

Take COS-271

## Prerequisites

Take COS-272AB Current North Carolina Cosmetologist License and six months experience as a licensed cosmetologist is required.

## COS 273 – Instructor Concepts II

This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
5	0	0	0	5

## Corequisites

COS-274

## Prerequisites

Take All: COS-271 and COS-272

## COS 273AB – Instructor Concepts II Part A

This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2.5	0	0	0	2.5

## Corequisites

Take COS-274

## Prerequisites

Take All: COS-271 and COS-272

## COS 273BB – Instructor Concepts II Part B

This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2.5	0	0	0	2.5

## Corequisites

Take COS-274

## Prerequisites

Take All: COS-271 and COS-272 Take COS-273AB

## COS 274 – Instructor Practicum II

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	21	0	0	7

## Corequisites

COS-273

## Prerequisites

Take All: COS-271 and COS-272

## COS 274AB – Instructor Practicum II Part A

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	10.5	0	0	3.5

## Corequisites

Take COS-273

## Prerequisites

Take All: COS-271 and COS-272

## COS 274BB – Instructor Practicum II Part B

This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	10.5	0	0	3.5

## Corequisites

Take COS-273

## Prerequisites

Take All: COS-274 and COS-272 Take COS-274AB

## CSC – Computer Science

### CSC 120 – Computing Fundamentals I

This course provides the essential foundation for the discipline of computing and a program of study in computer science, including the role of the professional. Topics include algorithm design, data abstraction, searching and sorting algorithms, and procedural programming techniques. Upon

completion, students should be able to solve problems, develop algorithms, specify data types, perform sorts and searches, and use an operating system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take One Set: Set 1: DMA-010, DMA-020, DMA-030, DMA-040, and DMA-050 Set 2: DMA-010, DMA-020 DMA-030 and DMA-045 Set 3: DMA-025, DMA-040 and DMA-050 Set 4: DMA-025 and DMA-045 Set 5: MAT-121 Set 6: MAT-171 Set 7: MAT-003

## CSC 121 – Python Programming

This course introduces computer programming using the Python programming language. Emphasis is placed on common algorithms and programming principles utilizing the standard library distributed with Python. Upon completion, students should be able to design, code, test, and debug Python language programs.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## CSC 130 – Computing Fundamentals II

This course provides in-depth coverage of the discipline of computing and the role of the professional. Topics include software design methodologies, analysis of algorithm and data structures, searching and sorting algorithms, and file organization methods. Upon completion, students should be able to use software design methodologies and choice of data structures and understand social/ethical responsibilities of the computing professional.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take CSC 120.

## CSC 134 – C++ Programming

This course introduces computer programming using the C++ programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## CSC 139 – Visual BASIC Programming

This course introduces computer programming using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take CIS-115

## CSC 151 – JAVA Programming

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## CSC 153 – C# Programming

This course introduces computer programming using the C# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment at the beginning level.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take CIS-115

## CSC 239 – Advanced Visual BASIC Programming

This course is a continuation of CSC 139 using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take CSC-139; Take CIS-115;

## CSC 251 – Advanced JAVA Programming

This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take CSC-151

## CSC 253 – Advanced C# Programming

This course is a continuation of CSC 153 using the C# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take CSC-153

## CSC 284 – Emerging Computer Programming Technologies

This course provides students with the latest technologies and strategies in the field of Computer Programming. Emphasis is placed on the evaluation of developing Computer Programming Technologies and presenting those findings to the class. Upon completion, students should be able to critically analyze emerging Computer Programming Technologies and establish informed opinions.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## CST – Construction

### CST 110 – Intro to Construction

This course introduces construction terminology, materials, and practices found at a construction worksite. Emphasis is placed on common and innovative practices, methods, materials, and other related topics of the construction industry. Upon completion, students should be able to successfully identify various practices, methods, and materials used in the construction industry.



## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## CST 131 – OSHA/Safety/Certification

This course covers the concepts of work site safety. Topics include OSHA regulations, tool safety, and certifications which relate to the construction industry. Upon completion, students should be able to identify and maintain a safe working environment based on OSHA regulations and maintain proper records and certifications.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## CST 231 – Soils & Site Work

This course covers site conditions and soil types and their physical properties. Topics include site preparation, access, mechanical analysis, classification of soils, and hydrostatics of groundwater. Upon completion, students should be able to adequately prepare a building site according to plans and specifications.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take One: MAT-121 or MAT-171

## CST 241 – Planning/Estimating I

This course covers the procedures involved in planning and estimating a construction/building project. Topics include performing quantity take-offs of materials necessary for a building project. Upon completion, students should be able to accurately complete a take-off of materials and equipment needs involved in a construction project.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take One: BPR-130, MAT-121, or MAT-171

## CTI – Computer Technology Integration

### CTI 110 – Web, Programming, and Database Foundation

This course covers the introduction of the tools and resources available to students in programming, mark-up language and services on the Internet. Topics include standard mark-up language Internet services, creating web pages, using search engines, file transfer programs; and database design and creation with DBMS products. Upon completion students should be able to demonstrate knowledge of programming tools, deploy a web-site with mark-up tools, and create a simple database table.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## CTI 120 – Network and Security Foundation

This course introduces students to the Network concepts, including networking terminology and protocols, local and wide area networks, and network standards. Emphasis is placed on securing information systems and the various implementation policies. Upon completion, students should be able to perform basic tasks related to networking mathematics, terminology, media and protocols.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## CTI 130 – Os and Device Foundation

This course covers the basic hardware and software of a personal computer, including installation, operations and interaction with popular microcomputer operating systems. Topics include components identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	4	0	0	6

## CTI 140 – Virtualization Concepts

This course introduces operating system virtualization. Emphasis is placed on virtualization terminology, virtual machine storage, virtual networking and access control. Upon completion, students should be able to perform tasks related to installation, configuration and management of virtual machines.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## Prerequisites

Take CTI-120

## CTS – Computer Information Technology

## CTS 060 – Essential Computer Usage

This course covers the basic functions and operations of the computer. Topics include identification of components, overview of operating systems, and other basic computer operations. Upon completion, students should be able to perform basic computer commands, access files, print documents and complete fundamental application operations.

Replaced CTS-080 2013FA-Local

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## CTS 115 – Information Systems Business Concepts

The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the 'hybrid business manager' and the potential offered by new technology and systems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## CTS 120 – Hardware/Software Support

This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## CTS 130 – Spreadsheet

This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## CTS 155 – Tech Support Functions

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine

the best technologies to support and solve actual technical support problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take CTI-130

## CTS 230 – Advanced Spreadsheet

This course covers advanced spreadsheet design and development. Topics include advanced functions and statistics, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take CTS-130

## CTS 240 – Project Management

This course introduces computerized project management software. Topics include identifying critical paths, cost management, and problem solving. Upon completion, students should be able to plan a complete project and project time and costs accurately.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take One: CTI-140 or DBA-120

## CTS 287 – Emerging Technologies

This course introduces emerging information technologies. Emphasis is placed on evolving technologies and trends in business and industry. Upon completion, students should be able to articulate an understanding of the current trends and issues in emerging technologies for information systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## DBA – Database Management Technology

## DBA 110 – Database Concepts

This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take CIS-110

## DBA 120 – Database Programming I

This course is designed to develop SQL programming proficiency. Emphasis is placed on data definition, data manipulation, and data control statements as well as on report generation. Upon completion, students should be able to write programs which create, update, and produce reports.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take DBA-110

## DEN – Dental

### DEN 100 – Basic Orofacial Anatomy

This course provides a basic introduction to the structures of the head, neck, and oral cavity. Topics include tooth morphology, head and neck anatomy, histology, and embryology. Upon completion, students should be able to demonstrate knowledge of normal structures and development and how they relate to the practice of dental assisting.

Students must be enrolled in the Dental Assisting D45240 program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### Prerequisites

Enrollment in the Dental Assisting D45240 program.

### DEN 101 – Preclinical Procedures

This course provides instruction in procedures for the clinical dental assistant as specified by the North Carolina Dental Practice Act. Emphasis is placed on orientation to the profession, infection control techniques, instruments, related expanded functions, and diagnostic, operative, and specialty procedures. Upon completion, students should be able to demonstrate proficiency in clinical dental assisting procedures.

Students must be enrolled in the Dental Assisting D45240 program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	6	0	0	7

## Prerequisites

Enrollment in the Dental Assisting D45240 program.

## DEN 102 – Dental Materials

This course provides instruction in identification, properties, evaluation of quality, principles, and procedures related to manipulation and storage of operative and specialty dental materials. Emphasis is placed on the understanding and safe application of materials used in the dental office and laboratory. Upon completion, students should be able to demonstrate proficiency in the laboratory and clinical application of routinely used dental materials.

Students must be enrolled in the Dental Assisting D45240 program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

## Prerequisites

Enrollment in the Dental Assisting D45240 program.

## DEN 103 – Dental Sciences

This course is a study of oral pathology, pharmacology, and dental office emergencies. Topics include oral pathological conditions, dental therapeutics, and management of emergency situations. Upon completion, students should be able to recognize abnormal oral conditions, identify classifications, describe actions and effects of commonly prescribed drugs, and respond to medical emergencies.

Students must be enrolled in the Dental Assisting D45240 program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Prerequisites

Enrollment in the Dental Assisting D45240 program.

## DEN 104 – Dental Health Education

This course covers the study of preventive dentistry to prepare dental assisting students for the role of dental health educator. Topics include etiology of dental diseases, preventive procedures, and patient education theory and practice. Upon completion, students should be able to demonstrate proficiency in patient counseling and oral health instruction in private practice or public health settings.

Students must be enrolled in the Dental Assisting D45240 program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Enrollment in the Dental Assisting D45240 program.

## DEN 105 – Practice Management

This course provides a study of principles and procedures related to management of the dental practice. Emphasis is placed on maintaining clinical and financial records, patient scheduling, and supply and inventory control. Upon completion, students should be able to demonstrate fundamental skills in dental practice management.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## DEN 106 – Clinical Practice I

This course is designed to provide experience assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to utilize classroom theory and laboratory and clinical skills in a dental setting.

Students must be enrolled in the Dental Assisting A45240 program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	12	0	6

## Prerequisites

Take DEN-101. Enrollment in the Dental Assisting D45240 program.

## DEN 107 – Clinical Practice II

This course is designed to increase the level of proficiency in assisting in a clinical setting. Emphasis is placed on the application of principles and procedures of four-handed dentistry and laboratory and clinical support functions. Upon completion, students should be able to combine theoretical and ethical principles necessary to perform entry-level skills including functions delegable to a DA II.

Students must be enrolled in the Dental Assisting A45240 program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	12	0	5

## Prerequisites

Take DEN-106. Enrollment in the Dental Assisting D45240 program.

## DEN 111 – Infection/Hazard Control

This course introduces the infection and hazard control procedures necessary for the safe practice of dentistry. Topics include microbiology, practical infection control, sterilization and monitoring, chemical disinfectants, aseptic technique, infectious diseases, OSHA standards, and applicable North Carolina laws. Upon completion, students should be able to understand infectious diseases, disease transmission, infection control procedures, biohazard management, OSHA standards, and applicable North Carolina laws.

Students must be enrolled in the Dental Assisting D45240 program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### Prerequisites

Enrollment in the Dental Assisting D45240 program.

## DEN 112 – Dental Radiography

This course provides a comprehensive view of the principles and procedures of radiology as they apply to dentistry. Topics include techniques in exposing, processing, and evaluating radiographs, as well as radiation safety, quality assurance, and legal issues. Upon completion, students should be able to demonstrate proficiency in the production of diagnostically acceptable radiographs using appropriate safety precautions.

Students must be enrolled in the Dental Assisting D45240 program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Enrollment in the Dental Assisting D45240 program.

## DFT – Drafting

### DFT 111 – Technical Drafting I

This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorials drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Corequisites

DFT-111A

## DFT 111A – Technical Drafting I Lab



This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 111. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 111.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

Take DFT-111 and DFT-151

## DFT 112 – Technical Drafting II

This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Corequisites

DFT-112A

## Prerequisites

Take DFT-111

## DFT 112A – Technical Drafting II Lab

This course provides a laboratory setting to enhance advance drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 112. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 112.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

DFT-112

## DFT 121 – Introduction to GD&T

This course introduces basic geometric dimensioning and tolerancing principles. Topics include symbols, annotation, theory, and applications. Upon completion, students should be able to interpret and apply basic geometric dimensioning and tolerancing principles to drawings.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## DFT 151 – CAD I

This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## DFT 154 – Intro to Solid Modeling

This course is an introduction to basic three-dimensional solid modeling and design software. Topics include basic design, creation, editing, rendering and analysis of solid models, and creation of multiview drawings. Upon completion, students should be able to use design techniques to create, edit, render and generate a multiview drawing.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## DFT 170 – Engineering Graphics

This course introduces basic engineering graphics skills and applications. Topics include sketching, selection and use of current methods and tools, and the use of engineering graphics applications. Upon completion, students should be able to demonstrate an understanding of basic engineering graphics principles and practices.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## DFT 254 – Intermediate Solid Modeling & Rendering

This course presents a continuation of basic three-dimensional solid modeling and design software. Topics include advanced study of parametric design, creation, editing, rendering and analysis of solid model assemblies, and multiview drawing generation. Upon completion, students should be able to use parametric design techniques to create and analyze the engineering design properties of a model assembly.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take DFT-154

## DRA – Drama/Theatre

### DRA 111 – Theatre Appreciation

This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience's appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate a vocabulary of theatre terms and to recognize the contributions of various theatre artists.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### DRA 126 – Storytelling

This course introduces the art of storytelling and the oral traditions of folk literature. Topics include the history of storytelling, its value and purpose, techniques of the storyteller, and methods of collecting verbal art. Upon completion, students should be able to present and discuss critically stories from the world's repertory of traditional lore.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### DRA 130 – Acting I

This course provides an applied study of the actor's craft. Topics include role analysis, training the voice, and body concentration, discipline, and self-evaluation. Upon completion, students should be able to explore their creativity in an acting ensemble.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

### DRA 132 – Stage Movement

This course provides an applied study of selected principles of stage movement for actors. Topics include improvisation, mime, stage combat, clowning, choreography, and masks. Upon completion, students should be able to focus properly on stage, to create characters, and to improvise scenes, perform mimes, fight, clown, juggle, and waltz.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Corequisites

DRA-111

## DRA 140 – Stagecraft I

This course introduces the theory and basic construction of stage scenery and properties. Topics include stage carpentry, scene painting, stage electrics, properties, and backstage organization. Upon completion, students should be able to pursue vocational and avocational roles in technical theatre.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

## DRA 170 – Play Production I

This course provides an applied laboratory study of the processes involved in the production of a play. Topics include fundamental practices, principles, and techniques associated with producing plays of various periods and styles. Upon completion, students should be able to participate in an assigned position with a college theatre production.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	9	0	0	3

## ECM – Electronic Commerce

### ECM 210 – Introduction to E-Commerce

This course introduces the concepts and tools to implement electronic commerce via the Internet. Topics include application and server software selection, securing transactions, use and verification of credit cards, publishing of catalogs, and site administration. Upon completion, students should be able to setup a working e-commerce Internet web site.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## ECO – Economics

### ECO 151 – Survey of Economics

This course, for those who have not received credit for ECO 251 or 252, introduces basic concepts of micro- and macroeconomics. Topics include supply and demand, optimizing economic behavior, prices and wages, money, interest rates, banking system, unemployment, inflation, taxes, government spending, and international trade. Upon completion, students should be able to explain alternative solutions for economic problems faced by private and government sectors.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ECO 251 – Principles of Microeconomics

This course introduces economic analysis of individual, business, and industry in the market economy. Topics include the price mechanism, supply and demand, optimizing economic behavior, costs and revenue, market structures, factor markets, income distribution, market failure, and government intervention. Upon completion, students should be able to identify and evaluate consumer and business alternatives in order to efficiently achieve economic objectives.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ECO 252 – Principles of Macroeconomics

This course introduces economic analysis of aggregate employment, income, and prices. Topics include major schools of economic thought; aggregate supply and demand; economic measures, fluctuations, and growth; money and banking; stabilization techniques; and international trade. Upon completion, students should be able to evaluate national economic components, conditions, and alternatives for achieving socioeconomic goals.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EDU – Education

### EDU 119 – Introduction to Early Childhood Education

This course introduces the foundations of early childhood education, the diverse educational settings for young children, professionalism and planning intentional developmentally appropriate experiences for each child. Topics include theoretical foundations, national early learning standards, NC Foundations for Early Learning and Development, state regulations, program types, career options, professionalism, ethical conduct, quality inclusive environments, and curriculum responsive to the needs of each child/family. Upon completion, students should be able to design a career/professional development plan, and appropriate environments, schedules, and activity plans.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

### EDU 131 – Child, Family, and Community

This course covers the development of partnerships among culturally, linguistically and ability diverse families, children, schools and communities through the use of evidence-based strategies. Emphasis is placed on developing skills and identifying benefits for establishing and supporting respectful relationships between diverse families, programs/schools, and community agencies/resources reflective of the NAEYC Code of Ethical Conduct and the Code of Ethics for North Carolina Educators. Upon completion, students should be able to identify appropriate relationship building strategies between diverse families, children birth through adolescence, schools, and communities and demonstrate a variety of communication skills including appropriate use of technology to support every child.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take One: DRE-097, ENG-002, or ENG-111

## EDU 144 – Child Development I

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-097

## EDU 145 – Child Development II

This course includes the theories of child development, observation and assessment, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on knowledge, observation and assessment of developmental sequences in approaches to play/learning, emotional/social, health/physical, language/communication and cognitive domains. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain biological and environmental factors that impact development, and identify evidence-based strategies for enhancing development for children that are culturally, linguistically, and ability diverse.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-097

## EDU 146 – Child Guidance

This course introduces evidence-based strategies to build nurturing relationships with each child by applying principles and practical techniques to facilitate developmentally appropriate guidance. Topics include designing responsive/supportive learning environments, cultural, linguistic and socio-economic influences on behavior, appropriate expectations, the importance of communication with children/families including using technology and the use of formative assessments in establishing intentional strategies for children with unique needs. Upon completion, students should be able to demonstrate direct/indirect strategies to encourage social skills, self-regulation, emotional expression and positive behaviors while recognizing the relationship between children's social, emotional and cognitive development.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-097

## EDU 151 – Creative Activities

This course introduces developmentally supportive creative learning environments with attention to divergent thinking, creative problem-solving, evidence-based teaching practices, and open-ended learning materials while applying NC Foundations for Early Learning and Development.

Emphasis is placed on observation of process driven learning experiences in art, music, creative movement, dance, and dramatics for every young child age birth through eight, integrated through all domains and academic content. Upon completion, students should be able to examine, create, and adapt developmentally creative learning materials, experiences, and environments for children that are culturally, linguistically, and ability diverse.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-097

## EDU 153 – Health, Safety and Nutrition

This course covers promoting and maintaining the health and well-being of every child. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, health benefits of active play, recognition and reporting of abuse/neglect, and state regulations. Upon completion, students should be able to apply knowledge of NC Foundations for Early Learning and Development for health, safety, nutritional needs and safe learning environments.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-097

## EDU 162 – Observation and Assessment in Early Childhood Education

This course introduces the research, benefits, goals, and ethical considerations associated with observation and formative assessment in early childhood education. Emphasis is placed on the implementation of multiple observation/assessment strategies including anecdotal records, event samples, rating scales, and portfolios to create appropriate learning experiences. Upon completion, students should be able to practice responsible assessment and effectively use tools to assess the child, teacher practices and indoor and outdoor environments to enhance programming; and explain the importance of assessment partnerships with families and other professionals.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

DRE-097

## EDU 214 – Early Childhood Intermediate Practicum

This course is designed to allow students to apply skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting with the implementation of developmentally appropriate activities and environments for all children; modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and onsite faculty visits.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	9	0	0	4

## Corequisites

Take DRE-098

## Prerequisites

Take one set: Set 1: EDU-119, EDU-144, and EDU-146 Set 2: PSY-244, EDU-119, and EDU-146

## EDU 216 – Foundations of Education

This course introduces the examination of the American educational systems and the teaching profession. Topics include the historical and philosophical influences on education, various perspectives on educational issues, and experiences in birth through grade 12 classrooms. Upon completion, students should be able to reflect on classroom observations, analyze the different educational approaches, including classical/traditional and progressive, and have knowledge of the various roles of educational systems at the federal, state and local level.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## EDU 221 – Children With Exceptionalities

This course covers atypical patterns of child development, inclusive/diverse settings, evidenced-based educational/family plans, differentiated instruction, adaptive materials, and assistive technology. Emphasis is placed on the characteristics of exceptionalities and delays, early intervention/special education, transitions, observation, developmental screening, formative assessment of children, and collaborating with families and community partners. Upon completion, students should be able to recognize diverse abilities, describe the referral process, identify community resources, explain the importance of collaboration with families/professionals, and develop appropriate strategies/adaptations to support children in all environments with best practices as defined by laws, policies and the NC Foundations for Early Learning and Development.

Please note that this is a writing intensive course.



## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## Prerequisites

Take one set: Set 1: EDU-144, EDU-145 Set 2: PSY-244 PSY-245

## EDU 234 – Infants, Toddlers, & Twos

This course covers the development of high-quality, individualized, responsive/engaging relationships and experiences for infants, toddlers, and twos. Emphasis is placed on typical and atypical child development, positive early learning experiences, supporting and engaging diverse families, providing safe, warm and nurturing interactions, and the application of the NC Foundations for Early Learning and Development. Upon completion, students should be able to demonstrate responsive planning, respectful relationships and exposure to a variety of developmentally appropriate experiences/materials that support a foundation for healthy development and growth of culturally, linguistically and ability diverse children birth to 36 months.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## Prerequisites

Take EDU-119

## EDU 235 – School-Age Development and Programs

This course includes developmentally appropriate practices in group settings for school-age children. Emphasis is placed on principles of development, environmental planning, and positive guidance techniques and program development. Upon completion, students should be able to discuss developmental principles for culturally, linguistically, and ability diverse children ages five to twelve and plan and implement developmentally appropriate programs and activities.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## EDU 247 – Sensory and Physical Disabilities

This course covers characteristics, intervention strategies, assistive technologies, and inclusive practices for children with sensory and physical disabilities. Topics include inclusive placement options, utilization of support services, other health impairments and family involvement for children with sensory and physical disabilities. Upon completion, students should be able to identify and utilize intervention strategies and service delivery options for those specific disabilities.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## Prerequisites

Take one set: Set 1: EDU-144 and EDU-145 Set 2: PSY-244 and PSY-245

## EDU 248 – Developmental Delays

This course covers the causes and assessment of developmental delays and individualized instruction and curriculum for children with developmental delays. Emphasis is placed on definition, characteristics, assessment, educational strategies, inclusion, family involvement, and services for children with developmental delays. Upon completion, students should be able to identify, assess, and plan educational intervention strategies for children with developmental delays and their families.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098.

## Prerequisites

Take One Set: Set 1: EDU-144 and EDU-145; Set 2: PSY-244 and PSY-245

## EDU 250 – Teacher Licensure Preparation

This course provides information and strategies necessary for transfer to a teacher licensure program at a senior institution. Topics include entry level teacher licensure exam preparation, performance based assessment systems, requirements for entry into teacher education programs, the process to become a licensed teacher in North Carolina, and professionalism including expectations within the field of education. Upon completion, students should be able to utilize educational terminology and demonstrate knowledge of teacher licensure processes including exam preparation, technology based portfolio assessment, and secondary admissions processes to the school of education at a senior institution.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take One Set: Set 1: ENG 111 and MAT 143; Set 2: ENG 111 and MAT 152; Set 3: ENG 111 and MAT 171

## EDU 251 – Exploration Activities

This course covers fundamental concepts in the content areas of science, technology, engineering, math and social studies through investigative experiences. Emphasis is placed on exploring fundamental concepts, developmentally appropriate scope and sequence, and teaching strategies to engage each child in the discovery approach. Upon completion, students should be able to understand major concepts in each content area and implement appropriate experiences for young children.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Corequisites

Take DRE-098

## EDU 254 – Music and Movement for Children

This course covers the use of music and creative movement for children. Topics include a general survey of the basic elements of music and planning, designing, and implementing music and movement experiences for creative learning. Upon completion, students should be able to use voice and various musical instruments to provide musical and movement activities for children.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### Corequisites

Take DRE-098

## EDU 259 – Curriculum Planning

This course is designed to focus on using content knowledge to build developmentally effective approaches for culturally/linguistically/ability diverse young children. Topics include components of curriculum, a variety of curriculum models, authentic observation and assessment, and planning developmentally appropriate experiences aligned with the NC Foundations for Early Learning and Development. Upon completion, students should be able to understand, evaluate, and use curriculum to plan for individual/group needs.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Corequisites

Take DRE-098

### Prerequisites

Take EDU-119

## EDU 261 – Early Childhood Administration I

This course introduces principles and practices essential to preparing and supporting child care administrators. Topics include program philosophy, policies and procedures, NC Child Care Law and Rules, business planning, personnel and fiscal management, and NAEYC Code of Ethical Conduct Supplement for Early Childhood Program Administration. Upon completion, students should be able to articulate a developmentally appropriate program philosophy, locate current state licensing regulations, analyze a business plan and examine comprehensive program policies and procedures.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take All: DRE-098 and EDU-119.

## EDU 262 – Early Childhood Administration II

This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take All: DRE-098, EDU-119 and EDU-261.

## EDU 271 – Educational Technology

This course introduces the ethical use of technology to enhance teaching and learning in all educational settings. Emphasis is placed on technology concepts, ethical issues, digital citizenship, instructional strategies, assistive technology, and the use of technology for professional development and communication. Upon completion, students should be able to discuss technology concepts, ethically use a variety of technology resources, demonstrate appropriate technology skills in educational environments, and identify assistive technology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Corequisites

Take DRE-098

## EDU 280 – Language/Literacy Experiences

This course provides evidence-based strategies for enhancing language and literacy experiences that align with NC Foundations for Early Learning and Development. Topics include developmental sequences for children's emergent receptive and expressive language, print concepts, appropriate observations/assessments, literacy enriched environments, quality selection of diverse literature, interactive media, and inclusive

practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate language and literacy experiences for children who are culturally, linguistically and ability diverse.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## EDU 282 – Early Childhood Literature

This course covers the history, selection, and integration of literature and language in the early childhood curriculum. Topics include the history and selection of developmentally appropriate children's literature and the use of books and other media to enhance language and literacy in the classroom. Upon completion, students should be able to select appropriate books for storytelling, reading aloud, puppetry, flannel board use, and other techniques for children who are culturally, linguistically, and ability diverse.

Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take DRE-098

## EDU 284 – Early Childhood Capstone Practicum

This course is designed to allow students to demonstrate acquired skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/engaging families; and modeling reflective and professional practices based on national and state guidelines. Upon completion, students should be able to apply NC Foundations for Early Learning and Development to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors, including the use of appropriate technology, as indicated by assignments and onsite faculty assessments.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	9	0	0	4

## Corequisites

Take DRE-098

## Prerequisites

Take One Set: Set 1: EDU-119, EDU-144, EDU-145, EDU-146, and EDU-151 Set 2: EDU-119, PSY-244, PSY-245, EDU-146, and EDU-151 Set 3: EDU-119, PSY-245, EDU-144, EDU-146, and EDU-151 Set 4: EDU-119, PSY-244, EDU-145, EDU-146, and EDU-151

## EGR – Engineering

### EGR 110 – Intro to Engineering Tech

This course introduces general topics relevant to engineering technology. Topics include career assessment, professional ethics, critical thinking and problem solving, usage of college resources for study and research, and using tools for engineering computations. Upon completion, students should be able to choose a career option in engineering technology and utilize college resources to meet their educational goals.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### EGR 115 – Intro to Technology

This course introduces the basic skills and career fields for technicians. Topics include career options, technical vocabulary, dimensional analysis, measurement systems, engineering graphics, calculator applications, professional ethics, safety practices, and other related topics. Upon completion, students should be able to demonstrate an understanding of the basic technologies, prepare drawings and sketches, and perform computations using a scientific calculator.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### EGR 125 – Appl Software for Tech

This course introduces personal computer software and teaches students how to customize the software for technical applications. Emphasis is placed on the use of common office applications software programs such as spreadsheets, word processing, graphics, and internet access. Upon completion, students should be able to demonstrate competency in using applications software to solve technical problems and communicate the results in text and graphical formats.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### EGR 150 – Introduction to Engineering

This course is an overview of the engineering profession. Topics include goal setting and career assessment, ethics, public safety, the engineering method and design process, written and oral communication, interpersonal skills and team building, and computer applications. Upon completion, students should be able to understand the engineering process, the engineering profession, and utilize college resources to meet their educational goals.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## EGR 220 – Engineering Statics

This course introduces the concepts of engineering based on forces in equilibrium. Topics include concentrated forces, distributed forces, forces due to friction, and inertia as they apply to machines, structures, and systems. Upon completion, students should be able to solve problems which require the ability to analyze systems of forces in static equilibrium.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Corequisites

Take MAT 272

### Prerequisites

Take PHY 251

## EGR 228 – Intro to Solid Mechanics

This course provides an introduction to engineering theory of deformable solids and applications. Topics include stress and deformation resulting from axial, torsion, and bending loads; shear and moment diagrams; Mohr's circle of stress; and strain and buckling of columns. Upon completion, students should be able to analyze solids subject to various forces and design systems using a variety of materials.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take EGR 220

## EGR 251 – Statics

This course covers the concepts and principles of statics. Topics include systems of forces and moments on structures in two- and three-dimensions in equilibrium. Upon completion, students should be able to analyze forces and moments on structures.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take MAT-121 or MAT-171

## EGR 252 – Strength of Materials

This course covers the principles and concepts of stress analysis. Topics include centroids, moments of inertia, shear/moment diagrams, and stress and strain. Upon completion, students should be able to perform a stress and strain analysis on structural components.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take EGR-251

## EHS – Environmental Health & Safety

### EHS 215 – Incident Management

This course introduces management of hazardous materials and incidents. Topics include analysis and application of the Incident Command System from the discovery of a hazardous substance release to decontamination and termination procedures. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of hazardous materials team members.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## ELC – Electrical

### ELC 111 – Introduction to Electricity

This course introduces the fundamental concepts of electricity and test equipment to non-electrical/electronics majors. Topics include basic DC and AC principles (voltage, resistance, current, impedance); components (resistors, inductors, and capacitors); power; and operation of test equipment. Upon completion, students should be able to construct and analyze simple DC and AC circuits using electrical test equipment.

ELC 111 is required for AHR and CMT program students, but can be used as an elective for ELC and ELN program students.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### ELC 112 – DC/AC Electricity

This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, and analyze simple DC/AC circuits.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	6	0	0	5

### ELC 113 – Residential Wiring

This course introduces the care/usage of tools and materials used in residential electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical print reading; planning, layout; and installation of electrical distribution



equipment; lighting; overcurrent protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with residential electrical installations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Corequisites

ELC-118

## ELC 115 – Industrial Wiring

This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Prerequisites

Take ELC-113

## ELC 117 – Motors and Controls

This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contactors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Corequisites

Take ELC-125.

## ELC 118 – National Electrical Code

This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## ELC 119 – NEC Calculations

This course covers branch circuit, feeder, and service calculations. Emphasis is placed on sections of the National Electrical Code related to calculations. Upon completion, students should be able to use appropriate code sections to size wire, conduit, and overcurrent devices for branch circuits, feeders, and service.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### Corequisites

Take ELC-118.

## ELC 125 – Diagrams and Schematics

This course covers the interpretation of electrical diagrams, schematics, and drawings common to electrical applications. Emphasis is placed on reading and interpreting electrical diagrams and schematics. Upon completion, students should be able to read and interpret electrical diagrams and schematics.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## ELC 126 – Electrical Computations

This course introduces the fundamental applications of mathematics which are used by an electrical/electronics technician. Topics include whole numbers, fractions, decimals, powers, roots, simple electrical formulas, and usage of a scientific calculator. Upon completion, students should be able to solve simple electrical mathematical problems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## ELC 128 – Introduction to Programmable Logic Controller

This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to understand basic PLC systems and create simple programs.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## ELC 130 – Advanced Motors/Controls

This course covers motors concepts, construction and characteristics and provides a foundation in motor controls. Topics include motor control ladder logic, starters, timers, overload protection, braking, reduced voltage starting, SCR control, AC/DC drives, system and component level troubleshooting. Upon completion, students should be able to specify, connect, control, troubleshoot, and maintain motors and motor control systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take One: ELC-111, ELC-112, ELC-131, or ELC-138

## ELC 138 – DC Circuit Analysis

This course introduces DC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, and analyze DC circuits; and properly use test equipment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## ELC 139 – AC Circuit Analysis

This course introduces AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include AC voltages, circuit analysis laws and theorems, reactive components and circuits, transformers, test equipment operation, circuit simulation, and other related topics. Upon completion, students should be able to interpret AC circuit schematics; analyze and troubleshoot AC circuits; and properly use test equipment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take ELC-138.

## ELC 213 – Instrumentation

This course covers the fundamentals of instrumentation used in industry. Emphasis is placed on electric, electronic, and other instruments. Upon completion, students should be able to install, maintain, and calibrate instrumentation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## ELC 215 – Electrical Maintenance

This course introduces the theory of maintenance and the skills necessary to maintain electrical equipment found in industrial and commercial facilities. Topics include maintenance theory, predictive and preventive maintenance, electrical equipment operation and maintenance, and maintenance documentation. Upon completion, students should be able to perform maintenance on electrical equipment in industrial and commercial facilities.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take ELC-117;

## ELN – Electronics

### ELN 131 – Analog Electronics I

This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog circuits using appropriate techniques and test equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Corequisites

ELC-139

### ELN 132 – Analog Electronics II

This course covers additional applications of analog electronic circuits with an emphasis on analog and mixed signal integrated circuits (IC). Topics include amplification, filtering, oscillation, voltage regulation, and other analog circuits. Upon completion, students should be able to construct, analyze, verify, and troubleshoot analog electronic circuits using appropriate techniques and test equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### ELN 133 – Digital Electronics

This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, medium scale integration (MSI) and large scale integration (LSI) circuits, analog to digital (AD) and digital to analog (DA) conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## ELN 150 – Computer-Aided Drafting for Electronics

This course introduces computer-aided drafting (CAD) with an emphasis on applications in the electronics field. Topics include electronics industry standards (symbols, schematic diagrams, layouts); drawing electronic circuit diagrams; and specialized electronic drafting practices and components such as resistors, capacitors, and ICs. Upon completion, students should be able to prepare electronic drawings with CAD software.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## ELN 232 – Introduction to Microprocessors

This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include low-level language programming, bus architecture, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## ELN 234 – Communication Systems

This course introduces the fundamentals of electronic communication systems. Topics include the frequency spectrum, electrical noise, modulation techniques, characteristics of transmitters and receivers, and digital communications. Upon completion, students should be able to interpret analog and digital communication circuit diagrams, analyze transmitter and receiver circuits, and use appropriate communication test equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take ELN-131;

## ELN 260 – Prog Logic Controllers

This course provides a detailed study of PLC applications, with a focus on design of industrial controls using the PLC. Topics include PLC components, memory organization, math instructions, documentation, input/output devices, and applying PLCs in industrial control systems. Upon completion, students should be able to select and program a PLC system to perform a wide variety of industrial control functions.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take ELC-128

# EMS – Emergency Medical Science

## EMS 110 – EMT

This course introduces basic emergency medical care. Topics include preparatory, airway, patient assessment, medical emergencies, trauma, infants and children, and operations. Upon completion, students should be able to demonstrate the knowledge and skills necessary to achieve North Carolina State or National Registry EMT certification.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
6	6	3	0	9

## EMS 122 – EMS Clinical Practicum I

This course provides the introductory hospital clinical experience for the paramedic student. Emphasis is placed on mastering fundamental paramedic skills. Upon completion, students should be able to demonstrate competence with fundamental paramedic level skills.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	3	0	1

## Corequisites

Take EMS-130

## Prerequisites

Take EMS-110

## EMS 125 – EMS Instructor Methodology

This course covers the information needed to develop and instruct EMS courses. Topics include instructional methods, lesson plan development, time management skills, and theories of adult learning. Upon completion, students should be able to teach EMS courses and meet the North Carolina EMS requirements for instructor methodology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

# EMS 130 – Pharmacology

This course introduces the fundamental principles of pharmacology and medication administration and is required for paramedic certification. Topics include medical terminology, pharmacological concepts, weights, measures, drug calculations, vascular access for fluids and medication administration and legislation. Upon completion, students should be able to accurately calculate drug dosages, properly administer medications, and demonstrate general knowledge of pharmacology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take EMS-110

## EMS 131 – Advanced Airway Management

This course is designed to provide advanced airway management techniques and is required for paramedic certification. Topics include respiratory anatomy and physiology, airway/ventilation, adjuncts, surgical intervention, and rapid sequence intubation. Upon completion, students should be able to properly utilize all airway adjuncts and pharmacology associated with airway control and maintenance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take EMS-110

## EMS 140 – Rescue Scene Management

This course introduces rescue scene management. Topics include response to hazardous material conditions, incident command, and extrication of patients from a variety of situations. Upon completion, students should be able to recognize and manage rescue operations based upon initial and follow-up scene assessment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## EMS 140A – Rescue Scene Skills Lab

This course is designed to provide enhanced rescue scene skills for EMS providers. Emphasis is placed on advanced rescue scene evolutions including hazardous materials and major incident response. Upon completion, students should be able to demonstrate skills necessary to safely effect patients rescue in a variety of situations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

## EMS 150 – Emergency Vehicles and EMS Communication

This course covers the principles governing emergency vehicles, maintenance of emergency vehicles, and EMS communication equipment. Topics include applicable motor vehicle laws affecting emergency vehicle operation, defensive driving, collision avoidance techniques, communication systems, and information management systems. Upon completion, students should have a basic knowledge of emergency vehicles, maintenance, and communication needs.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## EMS 160 – Cardiology I

This course introduces the study of cardiovascular emergencies and is required for paramedic certification. Topics include anatomy and physiology, pathophysiology, electrophysiology, and rhythm interpretation. Upon completion, students should be able to recognize and interpret rhythms.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take EMS-110

## EMS 220 – Cardiology II

This course provides an in-depth study of cardiovascular emergencies and is required for paramedic certification. Topics include assessment and treatment of cardiac emergencies, application and interpretation of advanced electrocardiography utilizing the twelve-lead ECG, cardiac pharmacology, and patient care. Upon completion, students should be able to assess and treat patients utilizing American Heart Association guidelines.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take All: EMS-122, EMS-130, and EMS-160

## EMS 221 – EMS Clinical Practicum II

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on increasing the proficiency of students' skills and abilities in patient assessments and the delivery of care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

### Hours



CLASS	LAB	CLINICAL	WORK	SHC
0	0	6	0	2

## Prerequisites

Take All: EMS 121 or EMS-122

## EMS 231 – EMS Clinical Practicum III

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on enhancing the students' skills and abilities in providing advanced-level care. Upon completion, students should be able to demonstrate continued progress in advanced-level patient care.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	9	0	3

## Prerequisites

Take All: EMS-221

## EMS 235 – EMS Management

This course stresses the principles of managing a modern emergency medical service system. Topics include structure and function of municipal governments, EMS grantsmanship, finance, regulatory agencies, system management, legal issues, and other topics relevant to the EMS manager. Upon completion, students should be able to understand the principles of managing emergency medical service delivery systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## EMS 240 – Patients with Special Challenges

This course includes concepts of crisis intervention and techniques of interacting with patients with special challenges and is required for paramedic certification. Topics include appropriate intervention and interaction for neglected, abused, terminally ill, chronically ill, technology assisted, bariatric, physically challenged, mentally challenged, or assaulted patients as well as behavioral emergencies. Upon completion, students should be able to recognize and manage the care of patients with special challenges.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take All: EMS-122 and EMS-130

## EMS 241 – EMS Clinical Practicum IV

This course provides clinical experiences in the hospital and/or field. Emphasis is placed on mastering the skills/competencies required of the paramedic providing advanced-level care. Upon completion, students should be able to provide advanced-level patient care as an entry-level paramedic.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	12	0	4

## Prerequisites

Take EMS-231

## EMS 250 – Medical Emergencies

This course provides an in-depth study of medical conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include appropriate interventions/treatments for disorders/diseases/injuries affecting the following systems: respiratory, neurological, abdominal/gastrointestinal, endocrine, genitourinary, musculoskeletal, and immunological as well as toxicology, infectious diseases and diseases of the eyes, ears, nose and throat. Upon completion, students should be able to recognize, assess and manage the care of frequently encountered medical conditions based upon initial patient assessment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take All: EMS-122 and EMS-130

## EMS 260 – Trauma Emergencies

This course provides in-depth study of trauma including pharmacological interventions for conditions frequently encountered in the prehospital setting and is required for paramedic certification. Topics include an overview of thoracic, abdominal, genitourinary, orthopedic, neurological, and multi-system trauma, soft tissue trauma of the head, neck, and face as well as environmental emergencies. Upon completion, students should be able to recognize and manage trauma situations based upon patient assessment and should adhere to standards of care.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take All: EMS-122 and EMS-130

## EMS 270 – Life Span Emergencies

This course covers medical/ethical/legal issues and the spectrum of age-specific emergencies from conception through death required for paramedic certification. Topics include gynecological, obstetrical, neonatal, pediatric, and geriatric emergencies and pharmacological therapeutics. Upon completion, students should be able to recognize and treat age-specific emergencies.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take All: EMS-122 and EMS-130

## EMS 280 – EMS Bridging Course

This course is designed to bridge the knowledge gained in a continuing education paramedic program with the knowledge gained in an EMS curriculum program. Emphasis is placed on patient assessment, advanced electrocardiography utilizing the twelve-lead ECG, advanced pharmacology, the appropriate intervention and treatment of multi-system injuries/disorders, ethics, and NC laws and rules. Upon completion, students should be able to perform advanced patient assessment and practice skills

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## EMS 285 – EMS Capstone

This course provides an opportunity to demonstrate problem-solving skills as a team leader in simulated patient scenarios and is required for paramedic certification. Emphasis is placed on critical thinking, integration of didactic and psychomotor skills, and effective performance in simulated emergency situations. Upon completion, students should be able to recognize and appropriately respond to a variety of EMS-related events.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take All: EMS-220, EMS-250, and EMS-260

## ENG – English

### ENG 002 – Transition English

This course provides an opportunity to customize foundational English content in specific areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in college-level English. Upon completion, students should be able to build a stronger foundation for success in their gateway level English courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

### ENG 011 – Writing and Inquiry Support

This course provides an opportunity to supplement the skills introduced in Writing and Inquiry. Topics include developing the necessary skills to edit and revise components of the writing process. Upon completion, students should be able to write in a variety of genres and formats using a recursive process, and effective use of rhetorical strategies, with emphasis placed on the editing and revision components of the writing process.

This course is a mandatory corequisite to ENG-111 for students with an unweighted high school GPA between 2.2 and 2.799. It is also a mandatory corequisite to ENG-111 for students who still require credit for DRE-098. This course is an optional corequisite to ENG-111 for all other students.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Corequisites

Take ENG 111

## ENG 102 – Applied Communications II

This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ENG 111 – Writing and Inquiry

This course is designed to develop the ability to produce clear writing in a variety of genres and formats using a recursive process. Emphasis includes inquiry, analysis, effective use of rhetorical strategies, thesis development, audience awareness, and revision. Upon completion, students should be able to produce unified, coherent, well-developed essays using standard written English.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

ENG 011 (mandatory for students with an unweighted high school GPA between 2.2 and 2.799, and for students who still require credit for DRE 098; optional for all other students)

## Prerequisites

Take DRE-098

## ENG 112 – Writing and Research in the Disciplines

This course, the second in a series of two, introduces research techniques, documentation styles, and writing strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented writing and research projects. Upon completion, students

should be able to evaluate and synthesize information from primary and secondary sources using documentation appropriate to various disciplines.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## ENG 113 – Literature-Based Research

This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## ENG 114 – Professional Research & Reporting

This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## ENG 125 – Creative Writing I

This course is designed to provide students with the opportunity to practice the art of creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon completion, students should be able to craft and critique their own writing and critique the writing of others.

Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## ENG 126 – Creative Writing II

This course is designed as a workshop approach for advancing imaginative and literary skills. Emphasis is placed on the discussion of style, techniques, and challenges for first publications. Upon completion, students should be able to submit a piece of their writing for publication.

Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-125

## ENG 131 – Introduction to Literature

This course introduces the principal genres of literature. Emphasis is placed on literary terminology, devices, structure, and interpretation. Upon completion, students should be able to analyze and respond to literature.

Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Corequisites

Take One: ENG-112, ENG-113, or ENG-114

## Prerequisites

Take ENG-111

## ENG 231 – American Literature I

This course covers selected works in American literature from its beginnings to 1865. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG 113, or ENG 114

## ENG 232 – American Literature II

This course covers selected works in American literature from 1865 to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to analyze and interpret literary works in their historical and cultural contexts.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## ENG 235 – Survey of Film As Lit

This course provides a study of the medium of film with a focus on the historical impact and the various literary genres of movies. Emphasis is placed on an appreciation of film as a form of literature which demonstrates various elements of fiction (character, setting, theme, etc.). Upon completion, students should be able to analyze film critically in various literary contexts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-113

## ENG 241 – British Literature I

This course covers selected works in British literature from its beginnings to the Romantic Period. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-112, ENG-113, or ENG-114

## ENG 242 – British Literature II

This course covers selected works in British literature from the Romantic Period to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to literary works in their historical and cultural contexts.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## ENG 261 – World Literature I

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## ENG 262 – World Literature II

This course introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## ENG 272 – Southern Literature



This course provides an analytical study of the works of several Southern authors. Emphasis is placed on the historical and cultural contexts, themes, aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## ENG 273 – African-American Literature

This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## ENG 274 – Literature by Women

This course provides an analytical study of the works of several women authors. Emphasis is placed on the historical and cultural contexts, themes and aesthetic features of individual works, and biographical backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and discuss selected works.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ENG-112, ENG-113, or ENG-114

## EPT – Emergency Preparedness

### EPT 120 – Sociology of Disaster

This course is designed to overview sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 124 – EM Services Law & Ethics

This course covers federal and state laws that affect emergency service personnel in the event of a natural disaster or terrorist incident. Topics include initial response and long-term management strategies, with an emphasis on legal and ethical considerations and coordination between local, state, and federal agencies. Upon completion, students should have an understanding of the role of private industry, government agencies, public policies, and federal/state declarations of disasters in emergency situations.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 130 – Mitigation & Preparedness

This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disasters. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion students should be able to develop a mitigation and preparedness plan.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 140 – Emergency Management

This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate an understanding of comprehensive emergency management and the integrated emergency management system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 150 – Incident Management

This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating within the National Incident Management System.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 210 – Response & Recovery

This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster, response, and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 220 – Terrorism and Emergency Management

This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, students should be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 225 – Hazard Analysis/Risk Assessment

This course covers the probability and frequency of hazards, level of hazard exposure, and the effect or cost, both direct and indirect, of this exposure. Topics include identifying and characterizing hazards, evaluating hazard severity and frequency, estimating risks, and determining potential societal and economic effects. Upon completion, students should be able to identify the potential hazards and risks within a community.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 230 – Emergency Planning

This course covers the rationale for and methods related to a comprehensive approach to emergency planning. Topics include the emergency planning process, command arrangement, coordination, budgetary issues, environmental contamination issues, and public policy concerns. Upon completion, students should be able to develop an emergency plan for a community.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 260 – Business Continuity

This course covers emergency preparedness techniques necessary to maintain business continuity. Topics include critical processes, planning, risk assessment, impact analysis, mitigation strategies, response, recovery and resumption activities. Upon completion, students should be able to demonstrate a working knowledge of the partnership between business and emergency response.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## EPT 275 – Emergency Operations Center Management

This course provides students with the knowledge and skills to effectively manage and operate an emergency operations center (EOC) during crisis situations. Topics include properly locating and designing an EOC, staffing, training and briefing EOC personnel, and how to operate an EOC. Upon completion, students should be able to demonstrate how to set up and operate an effective emergency operations center.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ETR – Entrepreneurship

### ETR 210 – Introduction to Entrepreneurship

This course provides a survey of the starting and operating of an entrepreneurial venture. Topics include new venture creation, the business plan, economics of the business, determining resource needs and acquiring resources, marketing, technology, leadership skills, and business ethics. Upon completion, students should be able to demonstrate an understanding of entrepreneurship concepts and how to use the entrepreneurial mindset to succeed in their careers.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### ETR 215 – Law for Entrepreneurs

This course introduces students to basic legal concepts specifically relevant to a business start-up venture. Topics include bailments and documents of title, nature and form of sales, risk and property rights, obligations and performance, business organizations, and agency and employment. Upon completion, students should be able to assess the legal responsibilities of a business start-up.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### ETR 220 – Innovation and Creativity

This course provides a study of developing and enhancing individual and organizational creativity and innovation. Topics include that innovation needs to be applied to products, services, and processes to increase competitive advantages and add value to businesses. Upon completion, students should be able to apply innovation and creativity principles in the work place.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ETR 230 – Entrepreneur Marketing

This course covers the techniques to correctly research and define the target market to increase sales for start up businesses or to expand current businesses. Topics include how to target market and meet customers' needs with a limited budget in the early stages of the life of a start up business. Upon completion, students should be able to demonstrate an understanding of how to correctly target market for a start-up business with limited resources.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ETR 240 – Funding for Entrepreneurs

This course provides a focus on the financial issues and needs confronting entrepreneurs attempting to grow their businesses by attracting startup and growth capital. Topics include sources of funding including angel investors, venture capital, IPO's, private placement, banks, suppliers, buyers, partners, and the government. Upon completion, students should be able to demonstrate an understanding of how to effectively finance a business venture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ACC-120

## ETR 270 – Entrepreneurship Issues

This course introduces current and emerging entrepreneurship issues and opportunities. Topics include franchising, import/export, small business taxes, legal structures, negotiations, contract management, and time management. Upon completion, students should be able to apply a variety of analytical and decision-making requirements to start a new business.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP – Fire Protection

### FIP 120 – Introduction to Fire Protection

This course provides an overview of the development, methods, systems and regulations that apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and related subjects. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 124 – Fire Prevention & Public Education

This course introduces fire prevention concepts as they relate to community and industrial operations referenced in NFPA standard 101. Topics include the development and maintenance of fire prevention programs, educational programs, and inspection programs. Upon completion, students should be able to research, develop, and present a fire safety program to a citizens or industrial group.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 128 – Detection and Investigation

This course covers procedures for determining the origin and cause of accidental and incendiary fires referenced in NFPA standard 921. Topics include collection and preservation of evidence, detection and determination of accelerants, courtroom procedure and testimony, and documentation of the fire scene. Upon completion, students should be able to conduct a competent fire investigation and present those findings to appropriate officials or equivalent.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 132 – Building Construction

This course covers the principles and practices reference in NFPA standard 220 related to various types of building construction, including residential and commercial, as impacted by fire conditions. Topics include types of construction and related elements, fire resistive aspects of construction materials, building codes, collapse, and other related topics. Upon completion, students should be able to understand and recognize various types of construction and their positive or negative aspects as related to fire conditions.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 136 – Inspections and Codes

This course covers the fundamentals of fire and building codes and procedures to conduct an inspection referenced in NFPA standard 1730. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 140 – Industrial Fire Protection

This course covers fire protection systems in industrial facilities referenced in NFPA standard 1. Topics include applicable health and safety standards, insurance carrier regulations, other regulatory agencies, hazards of local industries, fire brigade operation, and loss prevention programs. Upon completion, students should be able to plan and evaluation an industrial facility's fire protection program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 146 – Fire Protection Systems

This course introduces various types of automatic sprinklers, standpipes, fire alarm systems, and fixed and portable extinguishing systems referenced in NFPA standard 25, including their operation, installation, and maintenance. Topics include wet and dry systems, testing and maintenance, water supply requirements, fire detection and alarm systems, including application, testing, and maintenance of Halon, carbon dioxide, dry chemical, and special extinguishing agents utilized in fixed and portable systems. Upon completion, students should be able to demonstrate a working knowledge of sprinkler and alarm systems, both fixed and portable, including appropriate application, operation, inspection, and maintenance requirements.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## FIP 152 – Fire Protection Law

This course covers fire protection law as referenced in NFPA standard 1. Topics include legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 162 – Firefighter Safety & Wellness

The purpose of this course is to reduce firefighter injuries and fatalities by discussing topics that impact firefighter safety. Emphasis is placed on national standards, the 16 Life Safety Initiatives, and current events to identify changes needed to create a culture of safety. Upon completion, students should be able to define and describe the need for cultural and behavioral changes within the emergency services.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 164 – OSHA Standards

This course covers public and private sector OSHA work site requirements referenced in NFPA standard 1250. Emphasis is placed on accident prevention and reporting, personal safety, machine operations, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write workplace policies designed to achieve compliance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 176 – HazMat: Operations

This course is designed to increase first responder awareness of the type, nature, physiological effects of, and defensive techniques for mitigation of HazMat incidents. Topics include recognition, identification, regulations and standards, zoning, resource usage, defensive operations, and other related topics. Upon completion, students should be able to recognize and identify the presence of hazardous materials and use proper defensive techniques for incident mitigation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

## FIP 180 – Wildland Fire Behavior

This course covers the principles of wildland fire behavior and meteorology referenced in NFPA standard 1143. Emphasis is placed on fire calculations, fuels, and related weather effects. Upon completion, students should be able to demonstrate and apply fire behavior theories through written and performance evaluations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 184 – Wildland Fire Safety

This course covers safety principles used when working in the wildland fire environment referenced in NFPA standard 1143. Emphasis is placed on personal safety and working with equipment, aircraft, and fire-ground operations. Upon completion, students should be able to understand and demonstrate fire safety procedures through written and performance evaluations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 220 – Fire Fighting Strategies

This course provides preparation for command of initial incident operations involving emergencies within both the public and private sector referenced in NFPA standards 1561, 1710, and 1720. Topics include incident management, fire-ground tactics and strategies, incident safety, and command/control of emergency operations. Upon completion, students should be able to describe the initial incident system as it relates to operations involving various emergencies in fire and non-fire situations.

## Hours



CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 221 – Advanced Fire Fighting Strategies

This course covers command-level operations for multi-company/agency operations involving fire and non-fire emergencies. Topics include advanced use of the Incident Command System(ICS), advanced incident analysis, command-level fire operations, and control of both man made and natural major disasters. Upon completion, students should be able to describe proper and accepted systems for the mitigation of emergencies at the level of overall scene command.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take FIP-220

## FIP 224 – Fire Instructor I & II

This course covers the knowledge, skills, and abilities needed to train others in fire service operations. Topics include planning, presenting, and evaluating lesson plans, learning styles, use of media, communication, and other related topics. Upon completion, students should be able to meet the requirements of the Fire Instructor I and II objectives from National Fire Protection Association (NFPA) 1041.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

## FIP 226 – Fire Officer I & II

This course covers the knowledge, skills, and requirements referenced in the National Fire Protection Association (NFPA) Standard 1021 for Fire Officer I and II training. Topics include officer roles and responsibilities, budgets, fire cause determination, inspections, education, leadership, management, public relations, and other requirements included in the NFPA standard. Upon completion, students should be able to demonstrate an understanding of relevant NFPA standards as required for state Fire Officer I and II certification.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

## FIP 228 – Local Government Finance

This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operations of a department.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 229 – Fire Dynamics and Combustion

This course covers the theories and fundamentals of how and why fires start and spread, and how they are safely controlled referenced in NFPA standard 1001. Topics include components of fire, fire sources, fire behavior, properties of combustible solids, classification of hazards, and the use of fire extinguishing agents. Upon completion, students should be able to describe the properties of matter and dynamics of fire, identify fuel sources, and compare suppressants and extinguishment techniques.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 230 – Chemistry of Hazardous Materials I

This course covers the evaluation of hazardous materials referenced in NFPA standard 1072. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
5	0	0	0	5

## FIP 232 – Hydraulics and Water Distribution

This course covers the flow of fluids through fire hoses, nozzles, appliances, pumps, standpipes, water mains, and other devices reference in NFPA standard 25. Emphasis is placed on supply and delivery systems, fire flow testing, hydraulic calculations, and other related topics. Upon completion, students should be able to perform hydraulic calculations, conduct water availability tests, and demonstrate knowledge of water distribution systems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## FIP 240 – Fire Service Supervision

This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor's job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and safety. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of effective fire service supervision, meeting elements of NFPA 1021.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 248 – Fire Service Personnel Administration

This course covers the basics of setting up and administering the personnel functions of fire protection organizations referenced in NFPA standard 1021. Emphasis is placed on human resource planning, classification and job analysis, equal opportunity employment, affirmative action, recruitment, retention, development, performance evaluation, and assessment centers. Upon completion, students should be able to demonstrate knowledge of the personnel function as it relates to managing fire protection.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 256 – Municipal Public Relations

This course is a general survey of municipal public relations and their effect on the governmental process referenced in NFPA standard 1035. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage public relations functions of organizations which meet elements of NFPA 1021 for Fire Officer I and II.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 264 – Flame Properties and Materials Rating

This course covers the role of interior finishes in fires, smoke obscuration and density, flame spread, pyrolysis, and other related topics referenced in NFPA standard 1001. Emphasis is placed on testing equipment which includes Rack Impingement, Bench Furnace, and the two-foot tunnel. Upon completion, students should be able to understand the operation of the testing equipment and compile a reference notebook.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## FIP 276 – Managing Fire Services

This course provides an overview of fire department operative services referenced in NFPA standard 1021. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FIP 277 – Fire and Social Behavior

This course covers fire-related aspects of human behavior, with an emphasis on research and a systems approach to human-behavior analysis. Topics include identification of populations and structures at high risk, evaluation of systems models, and use of computer models to predict

human behavior during fires. Upon completion, students should be able to identify and anticipate human behavior in response to various residential, commercial, board-and-care facility, and wildland/rural fire events.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## FRE – French

### FRE 111 – Elementary French I

This course introduces the fundamental elements of the French language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written French and demonstrate cultural awareness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### FRE 112 – Elementary French II

This course is a continuation of FRE 111 focusing on the fundamental elements of the French language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written French and demonstrate further cultural awareness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take FRE-111

## GEO – Geography

### GEO 111 – World Regional Geography

This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### GEO 112 – Cultural Geography

This course is designed to explore the diversity of human cultures and to describe their shared characteristics. Emphasis is placed on the characteristics, distribution, and complexity of earth's cultural patterns. Upon completion, students should be able to demonstrate an understanding of the differences and similarities in human cultural groups.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## GEO 130 – General Physical Geography

This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## GIS – Geographic Information Systems

### GIS 212 – GIS/GPS Applications

This course provides experience in operational and management issues in designing and implementing GIS/GPSs for use in planning, management, analysis, and locational decision making. Topics include applications in municipal, industrial, and service sectors and the associated planning, legal, national, and global issues with a project emphasizing the student's specialization. Upon completion, students should be able to design and apply GIS/GPS technologies to solve practical problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	4	0	0	6

### GIS 252 – Utilities in GIS

The student will gain an understanding of utilizing GIS for utilities applications. Topics include the theory and implementation of GIS networks effectively in real world utility scenarios. Upon completion, students should be able to demonstrate an understanding of the fundamentals of utility mapping, including the use of correct terminology and symbology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## GRD – Graphic Design

### GRD 110 – Typography I

This course introduces the history and mechanics of type and its application to layout and design. Topics include typographic fundamentals, anatomy, measurements, composition, identification, and terminology. Upon completion, students should be able to demonstrate proficiency in

design application, analysis, specification, and creation of typographic elements.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## GRD 113 – History of Graphic Design

This course covers the history of graphic design and visual communications. Topics include major trends, developments, influences, and directions. Upon completion, students should be able to understand, recognize, and analyze important historical and world-wide cultural influences found in today's marketing of ideas and products.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## GRD 117 – Design Career Exploration

This course covers opportunities in the graphic design field and employment requirements. Topics include evaluation of career choices, operations, structure of advertising and graphic design businesses, and related business issues. Upon completion, students should be able to demonstrate an understanding of the graphic design field and consider an appropriate personal direction of career specialization.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## GRD 131 – Illustration I

This course introduces the application of rendering techniques to create illustrations. Emphasis is placed on controlling various media, methods, surfaces, design problems, and the appropriate media selection process. Upon completion, students should be able to produce quality illustrations from conception through finished artwork.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take One: ART-131, DES-125, or GRD-121

## GRD 132 – Illustration II

This course is a continuation of GRD 131. Topics include editorial, product, fashion, and advertising illustrations. Upon completion, students should be able to demonstrate increased proficiency in creating quality illustrations from conceptualization through finished artwork.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take GRD-131

## GRD 141 – Graphic Design I

This course introduces the conceptualization process used in visual problem solving. Emphasis is placed on learning the principles of design and on the manipulation and organization of elements. Upon completion, students should be able to apply design principles and visual elements to projects

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

## GRD 142 – Graphic Design II

This course covers the application of visual elements and design principles in advertising and graphic design. Topics include creation of various design, such as logos, advertisements, posters, outdoor advertising, and publication design. Upon completion, students should be able to effectively apply design principles and visual elements to projects.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

## Prerequisites

Take One: ART-121, DES-135, or GRD-141.

## GRD 145 – Design Applications I

This course introduces visual problem solving. Emphasis is placed on application of design principles. Upon completion, students should be able to produce projects utilizing basic design concepts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

Take GRD-141

## GRD 151 – Computer Design Basics

This course covers designing and drawing with various types of software applications for advertising and graphic design. Emphasis is placed on creative and imaginative use of space, shapes, value, texture, color, and typography to provide effective solutions to advertising and graphic

design problems. Upon completion, students should be able to use the computer as a creative tool.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## GRD 152 – Computer Design Tech I

This course covers complex design problems utilizing various design and drawing software applications. Topics include the expressive use of typography, image, and organization to communicate a message. Upon completion, students should be able to use appropriate computer software to professionally present their work.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## Prerequisites

Take GRD-151

## GRD 170 – Exhibit Design

This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts in both exhibit designs and commercial displays.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## Prerequisites

Take GRD-141

## GRD 230 – Technical Illustration

This course introduces technical and industrial illustration techniques. Topics include orthographic, isometric, linear perspective, and exploded views. Upon completion, students should be able to demonstrate competence in various technical rendering techniques.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take One: ART-131, DES-125, or GRD-121



## GRD 241 – Graphic Design III

This course is an advanced exploration of various techniques and media for advertising and graphic design. Emphasis is placed on advanced concepts and solutions to complex and challenging graphic design problems. Upon completion, students should be able to demonstrate competence and professionalism in visual problem solving.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

### Prerequisites

Take One: DES-136 or GRD-142

## GRD 260 – Digital Processes/Theory

This course covers technical problems associated with converting, formatting, preparing, reproducing, or outputting digital files for multimedia, print, video, photography, and communication media. Emphasis is placed on research, problem solving, analysis of output specifications, and exploration of current and emerging technologies in core and related industries. Upon completion, students should be able to identify and describe multiple solutions for each problem presented.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### Prerequisites

Take One: GRD-151 or GRA-151

## GRD 265 – Digital Print Production

This course covers preparation of digital files for output and reproduction. Emphasis is placed on output options, separations, color proofing, and cost and design considerations. Upon completion, students should be able to prepare files and select appropriate output methods for design solutions.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

### Prerequisites

Take One: GRD-151 or GRA-151

## GRD 280 – Portfolio Design

This course covers the organization and presentation of a design/advertising or graphic art portfolio and appropriate related materials. Emphasis is placed on development and evaluation of the portfolio, design and production of a resume and self-promotional materials, and interview techniques. Upon completion, students should be able to prepare and professionally present an effective portfolio and related self-promotional materials.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	4	0	0	4

## Prerequisites

Take One Set: Set 1: GRD-142 and GRD-152 Set 2: GRD-142 and GRA-152

## GRD 281 – Design of Advertising

This course explores the origins, roles, scope, forms, and development of advertising. Emphasis is placed on advertising development from idea through production and the interrelationship of marketing to types of advertising, media, and organizational structure. Upon completion, students should be able to produce advertising for various media and demonstrate an understanding of the complexities and relationships involved in advertising design.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## HEA – Health

### HEA 110 – Personal Health/Wellness

This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors necessary to the maintenance of health and wellness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HIS – History

### HIS 111 – World Civilizations I

This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-002 OR ENG-111.

## HIS 112 – World Civilizations II

This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ENG-002 OR ENG 111.

## HIS 122 – Western Civilization II

This course introduces western civilization from the early modern era to the present. Topics include the religious wars, the Industrial Revolution, World Wars I and II, and the Cold War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern western civilization.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ENG-002 OR ENG 111.

## HIS 131 – American History I

This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early American history.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ENG-002 OR ENG 111.

## HIS 132 – American History II

This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political,

socioeconomic, and cultural developments in American history since the Civil War.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-002 OR ENG 111.

## HIS 162 – Women and History

This course surveys the experience of women in historical perspective. Topics include the experiences and contributions of women in culture, politics, economics, science, and religion. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural contributions of women in history.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HIS 163 – The World Since 1945

This course surveys world developments since the end of World War II. Topics include the Cold War, nationalism, colonialism, the Third World, the arms race, and global capitalism and regionalism. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the world since 1945.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-002 OR ENG 111.

## HIS 221 – African-American History

This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans.

This course requires intensive reading and writing.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-002 OR ENG-111.

## HIS 226 – The Civil War

This course examines the social, political, economic, and ideological forces that led to the Civil War and Reconstruction. Topics include regional conflicts and sectionalism, dissolution of the Union, military campaigns, and the War's socioeconomic impact, aftermath, and consequences. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the United States during the era of the Civil War.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-002 OR ENG 111.

## HIS 236 – North Carolina History

This course is a study of geographical, political, economic, and social conditions existing in North Carolina from America's discovery to the present. Topics include native and immigrant backgrounds; colonial, antebellum, and Reconstruction periods; party politics; race relations; and the transition from an agrarian to an industrial economy. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in North Carolina.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-002 OR ENG 111

## HMT – Healthcare Management

### HMT 110 – Intro to Healthcare Mgt

This course introduces the functions, practices, organizational structures, and professional issues in healthcare management. Emphasis is placed on planning, controlling, directing, and communicating within health and human services organizations. Upon completion, students should be able to apply the concepts of management within a healthcare service environment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HSC – Health Sciences

### HSC 120 – CPR

This course covers the basic knowledge and skills for the performance of infant, child, and adult CPR and the management of foreign body airway obstruction. Emphasis is placed on recognition, assessment, and proper management of emergency care. Upon completion, students should be able to perform infant, child, and adult CPR and manage foreign body airway obstructions.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## HSE – Human Services

### HSE 245 – Stress Management

This course covers stressors and techniques for stress management. Topics include anger, assertiveness, breathing, change, coping skills, family, time management, meditation, guided imagery, and journaling. Upon completion, students should be able to identify areas of stress and the skills and management techniques for dealing with stressors.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## HUM – Humanities

### HUM 110 – Technology and Society

This course considers technological change from historical, artistic, and philosophical perspectives and its effect on human needs and concerns. Emphasis is placed on the causes and consequences of technological change. Upon completion, students should be able to critically evaluate the implications of technology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### HUM 115 – Critical Thinking

This course introduces the use of critical thinking skills in the context of human conflict. Emphasis is placed on evaluating information, problem solving, approaching cross-cultural perspectives, and resolving controversies and dilemmas. Upon completion, students should be able to demonstrate orally and in writing the use of critical thinking skills in the analysis of appropriate texts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: DRE-098, ENG-002, or ENG-111

## HUM 120 – Cultural Studies

This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HUM 121 – The Nature of America

This course provides an interdisciplinary survey of the American cultural, social, and political experience. Emphasis is placed on the multicultural character of American society, distinctive qualities of various regions, and the American political system. Upon completion, students should be able to analyze significant cultural, social, and political aspects of American life.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HUM 122 – Southern Culture

This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HUM 130 – Myth in Human Culture

This course provides an in-depth study of myths and legends. Topics include the varied sources of myths and their influence on the individual and society within diverse cultural contexts. Upon completion, students should be able to demonstrate a general familiarity with myths and a broad-based understanding of the influence of myths and legends on modern culture.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HUM 160 – Introduction to Film

This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## HUM 170 – The Holocaust

This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## HUM 212 – Humanities II

This course introduces the humanities as a record in literature, music, art, history, religion, and philosophy of humankind's answers to the fundamental questions of existence. Emphasis is placed on the interconnectedness of various aspects of cultures from early modern times to the present. Upon completion, students should be able to identify significant figures and cultural contributions of the periods studied.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## HYD – Hydraulics

### HYD 110 – Hydraulics/Pneumatics I

This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## INS – Insurance

### INS 121 – Life Insurance

This course is designed to follow the guidelines set forth by the North Carolina Department of Insurance to prepare an individual for the life agent state licensing exam. Topics include basic principles of life insurance, life insurance policies, provisions, options, riders, premiums, proceeds, beneficiaries, insurance underwriting, policy issues, and North Carolina Statutes and Regulations. Upon completion, students should be able to



demonstrate a thorough knowledge of North Carolina Department of Insurance requirements for life insurance and be prepared to sit for the state life agent licensing exam.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## INS 122 – Accident and Health Insurance

This course is designed to follow the guidelines set forth by the North Carolina Department of Insurance to prepare an individual for the accident and health agent insurance state licensing exam. Topics include basic principles of accident and health insurance, health insurance providers, medical expense insurance, accidental death & dismemberment, and accident and health insurance policy provisions. Upon completion, students should be able to demonstrate a thorough knowledge of North Carolina Department of Insurance requirements and be prepared to sit for the state accident and health agent licensing exam.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## INS 125 – Risk Management

This course introduces the fundamentals of risk management as it applies to individuals and businesses. Topics include risk and hazard recognition and measurement, risk analysis and the development of a risk management plan. Upon completion, students should be able to identify the daily managerial and organizational requirements of risk management.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## INS 127 – Claims Adjusting

This course introduces the legal basis of contracts and claims. Topics will include basic principles of claims adjusting; terms and concepts; dwelling property forms; fire policies; home owners and other personal policies; flood insurance; watercraft and auto policies; umbrella liability, loss/damage evaluation; loss reports; and North Carolina Statutes and Regulations. Upon completion, students should be able to demonstrate the ability to investigate and legally settle claims.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## INS 128 – Med Sup/Long-Term/Estate Plan

This course is designed to follow the guidelines set forth by the North Carolina Department of Insurance to prepare an individual for the Medicare Supplement/Long-Term Care Agent. Topics include principles of long-term care, long-term coverage, applicable laws and regulations, Medicaid, Medicare supplement insurance/assistance, hospital insurance, supplementary medical insurance, and estate planning. Upon completion, students should be able to identify and effectively discuss long-term care coverage, appropriate policy provisions, legal practices, estate planning, and their applicable taxes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## INT – International Business

### INT 110 – International Business

This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### INT 115 – Global Communication

This course introduces principles and techniques basic to intercultural business communications. Topics include selected cultural values and customs, verbal and non-verbal communication skills, and global etiquette. Upon completion students should be able to demonstrate beginning skills in effective verbal and non-verbal intercultural communications.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### INT 210 – International Trade

This course covers international business trade practices and foreign market research. Emphasis is placed on current trends of US trade practices in foreign countries and how to engage in international trade and acquire foreign marketing information. Upon completion, students should be able to formulate an overall product policy for the international marketplace.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### INT 220 – International Economics

This course introduces the forces and criteria for the development of a new international economic order. Emphasis is placed on balance of payments, foreign exchange rates and their determination, International Monetary System, and arguments for and against free trade and protectionism. Upon completion, students should be able to describe economic principles and concepts of international trade.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: ECO-151, ECO-251, or ECO-252

## INT 230 – International Law

This course is designed to develop an understanding of the different theories on international law and their effect on international trade. Emphasis is placed on concepts of contracts, international transactions, major organizations in international trade, establishment of treaties, economic areas, and US laws affecting international trade. Upon completion, students should be able to apply theories and concepts to international trade and transactions.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take BUS-115

## ISC – Industrial Science

### ISC 112 – Industrial Safety

This course introduces the principles of industrial safety. Emphasis is placed on industrial safety and OSHA regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance.

A fundamental study of accident costs and causes, safety records, accident investigation, development of safeguards, job safety analysis, facility inspection, and safety communication will be covered.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### ISC 113 – Industrial Specifications

This course introduces industrial specifications. Emphasis is placed on using machinist reference materials. Upon completion, students should be able to use and interpret charts and data found in reference materials.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

### ISC 115 – Construction Safety

This course introduces the basic concepts of construction site safety. Topics include ladders, lifting, lock-out/tag-out, personal protective devices, scaffolds, and above/below ground work based on OSHA regulations. Upon completion, students should be able to demonstrate knowledge of

applicable safety regulations and safely participate in construction projects.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## ISC 121 – Environmental Health & Safety

This course covers workplace environmental, health, and safety concepts. Emphasis is placed on managing the implementation and enforcement of environmental health and safety regulations and on preventing accidents, injuries, and illnesses. Upon completion, students should be able to demonstrate an understanding of basic concepts of environmental health and safety.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## ISC 132 – Manufacturing Quality Control

This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## ISC 135 – Principles of Industrial Management

This course covers the managerial principles and practices required for organizations to succeed in modern industry, including quality and productivity improvement. Topics include the functions and roles of all levels of the management, organization design, planning and control of manufacturing operation, managing conflict, group dynamics, and problem solving skills. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	0	0	0	4

## ISC 136 – Productivity Analysis I

This course covers modern methods of measuring, analyzing, and improving productivity. Topics include methods analysis, standardized practices, process analysis, and human factors. Upon completion, students should be able to apply productivity improvement techniques.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## ISC 214 – Job Analysis/Wages & Salary

This course covers job analysis and evaluation as a basis for determining equitable wages and salaries. Topics include selection and definition of job factors, relative values of factors, preparation of job specifications and descriptions, and determination of wage/salary structure. Upon completion, students should be able to prepare job specifications and descriptions, evaluate jobs by four commonly accepted methods, and calculate costs of wage curves.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## ISC 220 – Lean Manufacturing

This course introduces students to the concept of lean manufacturing as a means of waste reduction. Topics include the examination of manufacturing operations and the incorporation of lean techniques to reduce waste, cost, time, and materials in manufacturing processes. Upon completion, students should be able to demonstrate an understanding of lean manufacturing systems and how they benefit the environment and business.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## ISC 225 – Facility Layout

This course provides a practical study of facility planning with emphasis on a structured approach to solving layout problems. Emphasis is placed on investigating and designing an effective facility layout. Upon completion, students should be able to design a basic work area indicating effective use of allowable resources.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## ISC 237 – Quality Management

This course covers the process by which successful manufacturing organizations achieve customer satisfaction in all processes in the organization. Topics include quality models and approaches, such as MBNQA, ISO 9000, benchmarking, and Deming's 14 Points, and the incorporation of SPC improvement techniques. Upon completion, students should be able to integrate SPC techniques with successful management practices for a comprehensive understanding of continuous quality improvement.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## ISC 243 – Production and Operations Management I

This course introduces concepts used to analyze and solve productivity and operational problems. Topics include operations strategy, forecasting, resource allocation, and materials management. Upon completion, students should be able to recognize, analyze, and solve a variety of productivity and operational problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## ISC 255 – Engineering Economy

This course covers the process of economic evaluation of manufacturing industrial alternatives such as equipment selection, replacement studies, and cost reduction proposals. Topics include discounted cash flows, time value of money, income tax considerations, internal rates of return, and comparison of alternatives using computer programs. Upon completion, students should be able to analyze complex manufacturing alternatives based on engineering economy principles.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## LDD – Light Duty Diesel

### LDD 112 – Intro Light-Duty Diesel

This course covers the history, evolution, basic design and operational parameters for light-duty diesel (LDD) engines used in on-road applications. Topics include familiarization with the light-duty diesel, safety procedures, engine service and maintenance procedures, and introduction to combustion and emission chemistry. Upon completion, students should be able to describe the design and operation of the LDD, perform basic service operations, and demonstrate proper safety procedures.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### LDD 116 – Diesel Electric-Drive

This course covers the theory and operation of electric-drive diesel vehicles. Topics include maintenance, diagnosis, repair and safety procedures for electrically propelled and hybrid diesel vehicles. Upon completion, students should be able to perform diagnostics, maintenance and repairs on electric and hybrid diesel vehicles.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### LDD 181 – LDD Fuel Systems

This course covers the light-duty diesel fuel delivery systems in on-road applications including hydraulic electronically controlled unit injectors, common-rail, mechanical pumps, and emerging technologies. Topics include diesel combustion theory, fuel system components, electronic and

mechanical controls, and fuel types and chemistries that are common to the light-duty diesel engines. Upon completion, students should be able to demonstrate skills necessary to inspect, test, and replace fuel delivery components using appropriate service information and tools.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## LDD 183 – Air, Exhaust, Emissions

This course covers terminology, theory and operation of air induction and boost technologies, exhaust, and emission controls used in light-duty diesel engines. Topics include component identification, operation, diagnosis and repair of air delivery systems including turbochargers, diesel particulate filters and other exhaust catalysts. Upon completion, students should be able to demonstrate skills necessary to research service information, and inspect, test, and repair induction, boost, and after-treatment components.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## LDD 284 – LDD Test and Diagnosis

This course covers fundamentals of electronic engine management with an emphasis on diagnostic procedures and on-board diagnostic (OBD) systems in light-duty diesels. Topics include adaptive closed-loop controls, high-voltage injection systems, OBD fault detection, and government rules and regulations. Upon completion, students should be able to utilize diagnostic resources and equipment, identify and troubleshoot electronic malfunctions, and complete repairs on light-duty diesels.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## MAC – Machining

### MAC 111 – Machining Technology I

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	12	0	0	6

## Corequisites

MAC-114

## MAC 111AB – Machining Technology I-Part A

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Corequisites

MAC-114

## MAC 111BB – Machining Technology I-Part B

This course introduces machining operations as they relate to the metalworking industry. Topics include machine shop safety, measuring tools, lathes, drilling machines, saws, milling machines, bench grinders, and layout instruments. Upon completion, students should be able to safely perform the basic operations of measuring, layout, drilling, sawing, turning, and milling.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Corequisites

MAC-114

## Prerequisites

Take MAC-111AB

## MAC 112 – Machining Technology II

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	12	0	0	6

## Prerequisites

Take MAC-111;

## MAC 112AB – Machining Technology II

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.



## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Prerequisites

Take MAC-111;

## MAC 112BB – Machining Technology II

This course provides additional instruction and practice in the use of precision measuring tools, lathes, milling machines, and grinders. Emphasis is placed on setup and operation of machine tools including the selection and use of work holding devices, speeds, feeds, cutting tools, and coolants. Upon completion, students should be able to perform basic procedures on precision grinders and advanced operations of measuring, layout, drilling, sawing, turning, and milling.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Prerequisites

Take MAC-111 MAC-112AB;

## MAC 114 – Introduction to Metrology

This course introduces the care and use of precision measuring instruments. Emphasis is placed on the inspection of machine parts and use of a wide variety of measuring instruments. Upon completion, students should be able to demonstrate the correct use of measuring instruments.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## MAC 122 – CNC Turning

This course introduces the programming, setup, and operation of CNC turning centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC turning centers.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## MAC 124 – CNC Milling

This course introduces the manual programming, setup, and operation of CNC machining centers. Topics include programming formats, control functions, program editing, part production, and inspection. Upon completion, students should be able to manufacture simple parts using CNC machining centers.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## MAC 143 – Machining Applications III

This course provides instruction in the field of advanced machining. Emphasis is placed on creating complex components, close-tolerance machining, precise measurement, and proper equipment usage. Upon completion, students should be able to demonstrate the ability to produce an accurately machined component with a quality finish using the proper machining process.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## MAC 151 – Machining Calculations

This course introduces basic calculations as they relate to machining occupations. Emphasis is placed on basic calculations and their applications in the machine shop. Upon completion, students should be able to perform basic shop calculations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## MAC 152 – Advanced Machining Calculations

This course combines mathematical functions with practical machine shop applications and problems. Emphasis is placed on gear ratios, lead screws, indexing problems, and their applications in the machine shop. Upon completion, students should be able to calculate solutions to machining problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take MAC-151.

## MAC 222 – Advanced CNC Turning

This course covers advanced methods in setup and operation of CNC turning centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC turning centers.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take MAC-122;

## MAC 224 – Advanced CNC Milling

This course covers advanced methods in setup and operation of CNC machining centers. Emphasis is placed on programming and production of complex parts. Upon completion, students should be able to demonstrate skills in programming, operations, and setup of CNC machining centers.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take MAC-124;

## MAC 229 – CNC Programming

This course provides concentrated study in advanced programming techniques for working with modern CNC machine tools. Topics include custom macros and subroutines, canned cycles, and automatic machining cycles currently employed by the machine tool industry. Upon completion, students should be able to program advanced CNC functions while conserving machine memory.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Prerequisites

Take MAC-122 MAC-124;

## MAC 233 – Appl in CNC Machining

This capstone course provides students the opportunity to apply skills learned throughout the curriculum. Emphasis is placed on production of parts and assemblies using modern CNC machine tools. Upon completion, students should be able to manufacture complex parts using a variety of CNC machine tools.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	12	0	0	6

## Corequisites

MAC-248

## Prerequisites

Take MAC-222 MAC-224 MEC-232;

## MAC 234 – Advanced Multi-Axis Machining

This course includes multi-axis machining using machining centers with multi-axis capabilities. Emphasis is placed on generation of machining center input with a CAM system and setup of pallet changer and rotary system for multi-axis machining fixtures. Upon completion, students should be able to convert CAD to output for multi-axis machining centers, including tooling, setup, and debugging processes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## MAC 248 – Production Procedures

This course covers product planning and control and scheduling and routing of operations. Topics include cost-effective production methods, dimensional and statistical quality control, and the tooling and machines required for production. Upon completion, students should be able to plan, set up, and produce cost-effective quality machined parts.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take MAC-122 MAC-124;

## MAT – Mathematics

### MAT 003 – Transition Math

This course provides an opportunity to customize foundational math content in specific math areas and will include developing a growth mindset. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in their gateway level math courses by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	6	0	0	3

### MAT 052 – Statistical Methods I Support

This course provides an opportunity to customize foundational math content specific to Statistical Methods I. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Statistical Methods I by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

This course is a mandatory corequisite for students taking MAT 152 who exempted placement testing with a Multiple Measures Waiver and had below a 3.0 high school GPA; it is an optional corequisite to MAT 152 for all other students. A TI-84 Plus graphic calculator is required of all students in this course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Corequisites

Take MAT 152

## MAT 071 – Precalculus Algebra Support

This course provides an opportunity to customize foundational math content specific to Precalculus Algebra. Topics include developing the academic habits, learning strategies, social skills, and growth mindset necessary to be successful in mathematics. Upon completion, students should be able to build a stronger foundation for success in Precalculus Algebra by obtaining skills through a variety of instructional strategies with emphasis placed on the most essential prerequisite knowledge.

This course is a mandatory corequisite for students taking MAT 171 who exempted placement testing with a Multiple Measures Waiver and had below a 3.0 high school GPA; it is an optional corequisite to MAT 171 for all other students. A TI-84 Plus graphic calculator is required of all students in this course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	4	0	0	2

## Corequisites

Take MAT 171

## MAT 110 – Mathematical Measurement and Literacy

This course provides an activity-based approach that develops measurement skills and mathematical literacy using technology to solve problems for non-math intensive programs. Topics include unit conversions and estimation within a variety of measurement systems; ratio and proportion; basic geometric concepts; financial literacy; and statistics including measures of central tendency, dispersion, and charting of data. Upon completion, students should be able to demonstrate the use of mathematics and technology to solve practical problems, and to analyze and communicate results.

A TI-84 Plus graphing calculator is required of all students enrolled in this course. Online sections require students to take the midterm and final exam in an approved college testing center.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take 1 group; #Take DMA-010, DMA-020, and DMA-030 #Take MAT-060 #Take DMA-025 #Take MAT-003 with a grade of P1

## MAT 121 – Algebra/Trigonometry I

This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include the properties of plane and solid geometry, area and volume, and basic proportion applications; simplification, evaluation, and solving of algebraic equations and inequalities and radical functions; complex numbers; right triangle trigonometry; and systems of equations. Upon completion, students will be able to demonstrate the ability to use mathematics and technology for problem-solving, analyzing and communicating results.

A TI-84 Plus graphing calculator is required of all students enrolled in this course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take 1 group; #Take DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and DMA-060 #Take DMA-025 DMA-040 DMA-050 and DMA-060 #Take DMA-025 DMA-045 and DMA-060 #Take DMA-010 DMA-020 DMA-030 DMA-045 and DMA-060 #Take MAT-003 with a grade of P3

## MAT 143 – Quantitative Literacy

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

A TI-84 Plus graphing calculator is required of all students enrolled in this course. Online sections require students to take the midterm and final exam in an approved college testing center.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take 2 groups; Group #1: Take DMA-010, DMA-020, DMA-030, DMA-040, and DMA-050 OR Take DMA-010, DMA-020, DMA-030 and DMA-045 OR Take DMA-025 DMA-040 and DMA-050 OR Take DMA-025 and DMA-045 OR Take MAT-003 with a grade of P2 Group #2: Take DRE-098 OR Take ENG-002 OR Take ENG-111 with a grade of P2

## MAT 152 – Statistical Methods I

This course provides a project-based approach to introductory statistics with an emphasis on using real-world data and statistical literacy. Topics include descriptive statistics, correlation and regression, basic probability, discrete and continuous probability distributions, confidence intervals and hypothesis testing. Upon completion, students should be able to use appropriate technology to describe important characteristics of a data set, draw inferences about a population from sample data, and interpret and communicate results.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. A TI-84 Plus graphing calculator is required of all students enrolled in this course. Online sections require students to take the midterm and final exam in an approved college testing center.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Corequisites

MAT-052 (mandatory for students who exempted placement testing with a Multiple Measures Waiver and had below a 3.0 high school GPA, but is optional for other students)

## Prerequisites

Take 2 groups; Group #1: Take DMA-010, DMA-020, DMA-030, DMA-040, and DMA-050 OR Take DMA-010, DMA-020, DMA-030 and DMA-045 OR Take DMA-025 DMA-040 and DMA-050 OR Take DMA-025 and DMA-045 OR Take MAT-003 with a grade of P2 Group #2: Take DRE-098 OR Take ENG-002 OR Take ENG-111

## MAT 171 – Precalculus Algebra

This course is designed to develop topics which are fundamental to the study of Calculus. Emphasis is placed on solving equations and inequalities, solving systems of equations and inequalities, and analysis of functions (absolute value, radical, polynomial, rational, exponential, and logarithmic) in multiple representations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to algebra-related problems with and without technology.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. A TI-84 graphing calculator is required of all students enrolled in this course. Online sections require students to take the midterm and final exam in an approved college testing center.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Corequisites

MAT-071 (mandatory for students who exempted placement testing with a Multiple Measures Waiver and had below a 3.0 high school GPA, but is optional for other students)

## Prerequisites

Take One Set: Set 1: Take MAT-003 with a grade of P3 Set 2: Take DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, DMA-060, DMA-070, and DMA-080 Set 3: Take DMA-010, DMA-020, DMA-030, DMA-040, DMA-050, and DMA-065 Set 4: Take DMA-010 DMA-020 DMA-030 DMA-045 DMA-060 DMA-070 and DMA-080 Set 5: Take DMA-010 DMA-020 DMA-030 DMA-045 and DMA-065 Set 6: Take DMA-025 DMA-040 DMA-050 DMA-060 DMA-070 and DMA-080 Set 7: Take DMA-025 DMA-040 DMA-050 and DMA-065 Set 8: Take DMA-025 DMA-045 DMA-060 DMA-070 and DMA-080 Set 9: Take DMA-025 DMA-045 and DMA-065 Set 10: Take MAT-121

## MAT 172 – Precalculus Trigonometry

This course is designed to develop an understanding of topics which are fundamental to the study of Calculus. Emphasis is placed on the analysis of trigonometric functions in multiple representations, right and oblique triangles, vectors, polar coordinates, conic sections, and parametric equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to trigonometry-related problems with and without technology.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. A TI-84 Plus graphing calculator is required of all students enrolled in this course. Online sections require students to take the midterm and final exam in an approved college testing center.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

## MAT 263 – Brief Calculus

This course is designed to introduce concepts of differentiation and integration and their applications to solving problems. Topics include graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. A TI-84 Plus graphing calculator is required of all students enrolled in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

### Prerequisites

Take MAT-171

## MAT 271 – Calculus I

This course is designed to develop the topics of differential and integral calculus. Emphasis is placed on limits, continuity, derivatives and integrals of algebraic and transcendental functions of one variable. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to derivative-related problems with and without technology.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. A TI-84 Plus graphing calculator is required of all students enrolled in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

### Prerequisites

Take: MAT-172

## MAT 272 – Calculus II

This course is designed to develop advanced topics of differential and integral calculus. Emphasis is placed on the applications of definite integrals, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to select and use appropriate models and techniques for finding solutions to integral-related problems with and without technology.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system. A TI-84 Plus graphing calculator is required of all students enrolled in this course.

### Hours



CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take MAT-271

## MAT 273 – Calculus III

This course is designed to develop the topics of multivariate calculus. Emphasis is placed on multivariate functions, partial derivatives, multiple integration, solid analytical geometry, vector valued functions, and line and surface integrals. Upon completion, students should be able to select and use appropriate models and techniques for finding the solution to multivariate-related problems with and without technology.

A TI-84 Plus graphing calculator is required of all students enrolled in this course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take MAT-272

## MAT 280 – Linear Algebra

This course provides an introduction to linear algebra topics. Emphasis is placed on the development of abstract concepts and applications for vectors, systems of equations, matrices, determinants, vector spaces, multi-dimensional linear transformations, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to linear algebra-related problems with and without technology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take MAT-271

## MAT 285 – Differential Equations

This course provides an introduction to topics involving ordinary differential equations. Emphasis is placed on the development of abstract concepts and applications for first-order and linear higher-order differential equations, systems of differential equations, numerical methods, series solutions, eigenvalues and eigenvectors, and LaPlace transforms. Upon completion, students should be able to demonstrate understanding of the theoretical concepts and select and use appropriate models and techniques for finding solutions to differential equations-related problems with and without technology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take MAT-272

## MEC – Mechanical

### MEC 110 – Introduction to CAD/CAM

This course introduces CAD/CAM. Emphasis is placed on transferring part geometry from CAD to CAM for the development of a CNC-ready program. Upon completion, students should be able to use CAD/CAM software to produce a CNC program.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## Prerequisites

Take CTS-060 or CTS-080;

### MEC 111 – Machine Processes I

This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to manufacture simple parts to specified tolerance.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

### MEC 142 – Physical Metallurgy

This course covers the heat treating of metals. Emphasis is placed on the effects of hardening, tempering, and annealing on the structure and physical properties of metals. Upon completion, students should be able to heat treat materials.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### MEC 145 – Manufacturing Materials I

This course introduces a variety of manufacturing materials and common processing techniques. Emphasis is placed on the processing, testing, and application of materials such as wood, metals, plastics, ceramics, and composites. Upon completion, students should be able to demonstrate an understanding of fundamental engineering applications for a variety of materials, including their process capabilities and limitations.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## MEC 231 – Computer-Aided Manufacturing I

This course introduces computer-aided design/ manufacturing (CAD/CAM) applications and concepts. Topics include software, programming, data transfer and verification, and equipment setup. Upon completion, students should be able to produce parts using CAD/CAM applications.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

### Prerequisites

Take MEC-110;

## MEC 232 – Computer-Aided Manufacturing II

This course provides an in-depth study of CAM applications and concepts. Emphasis is placed on the manufacturing of complex parts using computer-aided manufacturing software. Upon completion, students should be able to manufacture complex parts using CAM software.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

### Prerequisites

Take MEC-231

## MEC 265 – Fluid Mechanics

This course covers the physical behavior of fluids and fluid systems. Topics include fluid statics and dynamics, laminar and turbulent flow, Bernoulli's Equation, components, applications, and other related topics. Upon completion, students should be able to apply fluid power principles to practical applications.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## MEC 275 – Engineering Mechanisms

This course covers plane motion and devices used to generate plane motion. Topics include analysis of displacement, velocity, acceleration, gears, cams, and other mechanical systems. Upon completion, students should be able to graphically and mathematically analyze a plane motion system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take One: PHY-131, PHY-151, or PHY-251

## MED – Medical Assisting

### MED 120 – Survey of Medical Terminology

This course introduces the vocabulary, abbreviations, and symbols used in the language of medicine. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

### MED 130 – Admin Office Proc I

This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## MKT – Marketing

### MKT 120 – Principles of Marketing

This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### MKT 123 – Fundamentals of Selling

This course is designed to emphasize the necessity of selling skills in a modern business environment. Emphasis is placed on sales techniques involved in various types of selling situations. Upon completion, students should be able to demonstrate an understanding of the techniques covered.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### MKT 220 – Advertising and Sales Promotion

This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion,

students should be able to demonstrate an understanding of the concepts covered through application.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MKT 223 – Customer Service

This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MKT 224 – International Marketing

This course covers the basic concepts of international marketing activity and theory. Topics include product promotion, placement, and pricing strategies in the international marketing environment. Upon completion, students should be able to demonstrate a basic understanding of the concepts covered.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MKT 225 – Marketing Research

This course provides information for decision making by providing guidance in developing, analyzing, and using data. Emphasis is placed on marketing research as a tool in decision making. Upon completion, students should be able to design and conduct a marketing research project and interpret the results.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take MKT-120

## MKT 227 – Marketing Applications

This course extends the study of diverse marketing strategies. Emphasis is placed on case studies and small-group projects involving research or planning. Upon completion, students should be able to effectively participate in the formulation of a marketing strategy.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MKT 232 – Social Media Marketing

This course is designed to build students' social media marketing skills by utilizing projects that give students hands on experience implementing social media marketing strategies. Topics include integrating different social media technologies into a marketing plan, creating social media marketing campaigns, and applying appropriate social media tools. Upon completion, students should be able to use social media technologies to create and improve marketing efforts for businesses.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## MSM – Motorsports Management

### MSM 110 – Intro to Motorsports Mgmt

This course provides a survey of the motorsports industry. Topics include history and scope of motorsports, sanctioning bodies, types and characteristics of vehicles, related businesses, job opportunities, and economics of the industry. Upon completion, students should be able to demonstrate a general knowledge of the motorsports industry and evaluate career choices and direction.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### MSM 112 – Engine/Drivetrain Fundamentals

This course introduces the principles of internal combustion engines and drivetrains. Topics include types of engines used in motorsports, basic physics of engine operation, terminology related to engines/drivetrains, tools/equipment, and functions of components and accessories. Upon completion, students should be able to identify basic parts of engines/drivetrains, identify shop tools/equipment, and explain how power is generated, transmitted, and controlled.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## MSM 210 – Motorsports Marketing

This course introduces principles and problems of marketing goods and services especially related to the motorsports industry. Topics include promotion, placement, and pricing strategies for motorsports products and services; importance/significance of media on product image; and the human relations element in marketing. Upon completion, students should be able to develop a marketing and media plan for a motorsports product or service.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MSM 212 – Chassis Handling Fundamentals

This course introduces chassis design/handling features for super speedways, short tracks, and road courses. Topics include spring rates, caster/camber settings, aerodynamics, tire construction, tire pressure, stagger, corner and cross weights, chassis flex, steering geometry, and effects of track design on chassis handling and tire wear. Upon completion, students should be able to demonstrate a basic understanding of chassis design and the critical factors involved in chassis set-ups.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## MSM 214 – Fabrication Fundamentals

This course introduces the basic elements of race vehicle fabrication. Topics include chassis design (driver safety, "crush" zones, energy absorption, flex); selection of materials; material forming; and fundamentals of mig, tig, and arc welding. Upon completion, students should be able to demonstrate basic knowledge of fabrication and be able to perform elementary fabrication procedures.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## MSM 216 – Organization Mobility

This course covers the processes and procedures involved in moving complex operations from one location to another in a short time span. Topics include budgeting/coordination of transport/housing/ subsistence of personnel; transport of vehicles/equipment or products (including adherence to DOT regulations); facility acquisition; and cost accounting. Upon completion, students should be able to plan and execute a mock both-way move of a complex operation.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## MSM 218 – Safety/Environment

This course covers safety and environmental information related to motorsports management. Topics include local, state, and federal regulations as applied to workplace safety, handling/disposal of certain materials, safe transport of products/vehicles, and processing of required paperwork. Upon completion, students should be able to identify the source and describe general regulations pertaining to safety/environment related to motorsports.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## MSM 220 – Advanced Chassis Analysis

This course introduces students to the principles of static and dynamic chassis calculations. Topics include basic understanding of the building and testing of shocks, basic applications of dynamic weight transfer, and use of software programs for chassis setups. Upon completion, students should be able to explain the effect and/or reaction of certain suspension and chassis changes using advanced technology.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### Prerequisites

Take MSM-212

## MSM 285 – Motorsport Capstone Project

This course provides a capstone experience for the motorsports management technology student. Topics include planning, preparing, and developing a specific motorsports simulated project, including all aspects related to the management of the project. Upon completion, students should be able to document and defend a project, such as a new team start-up, major event management, or major sales promotion.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take All: MSM-110 and BUS-137

## MUS – Music

### MUS 110 – Music Appreciation

This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### MUS 112 – Introduction to Jazz

This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music.



This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MUS 131 – Chorus I

This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## MUS 132 – Chorus II

This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Prerequisites

Take MUS-131

## MUS 210 – History of Rock Music

This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## MUS 231 – Chorus III

This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Prerequisites

Take MUS-132

## MUS 232 – Chorus IV

This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Prerequisites

Take MUS-231

## NAS – Nursing Assistant

### NAS 101 – Nurse Aide I

This course includes basic nursing skills required to provide safe, competent personal care for individuals. Emphasis is placed on person-centered care, the aging process, communication, safety/emergencies, infection prevention, legal and ethical issues, vital signs, height and weight measurements, elimination, nutrition, basic restorative care/rehabilitation, dementia, mental health and end-of-life care. Upon completion, students should be able to demonstrate knowledge and skills and be eligible to test for listing on the North Carolina Nurse Aide I Registry.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	4	3	0	6

### NAS 102 – Nurse Aide II

This course provides training in Nurse Aide II tasks. Emphasis is placed on the role of the Nurse Aide II, sterile technique and specific tasks such as urinary catheterization, wound care, respiratory procedures, ostomy care, peripheral IV assistive activities, and alternative feeding methods. Upon completion, students should be able to demonstrate knowledge and skills and safe performance of skills necessary to be eligible for listing on the North Carolina Nurse Aide II Registry.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	6	0	6

## Prerequisites

Take NAS-101

## NET – Networking Technology

### NET 110 – Networking Concepts

This course introduces students to the networking field. Topics include network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, subnetting, and TCP/IP Protocols.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

#### Prerequisites

Take CIS-110

### NET 125 – Introduction to Networks

This course introduces the architecture, structure, functions, components, and models of the Internet and computer networks. Topics include introduction to the principles of IP addressing and fundamentals of Ethernet concepts, media, and operations. Upon completion, students should be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

### NET 126 – Routing Basics

This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

#### Prerequisites

Take NET 125

### NET 175 – Wireless Technology

This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Markup language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take NET-126

## NET 225 – Routing & Switching I

This course focuses on advanced IP addressing techniques, intermediate routing protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## Prerequisites

Take NET 126

## NET 226 – Routing and Switching II

This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	4	0	0	3

## Prerequisites

Take NET 225

## NOS – Network Operating Systems

### NOS 120 – Linux/UNIX Single User

This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## NOS 130 – Windows Single User

This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take CTI-120

## NOS 230 – Windows Administration I

This course covers the installation and configuration of a Windows Server operating system. Emphasis is placed on the basic configuration of core network services, Active Directory and group policies. Upon completion, students should be able to install and configure a Windows Server operating system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take NOS-130

## NUR – Nursing

### NUR 101 – Practical Nursing I

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including assessment, clinical decision making, professional behaviors, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching/learning, safety, ethical principles, legal issues, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

Clinical/laboratory experiences will focus on the development of basic skills, medication, administration, and understanding the nursing process in the care of medical/surgical clients.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
7	6	6	0	11

### Corequisites

Take BIO-163 OR both BIO-168 and BIO-169. Take PSY-110 OR both PSY-150 and PSY-241.

### NUR 102 – Practical Nursing II

This course is designed to further develop the concepts within the three domains of the individual, nursing, and healthcare. Emphasis is placed on the concepts within each domain including clinical decision making, caring interventions, biophysical and psychosocial concepts, communication, collaboration, teaching and learning, accountability, safety, informatics, and evidence-based practice. Upon completion, students should be able to provide safe nursing care across the lifespan incorporating the concepts identified in this course.

Clinical experiences will focus on discipline-specific roles in the care of medical and surgical clients.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
7	0	9	0	10

## Corequisites

ENG-111

## Prerequisites

Take NUR-101, BIO-163, and PSY-110.

## NUR 103 – Practical Nursing III

This course focuses on use of nursing/related concepts by practical nurses as providers of care/members of discipline in collaboration with health team members. Emphasis is placed on the nursing process, wellness/illness patterns, entry-level issues, accountability, advocacy, professional development, evolving technology, and changing health care delivery systems. Upon completion, students should be able to use the nursing process to promote/maintain/restore optimum health for diverse clients throughout the life span.

Clinical experiences include geriatrics, medical-surgical, obstetrical and a medical-surgical preceptorship experience in a long-term care setting.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
6	0	9	0	9

## Prerequisites

Take NUR-101; NUR-102; ENG-111

## NUR 111 – Introduction to Health Concepts

This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	6	6	0	8

## Corequisites

ENG-111 and PSY-150

## NUR 112 – Health-Illness Concepts

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	6	0	5

### Corequisites

Take NUR 112, BIO 169, PSY 241

### Prerequisites

Take NUR-111; Take ENG-111 BIO-168 PSY-150;

## NUR 113 – Family Health Concepts

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	6	0	5

### Corequisites

Take NUR 112, BIO 169, PSY 241

### Prerequisites

Take NUR-111; Take ENG 111, BIO 168, PSY 150

## NUR 114 – Holistic Health Concepts

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	6	0	5

### Corequisites

Take NUR 112, NUR 113, NUR 212

## Prerequisites

Take NUR 111;

## NUR 211 – Health Care Concepts

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	6	0	5

## Prerequisites

Take NUR-111

## NUR 212 – Health System Concepts

This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	6	0	5

## Corequisites

Take NUR 112 NUR 113 NUR 114 NUR 211

## Prerequisites

Take NUR 111;

## NUR 213 – Complex Health Concepts

This course is designed to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	3	15	0	10

## Corequisites



Take NUR 112 , NUR 113, NUR 114, NUR 211, and NUR 212

## Prerequisites

Take NUR 111

## NUR 221 – LPN to ADN Concepts I

This course is designed for the LPN to ADN student to explore the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of safety, perfusion, inflammation, oxygenation, mood/affect, behavior, development, family, health-wellness-illness, sensory perception, stress/coping, cognition, self, violence, and professional behaviors. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course.

For LPNs who are completing their ADN.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
6	0	9	0	9

## NUR 223 – LPN to ADN Concepts II

This course is designed for the LPN to ADN student to assimilate the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, thermoregulation, oxygenation, tissue integrity, infection, perfusion, mobility, reproduction, sexuality, health-wellness-illness, professional behaviors, accountability, advocacy, and collaboration. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry-level nursing care.

For LPNs who are completing their ADN.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
6	0	9	0	9

## Prerequisites

Take NUR 221.

## OMT – Operations Management

### OMT 240 – Customers and Products

This course relates to the design, marketing, and service of a product from recognition of need to the end of its life cycle. Topics include marketing and sales, field service, product design and development, and their interrelationships. Upon completion, students should be able to demonstrate an understanding of customers and products and be prepared for the APICS CIRM examination.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### OMT 241 – Logistics

This course presents the market-driven activities necessary to plan and procure materials, control manufacturing, and distribute products to customers throughout the supply chain. Topics include production and inventory control, procurement, distribution, and their interrelationships. Upon completion, students should be able to demonstrate an understanding of logistics and be prepared for the APICS CIRM examination.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## OMT 243 – Support Functions

This course covers the broader activities an organization undertakes to assist its own internal departments. Topics include Total Quality Management, human resources, finance and accounting, information systems, and their interrelationships. Upon completion, students should be able to demonstrate an understanding of support functions and be prepared for the APICS CIRM examination.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## OST – Office Systems Technology

### OST 130 – Comprehensive Keyboarding

This course is designed to develop keyboarding skills and introductory document formatting. Emphasis is placed on keyboarding techniques and formatting basic business documents. Upon completion, students should be able to create documents in an ever-changing workplace.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### OST 134 – Text Entry & Formatting

This course is designed to provide skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce documents and key timed writings at speeds commensurate with employability.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take OST-130;

### OST 135 – Advanced Text Entry & Formatting

This course is designed to incorporate computer application skills in the generation of office documents. Emphasis is placed on advanced document production with increased speed and accuracy. Upon completion, students should be able to make independent decisions regarding

planning, style, and method of presentation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take OST-134

## OST 136 – Word Processing

This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment.

Students will use the most current Word software package in this course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## OST 141 – Med Office Terms I

This course uses a language-structure approach to present the terminology and vocabulary that will be encountered in medical office settings. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in approximately one-half of the systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## OST 142 – Med Office Terms II

This course is a continuation of OST 141 and continues the study, using a language-structure approach, of medical office terminology and vocabulary. Topics include word parts that relate to systemic components, conditions, pathology, and disorder remediation in the remaining systems of the human body. Upon completion, students should be able to relate words to systems, pluralize, define, pronounce, and construct sentences with the included terms.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take MED 121 or OST-141

## OST 148 – Medical Insurance & Billing

This course introduces fundamentals of medical insurance and billing. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## OST 149 – Medical Legal Issues

This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## OST 164 – Office Editing

This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## OST 181 – Office Procedures

This course introduces the skills and procedures needed in today's office. Topics include effectively interacting with co-workers and the public, processing simple financial and informational documents, and performing functions typical of today's offices. Upon completion, students should be able to display skills and decision-making abilities essential for functioning in the total office context.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## OST 184 – Records Management

This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## OST 236 – Advanced Word Processsing

This course develops proficiency in the utilization of advanced word processing functions. Emphasis is placed on advanced word processing features. Upon completion, students should be able to produce a variety of complex business documents.

Students will use the most current Word software package in this course.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take OST-136

## OST 243 – Med Office Simulation

This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take OST-148; Take OST-142;

## OST 247 – Procedure Coding

This course provides in-depth coverage of procedural coding. Emphasis is placed on CPT and HCPCS coding systems. Upon completion, students should be able to properly code procedures and services performed in a medical facility.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take MED-121 or OST-141

## OST 248 – Diagnostic Coding

This course provides an in-depth study of diagnostic coding. Emphasis is placed on ICD coding system. Upon completion, students should be able to properly code diagnoses in a medical facility. Requisite Courses Prerequisite Take One: MED-121 or OST-141 College Transfer N/A General

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take MED-121 or OST-141

## OST 249 – Med Coding Certification Prep

This course provides instruction that will prepare students to sit for a national coding certification exam. Topics include diagnostic and procedural coding. Upon completion, students should be able to sit for various medical coding certification exams.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take All: OST-247 and OST-248

## OST 289 – Office Administrative Capstone

This course is designed to be a capstone course for the office professional and provides a working knowledge of administrative office procedures. Emphasis is placed on written and oral communication skills, office software applications, office procedures, ethics, and professional development. Upon completion, students should be able to adapt in an office environment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take One Set: Set 1: OST-134 and OST-164 Set 2: OST-136 and OST-164

## OTA – Occupational Therapy Assistant

### OTA 110 – Fundamentals of OT

This course introduces occupational therapy (OT) theory, practice, philosophy, and principles. Emphasis is placed on providing a basic understanding of the profession as well as beginning to develop interaction and observation skills. Upon completion, students should be able to demonstrate basic understanding of the domain and practice of occupational therapy, practice settings and professional roles, OT terminology, activity analysis, principles, process, philosophies, and frames of reference.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take One: BIO-165 or BIO-168

## OTA 120 – OT Media I

This course provides training in recognizing the therapeutic value and use of a wide variety of human occupations including basic activities of daily living, instrumental activities of daily living, rest and sleep, education, work, play, leisure, and social participation. Topics include the understanding of different teaching and learning methods and styles, the language of occupational therapy (OT), OT interventions including preparatory methods and tasks, and restorative and compensatory techniques. Upon completion, students should be able to analyze, design, select, and safely perform occupation related activities that would be therapeutic for various populations across the lifespan.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Corequisites

Take OTA-110

## OTA 130 – Assessment Skills

This course provides training in appropriate and accurate assessment skills related to sensation, movement, vision, perception, cognition, emotions, and performance of basic activities of daily living and instrumental activities of daily living. Topics include physical and psychosocial factors affecting performance; and sensory, range of motion, strength, coordination, cognitive, visual-perceptual, self-care, and work-related assessments. Upon completion, students should be able to gather and share data for the purpose of screening and evaluation, administer selected assessments using appropriate procedures and protocols, and articulate the role of the occupational therapy assistant and occupational therapist in the screening and evaluation process.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take OTA-110

## OTA 135 – Kinesiology

This course provides training in understanding and using principles of normal human movement. Topics include terminology, structures of the body associated with movement, principles of motion, analysis of movement, joint structure and its impact on motion, and muscle actions. Upon completion, students should be able to demonstrate proficiency in identifying terms associated with movement, motions, structures, normal ranges and directions of motion, and general principles of human movement; and apply biomechanical principles to safe and efficient functional mobility activities.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

Take One: BIO-165 or BIO-168

## Prerequisites

Take OTA-110

## OTA 140 – Professional Skills I

This course introduces the roles and responsibilities of the occupational therapy assistant (OTA) and the occupational therapist (OT) in occupational therapy practice and facilitates development of professional behaviors and skills. Topics include professional ethics, supervisory roles, responsibilities, and collaborative professional relationships; credentialing, certification, and licensure; documentation, which communicates the need and rationale for occupational therapy services; therapeutic use of self; and professional identity and professional behaviors; and observation skills. Upon completion, students should be able to demonstrate ethical behavior, discriminate between roles and responsibilities of the OTA and OT, and explain acceptable supervision and documentation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Corequisites

Take OTA-110

## OTA 150 – Pediatric Concepts and Interventions

This course provides knowledge and skills needed for working with children from birth through adolescence. Topics include review of normal growth and development, habituation of healthy habits/routines, the role of occupational therapy with caregivers/providers, understanding of common conditions and developmental delays; and the role of occupation in assessment, intervention planning and implementation with pediatric populations. Upon completion, students should be able to plan, implement, and modify appropriate interventions with children in their context and environment to promote engagement in occupation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take PSY-241 and OTA-170

## OTA 161 – Fieldwork I-Placement 1

This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

## Hours



CLASS	LAB	CLINICAL	WORK	SHC
0	0	3	0	1

## Prerequisites

Take OTA-120 and OTA-140

## OTA 162 – Fieldwork I-Placement 2

This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	3	0	1

## Corequisites

Take OTA-130

## Prerequisites

Take OTA-120 and OTA-140

## OTA 163 – Fieldwork I-Placement 3

This course provides introductory-level clinical training opportunities. Emphasis is placed on observational and basic interactional skills in a setting with a culturally diverse client population. Upon completion, students should be able to use observational and interactional skills to relate effectively with clients under the guidance/direction of fieldwork supervisors.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	3	0	1

## Corequisites

Take OTA-130

## Prerequisites

Take OTA-120 and OTA-140

## OTA 170 – Physical Conditions

This course is designed to provide knowledge and skills needed for working with individuals experiencing various medical conditions to help them achieve participation in life through engagement in occupation. Topics include medical terminology, common conditions, body functions that change with disease processes, applicable theories and principles, assessment and intervention priorities for commonly treated conditions. Upon completion, students should be able to recognize common symptoms, prioritize mental, neuromusculoskeletal and movement related functional problems, while providing for patient safety within the patient's context and environment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take OTA-130

## OTA 180 – Psychosocial Conditions

This course is designed to provide knowledge and skills needed for working with individuals experiencing various psychosocial conditions to help them achieve participation in life through engagement in occupation. Topics include mental health conditions, applicable theories and principles, symptoms of dysfunction, assessment and treatment of individuals, planning and facilitating therapeutic groups, client safety, therapeutic use of self, and psychosocial aspects of practice. Upon completion, students should be able to effectively plan and conduct individual and group interventions for client conditions related to psychosocial dysfunction while recognizing contexts and environments that may also impact occupational performance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take OTA-130

## Prerequisites

Take PSY-281

## OTA 220 – OT Media II

This course provides training in appropriate and accurate assessment and intervention skills related to orthotics, prosthetics, assistive devices, assistive technology, client mobility, and Americans with Disabilities Act (ADA) issues. Topics include ergonomics seating and positioning, community mobility, use of physical agent modalities, and technology in occupational therapy intervention. Upon completion, students should be able to demonstrate competency fabricating and utilizing orthotic and assistive devices, understanding ADA guidelines, and using technology for engagement in occupation.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Prerequisites

Take OTA-120 and OTA-130

## OTA 240 – Professional Skills II

This course covers professional development, supervisory relationships, involvement in the profession, and clinic management skills. Topics include clarification of roles and responsibilities, detailed examination of the supervisory process, participation in professional organizations, and the mechanics of assisting in clinic operations. Upon completion, students should be able to work effectively with a supervisor, plan and implement a professional activity, and perform routine clinic management tasks.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Prerequisites

Take OTA-140

## OTA 245 – Professional Skills III

This course provides preparation for Fieldwork II experiences using skills/knowledge gained in OTA 140 and OTA 240 to promote integration into the professional community. Topics include interview skills, resume production, conflict resolution, professional presentations, participation in research activities, and completion of all forms required for Fieldwork II. Upon completion, students should be able to independently complete employment-seeking activities and provide in-service training.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## Prerequisites

Take OTA-240

## OTA 250 – Adult Concepts & Interventions

This course provides knowledge and skills needed for working with adults through the lifespan. Emphasis is placed on identification and discussion of common changes associated with aging, disabilities and chronic diseases affecting this population, assessments and intervention, including developing healthy habits and routines, and the impact on participation in occupation in various settings. Upon completion, students should be able to plan, implement, and modify appropriate interventions with adults in their context and environment to promote engagement in occupations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take PSY-241, OTA-170 and OTA-180

## OTA 260 – Level II Fieldwork Placement 1

This course provides clinical experience under the direct supervision of experienced occupational therapists or occupational therapy assistant practitioners working in various practice settings. Emphasis is placed on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies for entry-level practice established by the curriculum, AOTA guidelines, and regulatory bodies.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	18	0	6

## OTA 261 – Level II Fieldwork Placement 2

This course provides the final clinical experience under the direct supervision of experienced occupational therapists or occupational therapy assistant practitioners working in various practice settings. Emphasis is placed on final clinical preparation for entry-level practice in the profession. Upon completion, students should be able to meet all critical competencies for entry-level practice established by the curriculum, AOTA guidelines, and regulatory bodies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	18	0	6

## OTA 280 – Professional Transitions

This course provides closure to the educational program in conjunction with clinical experience. Emphasis is placed on portfolio development and presentation, program evaluation, analysis and synthesis of clinical experiences, and final preparation for the certification examination. Upon completion, students should be able to enter the occupational therapy (OT) workforce with an understanding of themselves as OT professionals, and with supportive documentation demonstrating progress toward meeting competencies set forth by the profession and regulatory bodies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Corequisites

Take One: OTA-260 or OTA-261

## PED – Physical Education

### PED 110 – Fit and Well for Life

This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### PED 111 – Physical Fitness I

This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 112 – Physical Fitness II

This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

### Prerequisites

Take PED-111

## PED 113 – Aerobics I

This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 117 – Weight Training I

This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 118 – Weight Training II

This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

### Prerequisites

Take PED-117

## PED 120 – Walking for Fitness

This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 121 – Walk, Jog, Run

This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 122 – Yoga I

This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## PED 123 – Yoga II

This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Prerequisites

Take PED-122

## PED 124 – Run, Swim, Cycle

This course introduces the sport of the triathlon. Topics include the rules, equipment, and skills necessary for the triathlon. Upon completion, students should be able to participate in a triathlon competition.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 128 – Golf-Beginning

This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## PED 130 – Tennis-Beginning

This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## PED 142 – Lifetime Sports

This course is designed to give an overview of a variety of sports activities. Emphasis is placed on the skills and rules necessary to participate in a variety of lifetime sports. Upon completion, students should be able to demonstrate an awareness of the importance of participating in lifetime sports activities.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## PED 154 – Swimming for Fitness

This course introduces lap swimming, aquacises, water activities, and games. Emphasis is placed on increasing cardiovascular efficiency through aquatic exercise. Upon completion, students should be able to develop an individualized aquatic fitness program.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PED 217 – Pilates I

This course provides an introduction to the pilates method of body conditioning exercise. Topics include instruction in beginning and intermediate pilates exercises using a mat or equipment, history of pilates method, and relevant anatomy and physiology. Upon completion, students should be

able to perform beginning and intermediate exercises, and possess an understanding of the benefits of conditioning the body's core muscles.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## PHI – Philosophy

### PHI 210 – History of Philosophy

This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

### PHI 221 – Western Philosophy II

This course covers Western intellectual and philosophic thought from post-medievalists through recent thinkers. Emphasis is placed on such figures as Descartes, Spinoza, Leibnitz, Locke, Berkeley, Hume, Kant, Hegel, Marx, Mill, and representatives of pragmatism, logical positivism, and existentialism. Upon completion, students should be able to trace the development of leading ideas concerning knowledge, reality, science, society, and the limits of reason.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

### PHI 230 – Introduction to Logic

This course introduces basic concepts and techniques for distinguishing between good and bad reasoning. Emphasis is placed on deduction, induction, validity, soundness, syllogisms, truth functions, predicate logic, analogical inference, common fallacies, and scientific methods. Upon completion, students should be able to analyze arguments, distinguish between deductive and inductive arguments, test validity, and appraise inductive reasoning.

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## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3



## Prerequisites

Take ENG-111

## PHI 240 – Introduction to Ethics

This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on moral theories such as consequentialism, deontology, and virtue ethics. Upon completion, students should be able to apply various ethical theories to moral issues such as abortion, capital punishment, poverty, war, terrorism, the treatment of animals, and issues arising from new technologies.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take ENG-111

## PHY – Physics

### PHY 110 – Conceptual Physics

This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take 1 group; # Take MAT-060; # Take DMA-010 DMA-020 DMA-030 DMA-040; # Take MAT-003 with a grade of P2.

### PHY 110A – Conceptual Physics Lab

This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	2	0	0	1

## Corequisites

PHY-110

## PHY 131 – Physics-Mechanics

This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take One: MAT-121 or MAT-171

## PHY 132 – Physics-Electricity & Magnetism

This algebra/trigonometry-based course is a study of fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, waves, electricity, magnetism, circuits, transformers, motors, and generators. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take PHY-131

## PHY 151 – College Physics I

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

## Prerequisites

Take MAT-171

## PHY 152 – College Physics II

This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	2	0	0	4

### Prerequisites

Take PHY-151

## PHY 251 – General Physics I

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Corequisites

MAT-272

### Prerequisites

Take MAT-271

## PHY 252 – General Physics II

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## Prerequisites

Take All: MAT-272 and PHY-251

## POL – Political Science

### POL 120 – American Government

This course is a study of the origins, development, structure, and functions of American government. Topics include the constitutional framework, federalism, the three branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy process. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### POL 130 – State & Local Government

This course includes state and local political institutions and practices in the context of American federalism. Emphasis is placed on procedural and policy differences as well as political issues in state, regional, and local governments of North Carolina. Upon completion, students should be able to identify and discuss various problems associated with intergovernmental politics and their effect on the community and the individual.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### POL 220 – International Relations

This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nation-states. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, non-governmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## PSY – Psychology

### PSY 110 – Life Span Development

This course provides an introduction to the study of human growth and development. Emphasis is placed on the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span and apply this knowledge to their specific field of study.

#### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## PSY 118 – Interpersonal Psychology

This course introduces the basic principles of psychology as they relate to personal and professional development. Emphasis is placed on personality traits, communication/leadership styles, effective problem solving, and cultural diversity as they apply to personal and work environments. Upon completion, students should be able to demonstrate an understanding of these principles of psychology as they apply to personal and professional development.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## PSY 150 – General Psychology

This course provides an overview of the scientific study of human behavior. Topics include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take ENG-002 or ENG-111.

## PSY 211 – Psychology of Adjustment

This course introduces the study of the adjustment process focusing on contemporary challenges individuals must deal with in everyday life. Topics include theories of behavior, career choices, self-understanding, coping mechanisms, human relationships, intimacy, sociocultural factors influencing healthy personal adjustment, and other related topics. Upon completion, students should be able to demonstrate an awareness of the processes of adjustment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take PSY-150

## PSY 215 – Positive Psychology

This course is an overview of the scientific study of human strengths. Topics include resilience, optimism, vital engagement (flow), positive relationships, creativity, wisdom, happiness, empathy, emotional intelligence, and other relevant topics. Upon completion, students should be able to demonstrate an understanding of the psychological factors relevant to enhancing well being.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PSY 231 – Forensic Psychology

This course introduces students to concepts which unite psychology and the legal system. Topics include defining competency, insanity, involuntary commitment, as well as introducing forensic assessment techniques, such as interviewing process, specialized assessments, and collecting collateral information. Upon completion, students should be able to demonstrate knowledge in areas of forensic psychology: risk assessment, criminal competencies, insanity, psychopathology, and mentally disordered offenders.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PSY 237 – Social Psychology

This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take One: PSY-150 or SOC-210

## PSY 239 – Psychology of Personality

This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PSY 241 – Developmental Psychology

This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PSY 243 – Child Psychology

This course provides an overview of physical, cognitive, and psychosocial development from conception through adolescence. Topics include theories and research, interaction of biological and environmental factors, language development, learning and cognitive processes, social relations, and moral development. Upon completion, students should be able to identify typical and atypical childhood behavior patterns as well as appropriate strategies for interacting with children.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PSY 246 – Adolescent Psychology

This course provides an overview of the behavior patterns, life changes, and social issues that accompany the developmental stage of adolescence. Topics include developmental theories; physical, cognitive and psychosocial growth; transitions to young adulthood; and sociocultural factors that influence adolescent roles in home, school and community. Upon completion, students should be able to identify typical and atypical adolescent behavior patterns as well as appropriate strategies for interacting with adolescents.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

## PSY 249 – Psychology of Aging

This course covers the particular needs and behaviors of the maturing adult. Emphasis is placed on psychosocial processes; biological and intellectual aspects of aging; adjustments to retirement, dying, bereavement; and the stereotypes and misconceptions concerning the elderly. Upon completion, students should be able to show an understanding of the psychological factors related to the aging process.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take PSY-150

## PSY 259 – Human Sexuality

This course provides the biological, psychological, and sociocultural aspects of human sexuality and related research. Topics include reproductive biology, sexual and psychosexual development, sexual orientation, contraception, sexually transmitted diseases, sexual disorders, theories of sexuality, and related issues. Upon completion, students should be able to demonstrate an overall knowledge and understanding of human sexuality.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take PSY-150

## PSY 263 – Educational Psychology

This course examines the application of psychological theories and principles to the educational process and setting. Topics include learning and cognitive theories, achievement motivation, teaching and learning styles, teacher and learner roles, assessment, and developmental issues. Upon completion, students should be able to demonstrate an understanding of the application of psychological theory to educational practice.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### Prerequisites

Take PSY-150

## PSY 275 – Health Psychology

This course covers the biopsychosocial dynamics of stress and the maintenance of good health. Topics include enhancing health and well-being, stress management, lifestyle choices and attitudes, the mind-body relationship, nutrition, exercise, and fitness. Upon completion, students should



be able to demonstrate an understanding of the psychological factors related to health and well-being.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PSY 281 – Abnormal Psychology

This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology. Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take PSY-150

## PTA – Physical Therapy

### PTA 110 – Intro to Physical Therapy

This course introduces the field of physical therapy including the history and standards of practice for the physical therapist assistant and basic treatment techniques. Emphasis is placed on ethical and legal considerations, universal precautions, vital signs, documentation, basic patient preparation and treatment skills, and architectural barrier screening. Upon completion, students should be able to explain the role of the physical therapist assistant and demonstrate competence in basic techniques of patient care.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### PTA 120 – Functional Anatomy

This course provides an organized study of anatomy and kinesiology. Emphasis is placed on the integration of structure and function of the skeletal, articular, muscular, nervous, and circulatory systems to include gait analysis. Upon completion, students should be able to describe the components and demonstrate function of these systems as applied to physical therapy.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Corequisites

Take PTA-140

## PTA 130 – Physical Therapy Proc I

This course includes concepts of injury and repair and documentation methods. Emphasis is placed on physiological effects, indications, contraindications, and skilled applications of selected therapeutic modalities. Upon completion, students should be able to safely, correctly, and effectively apply the emphasized techniques and procedures with understanding of correct documentation.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Corequisites

Take PTA-110

## PTA 140 – Therapeutic Exercise

This course covers muscle physiology, exercise concepts, testing, and applications to the spine and extremities. Topics include strength, endurance, flexibility, and exercise protocols and progressions. Upon completion, students should be able to demonstrate skill in applying therapeutic exercise principles for non-neurological conditions in a safe and appropriate manner.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Corequisites

Take PTA-120

## PTA 150 – Physical Therapy Proc II

This course is designed to include the theory and practice of additional therapeutic interventions. Topics include but are not limited to electrotherapy, burn and wound care, biofeedback, and selected data collection methods. Upon completion, students should be able to apply these modalities and treatment techniques effectively and safely and demonstrate knowledge of physiological principles involved.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Prerequisites

Take PTA-130

## PTA 160 – Physical Therapy Proc III

This course introduces treatment and measurement techniques and discusses treatment programs for selected neuromusculoskeletal dysfunction and injuries. Topics include soft tissue and joint dysfunction, selected assessment techniques, and various exercise programs. Upon completion,

students should be able to demonstrate the application of selected data collection methods and functional interventions.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take PTA-150

## PTA 170 – Pathophysiology

This course is a survey of basic pathology with emphasis on conditions most frequently observed and treated in physical therapy. Topics include etiology, pathology, manifestation, treatment, and prognosis. Upon completion, students should be able to explain repair processes, categorize diseases, define pathology, identify organ/body systems involved, and discuss treatment and prognosis.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## PTA 180 – PTA Clinical Ed Intro

This course introduces the physical therapy clinic in planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care and communication. Upon completion, students should be able to demonstrate satisfactory performance in learned patient care skills, communication activities, and professional behaviors.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	9	0	3

## PTA 212 – Health Care/Resources

This course provides an overview of various aspects of health care delivery systems and the interrelationships of health care team members. Topics include health agencies and their functions, health care team member roles, management, and other health care issues. Upon completion, students should be able to discuss the functions of health organizations and team members and aspects of health care affecting physical therapy delivery.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## PTA 222 – Professional Interactions

This course is designed to assist in the development of effective interpersonal skills in the physical therapist assistant setting. Topics include reactions to disability, the grieving process, methods of communication, motivation, health promotion, disease prevention, and aging. Upon completion, students should be able to discuss and demonstrate methods for achieving effective interaction with patients, families, the public, and other health care providers.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## PTA 240 – Physical Therapy Proc IV

This course covers normal development, adult and pediatric/CNS dysfunction, spinal cord injuries, amputee rehabilitation techniques, and cardiopulmonary rehabilitation. Topics include neurology review, selected rehabilitation techniques, ADL and functional training, prosthetic and orthotic training, and environmental access. Upon completion, students should be able to demonstrate safe and correct application of selected rehabilitation techniques for neurological dysfunction, cardiopulmonary conditions, and amputations.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	6	0	0	5

## PTA 252 – Geriatrics for the PTA

This course is designed to provide more in-depth knowledge of physical therapy care for the geriatric individual. Topics include health promotion, wellness programs, and medical problems specific to the elderly. Upon completion, students should be able to discuss and describe special problems and programs for the elderly.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## PTA 254 – Pediatrics for the PTA

This course provides an in-depth study of pediatric dysfunction and rehabilitation techniques. Topics include severe and profound attention deficit disorder, sensory integration, and rehabilitation in the school setting. Upon completion, students should be able to discuss selected pediatric dysfunctions and demonstrate specialized rehabilitation techniques.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	3	0	0	1

## PTA 260 – Adv. PTA Clinical Ed.

This course provides full-time clinical affiliations for planned learning experiences and practice under supervision. Emphasis is placed on reinforcement of learned skills in direct patient care, communications, and professional behaviors. Upon completion, students should be able to demonstrate satisfactory performance as an entry-level physical therapist assistant and as a member of the physical therapy team.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	30	0	10

## Prerequisites

Take One Set: Set 1: PTA-180 Set 2: PTA-182 and PTA-210

## PTA 270 – PTA Topics

This course covers the physical therapist assistant profession in preparation for the state licensure exam. Topics include developing time management skills and practicing for the competence examinations. Upon completion, students should be able to identify individual academic strengths and weaknesses and utilize this information to continue self-study for the licensure exam.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

## PTA 280 – PTA Issues I

This course consists of reports, discussions, and guest lectures on the latest physical therapy techniques, equipment, and health sciences specialties. Topics include reports on extra-departmental experiences, case studies, and literature reviews. Upon completion, students should be able to discuss specialized physical therapy equipment and/or related fields and display competent writing skills.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

## RAD – Radiography

### RAD 110 – Rad Intro & Patient Care

This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Corequisites

Take RAD-111 and RAD-151.

## RAD 111 – RAD Procedures I

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, bony thorax and pelvis. Upon completion, students should be able to demonstrate competence in these areas.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

## RAD 112 – RAD Procedures II

This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, spine, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	3	0	0	4

### Prerequisites

Take All: RAD-110, RAD-111, and RAD-151

## RAD 121 – Image Production I

This course provides the basic principles of radiographic image production. Emphasis is placed on image production, x-ray equipment, receptor exposure, and basic imaging quality factors. Upon completion, students should be able to demonstrate an understanding of basic principles of radiographic image production.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take All: RAD-110, RAD-111, and RAD-151

## RAD 122 – Image Production II

This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on advanced digital principles and production. Upon completion, students should be able to demonstrate an understanding of advanced principles of digital imaging production.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### Prerequisites

Take All: RAD-112, RAD-121, and RAD-161

## RAD 141 – Radiation Safety

This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	0	0	0	2

## Prerequisites

Take All: RAD-112, RAD-121, and RAD-161

## RAD 151 – RAD Clinical Ed I

This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	6	0	2

## Corequisites

Take RAD-110 and RAD-111.

## RAD 161 – RAD Clinical Ed II

This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	15	0	5

## Corequisites

Take RAD-112 and RAD-121.

## Prerequisites

Take All: RAD-110, RAD-111, and RAD-151

## RAD 171 – RAD Clinical Ed III

This course provides experience in patient management specific to advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and transitioning to mastering positioning of advanced studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	9	0	3

## Prerequisites

Take All: RAD-112, RAD-121, and RAD-161

## RAD 211 – RAD Procedures III

This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, advanced imaging, radiographic pathology and image analysis. Upon completion, students should be able to demonstrate an understanding of these areas.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

## Prerequisites

Take All: RAD-122, RAD-141, and RAD-171.

## RAD 231 – Image Production III

This course is designed to continue to develop the concepts and principles in the field of radiologic technology. Emphasis is placed on complex imaging production and principles, quality control and quality assurance in the imaging sciences. Upon completion, students should be able to demonstrate an understanding of advanced radiographic equipment and quality control programs.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take All: RAD-122, RAD-141, and RAD-171

## RAD 251 – RAD Clinical Ed IV

This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	21	0	7

## Corequisites

Take All: RAD-211 and RAD-231.

## Prerequisites



Take All: RAD-122 and RAD-171.

## RAD 261 – RAD Clinical Education V

This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	21	0	7

### Corequisites

Take RAD-271.

### Prerequisites

Take RAD-251.

## RAD 271 – Radiography Capstone

This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of an entry-level radiographer.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	3	0	0	3

### Prerequisites

Take All: RAD-211, RAD-231, and RAD-251.

## REF – Refrigeration

### REF 116 – Commercial Systems I

This course introduces and compares various commercial refrigeration systems. Topics include service, repair, and diagnostic procedures for commercial systems and components, as well as evacuation, charging, startup, and evaluation. Upon completion, students should be able to use appropriate tools, instruments, and procedures to service and install basic refrigeration systems or components.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Prerequisites

Take AHR-115

## REF 117 – Refrigeration Controls

This course covers the design, operation, function, and schematics of basic control systems used in the refrigeration industry. Topics include proper control application, selection, and use of test instruments; simple control wiring; and the use of schematics as a troubleshooting tool. Upon completion, students should be able to identify, diagnose, and repair electrical and mechanical malfunctioning components.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Prerequisites

Take One: AHR-110, AHR-111, or ELC-111

## REF 260 – Commercial Systems II

This course covers the installation and start up of common commercial refrigeration systems. Topics include the installation of display/storage boxes or cases, walk-in systems, dispensing machines, ice-making equipment, and refrigerated laboratory equipment. Upon completion, students should be able to safely install and start up common commercial refrigeration systems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Prerequisites

Take One: AHR-115 or ELC-111

## REL – Religion

### REL 110 – World Religions

This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### REL 211 – Introduction to Old Testament

This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## REL 212 – Introduction to New Testament

This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SEC – Information Systems Security

### SEC 110 – Security Concepts

This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take CTI-120

### SEC 150 – Secure Communications

This course provides an overview of current technologies used to provide secure transport of information across networks. Topics include data integrity through encryption, Virtual Private Networks, SSL, SSH, and IPSec. Upon completion, students should be able to implement secure data transmission technologies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### Prerequisites

Take NET-126

### SEC 160 – Security Administration I

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take NET-126

## SEC 210 – Intrusion Detection

This course introduces the student to intrusion detection methods in use today. Topics include the types of intrusion detection products, traffic analysis, and planning and placement of intrusion detection solutions. Upon completion, students should be able to plan and implement intrusion detection solution for networks and host-based systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take CTI-120

## SOC – Sociology

### SOC 210 – Introduction to Sociology

This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies.

This course is a Universal General Education Transfer Component course that is guaranteed to transfer for general education equivalency credit to each of the 16 institutions in the University of North Carolina system.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### SOC 213 – Sociology of the Family

This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### SOC 220 – Social Problems

This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SOC 230 – Race and Ethnic Relations

This course includes an examination of the various aspects of race and ethnicity and how these lead to different experiences, opportunities, problems, and contributions. Topics include prejudice, discrimination, perceptions, myths, stereotypes, and intergroup relationships. Upon completion, students should be able to identify and analyze relationships among racial and ethnic groups within the larger society.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SOC 234 – Sociology of Gender

This course examines contemporary roles in society with special emphasis on recent changes. Topics include sex role socialization, myths and stereotypes, gender issues related to family, work, and power. Upon completion, students should be able to analyze modern relationships between men and women.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SOC 240 – Social Psychology

This course examines the influence of culture and social groups on individual behavior and personality. Emphasis is placed on the process of socialization, communication, conformity, deviance, interpersonal attraction, intimacy, race and ethnicity, small group experiences, and social movements. Upon completion, students should be able to identify and analyze cultural and social forces that influence the individual in a society.

Please note that this is a writing intensive course.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SOC 242 – Sociology of Deviance

This course provides an overview of deviant behavior and the processes involved in its definition, causation, prevention, control, and treatment. Topics include theories of causation, social control, delinquency, victimization, criminality, the criminal justice system, punishment, rehabilitation, and restitution. Upon completion, students should be able to identify and analyze issues surrounding the nature and development of social responses to deviance.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SOC 245 – Drugs and Society

This course covers the impact of drugs on society and human behavior. Emphasis is placed on the construction of a modern social problem from contrasting historical responses to mind-altering substances. Upon completion, students should be able to apply sociological analysis in evaluating drug use as a societal and interpersonal problem.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take All: DRE-098 and SOC-210

## SOC 250 – Sociology of Religion

This course examines religion from a sociological perspective as part and product of human society. Topics include the origins, development, and functions of belief systems; religious organizations; conversion; and interactions with politics, the economy, science, and the class system. Upon completion, students should be able to describe and analyze religious systems.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SPA – Spanish

### SPA 111 – Elementary Spanish I

This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

### SPA 112 – Elementary Spanish II

This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take SPA-111

## SPA 120 – Spanish for the Workplace

This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## SPA 211 – Intermediate Spanish I

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take SPA-112

## SPA 212 – Intermediate Spanish II

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## Prerequisites

Take SPA-211

## SST – Sustainability Technologies

### SST 140 – Green Building and Design Concepts

This course is designed to introduce the student to sustainable building design and construction principles and practices. Topics include sustainable building rating systems and certifications, energy efficiency, indoor environmental quality, sustainable building materials and water use. Upon completion, students should be able to identify the principles and practices of sustainable building design and construction.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
3	0	0	0	3

## TRN – Transportation Technology

### TRN 110 – Introduction to Transport Technology

This course covers workplace safety, hazardous materials, environmental regulations, hand tools, service information, basic concepts, vehicle systems, and common transportation industry terminology. Topics include familiarization with major vehicle systems, proper use of various hand and power tools, material safety data sheets, and personal protective equipment. Upon completion, students should be able to demonstrate appropriate safety procedures, identify and use basic shop tools, and describe government regulations regarding transportation repair facilities.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### TRN 120 – Basic Transportation Electricity

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
4	3	0	0	5

### TRN 130 – Intro to Sustainable Transportation

This course provides an overview of alternative fuels and alternative fuel vehicles. Topics include composition and use of alternative fuels including compressed natural gas, biodiesel, ethanol, hydrogen, and synthetic fuels, hybrid/electric, and vehicles using alternative fuels. Upon completion, students should be able to identify alternative fuel vehicles, explain how each alternative fuel delivery system operates, and perform minor repairs.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take TRN-110 and TRN-120.



## TRN 140 – Transportation Climate Control

This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis and repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to diagnose and repair vehicle climate control systems.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### Corequisites

TRN-140A

### Prerequisites

Take TRN-120;

## TRN 140A – Transportation Climate Control Lab

This course provides experiences for enhancing student skills in the diagnosis and repair of transportation climate control systems. Emphasis is placed on reclaiming, recovery, recharging, leak detection, climate control components, diagnosis, air conditioning equipment, tools and safety. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

### Corequisites

TRN-140

## TRN 170 – Pc Skills for Transportation

This course introduces students to personal computer literacy and Internet literacy with an emphasis on the transportation service industry. Topics include service information systems, management systems, computer-based systems, and PC-based diagnostic equipment. Upon completion, students should be able to access information pertaining to transportation technology and perform word processing.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2

## WBL – Work-Based Learning

### WBL 110 – World of Work

This course covers basic knowledge necessary for gaining and maintaining employment. Topics include job search skills, work ethic, meeting employer expectations, workplace safety, and human relations. Upon completion, students should be able to successfully make the transition from school to work.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	0	0	0	1

## WBL 111 – Work-Based Learning I

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	10	1

## WBL 112 – Work-Based Learning I

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	20	2

## WBL 113 – Work-Based Learning I

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	30	3

## WBL 114 – Work-Based Learning I

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	40	4

## WBL 121 – Work-Based Learning II

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	10	1

## WBL 122 – Work-Based Learning II

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	20	2

## WBL 123 – Work-Based Learning II

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	30	3

## WBL 131 – Work-Based Learning III

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	10	1

## WBL 132 – Work-Based Learning III

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	20	2

## WBL 211 – Work-Based Learning IV

This course provides a work-based learning experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
0	0	0	10	1

## WEB – Web Technologies

### WEB 110 – Internet/Web Fundamentals

This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up language, and effectively use and understand the function of search engines.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### WEB 111 – Introduction to Web Graphics

This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

### WEB 115 – Web Markup and Scripting

This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation, accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take WEB-110

## WEB 180 – Active Server Pages

This course introduces active server programming. Topics include HTML forms processing and other issues related to developing active web applications. Upon completion, students should be able to create and maintain a dynamic website.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take WEB-110

## WEB 187 – Programming for Mobile Devices

This course introduces content development for mobile electronic devices with a focus on business-related, social media, and entertainment applications. Emphasis is placed on developing web content and creating applications for mobile devices, including internet/business practices and techniques for delivery on mobile platforms. Upon completion, students should be able to develop web content and business or entertainment applications for use on mobile electronic devices.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take CIS-115

## WEB 211 – Advanced Web Graphics

This course covers the advanced concepts related to the creation and manipulation of graphic images for web delivery. Topics include graphics acquisition, use of masks and channels, advanced special effects, advanced photo manipulation, and other related topics. Upon completion, students should be able to create, manipulate, and optimize web graphics with advanced techniques and maintain an online coursework portfolio.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## Prerequisites

Take WEB-111

## WEB 214 – Social Media

This course introduces students to social media for organizations. Topics include social media, marketing strategy, brand presence, blogging, social media analytics and technical writing. Upon completion, students should be able to utilize popular social media platforms as part of a

marketing strategy, and work with social media analytics tools.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## WEB 225 – Content Management Systems

This course introduces students to Content Management Systems (CMS) designed for the publication of Web content to Web sites. Topics include individual user accounts, administration menus, RSS-feeds, customizable layout, flexible account privileges, logging, blogging systems, creating online forums, and modules. Upon completion, students should be able to register and maintain individual user accounts and create a business website and/or an interactive community website.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## WLD – Welding

### WLD 110 – Cutting Processes

This course introduces oxy-fuel and plasma-arc cutting systems. Topics include safety, proper equipment setup, and operation of oxy-fuel and plasma-arc cutting equipment with emphasis on straight line, curve and bevel cutting. Upon completion, students should be able to oxy-fuel and plasma-arc cut metals of varying thickness.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### WLD 112 – Basic Welding Processes

This course introduces basic welding and cutting. Emphasis is placed on beads applied with gases, mild steel fillers, and electrodes and the capillary action of solder. Upon completion, students should be able to set up welding and oxy-fuel equipment and perform welding, brazing, and soldering processes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

### WLD 115 – SMAW (Stick) Plate

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	9	0	0	5

## Corequisites

WLD-110

## WLD 116 – SMAW (stick) Plate/Pipe

This course is designed to enhance skills with the shielded metal arc (stick) welding process. Emphasis is placed on advancing manipulative skills with SMAW electrodes on varying joint geometry. Upon completion, students should be able to perform groove welds on carbon steel with prescribed electrodes in the flat, horizontal, vertical, and overhead positions.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	9	0	0	4

## Prerequisites

Take WLD-115

## WLD 121 – GMAW (MIG) FCAW/Plate

This course introduces metal arc welding and flux core arc welding processes. Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel with prescribed electrodes in the flat, horizontal, and overhead positions.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Corequisites

Take WLD-110

## WLD 122 – GMAW (MIG) Plate/Pipe

This course is designed to enhance skills with the gas metal arc (MIG) welding process. Emphasis is placed on advancing skills with the GMAW process making groove welds on carbon steel plate and pipe in various positions. Upon completion, students should be able to perform groove welds with prescribed electrodes on various joint geometry.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Prerequisites

Take WLD-121

## WLD 131 – GTAW (TIG) Plate

This course introduces the gas tungsten arc (TIG) welding process. Topics include correct selection of tungsten, polarity, gas, and proper filler rod with emphasis placed on safety, equipment setup, and welding techniques. Upon completion, students should be able to perform GTAW fillet and groove welds with various electrodes and filler materials.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Corequisites

Take WLD-110

## WLD 132 – GTAW (TIG) Plate/Pipe

This course is designed to enhance skills with the gas tungsten arc (TIG) welding process. Topics include setup, joint preparation, and electrode selection with emphasis on manipulative skills in all welding positions on plate and pipe. Upon completion, students should be able to perform GTAW welds with prescribed electrodes and filler materials on various joint geometry.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

### Prerequisites

Take WLD-131

## WLD 141 – Symbols and Specifications

This course introduces the basic symbols and specifications used in welding. Emphasis is placed on interpretation of lines, notes, welding symbols, and specifications. Upon completion, students should be able to read and interpret symbols and specifications commonly used in welding.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## WLD 143 – Welding Metallurgy

This course introduces the concepts of welding metallurgy. Emphasis is placed on basic metallurgy, effects of welding on various metals, and metal classification and identification. Upon completion, students should be able to understand basic metallurgy, materials designation, and classification systems used in welding.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	2	0	0	2



## WLD 151 – Fabrication I

This course introduces the basic principles of fabrication. Emphasis is placed on safety, measurement, layout techniques, cutting, joining techniques, and the use of fabrication tools and equipment. Upon completion, students should be able to perform layout activities and operate various fabrication and material handling equipment.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

### Prerequisites

Take WLD-110 WLD-115 WLD-121 WLD-141;

## WLD 215 – SMAW (stick) Pipe

This course covers the knowledge and skills that apply to welding pipe. Topics include pipe positions, joint geometry, and preparation with emphasis placed on bead application, profile, and discontinuities. Upon completion, students should be able to perform SMAW welds to applicable codes on carbon steel pipe with prescribed electrodes in various positions.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	9	0	0	4

### Prerequisites

Take WLD-115 or WLD-116; Take WLD-115 and WLD-116;

## WLD 231 – GTAW (TIG) Pipe

This course covers gas tungsten arc welding on pipe. Topics include joint preparation and fit up with emphasis placed on safety, GTAW welding technique, bead application, and joint geometry. Upon completion, students should be able to perform GTAW welds to applicable codes on pipe with prescribed electrodes and filler materials in various pipe positions.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

### Prerequisites

Take WLD-132

## WLD 251 – Fabrication II

This course covers advanced fabrication skills. Topics include advanced layout and assembly methods with emphasis on the safe and correct use of fabrication tools and equipment. Upon completion, students should be able to fabricate projects from working drawings.

### Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	6	0	0	3

## Prerequisites

Take WLD-151

## WLD 261 – Certification Practices

This course covers certification requirements for industrial welding processes. Topics include techniques and certification requirements for prequalified joint geometry. Upon completion, students should be able to perform welds on carbon steel plate and/or pipe according to applicable codes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
1	3	0	0	2

## Prerequisites

Take All: WLD-115, WLD-121, and WLD-131

## WLD 262 – Inspection & Testing

This course introduces destructive and non-destructive testing methods. Emphasis is placed on safety, types and methods of testing, and the use of testing equipment and materials. Upon completion, students should be able to understand and/or perform a variety of destructive and non-destructive testing processes.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	2	0	0	3

## WLD 265 – Automated Welding/Cutting

This course introduces automated welding equipment and processes. Topics include setup, programming, and operation of automated welding and cutting equipment. Upon completion, students should be able to set up, program, and operate automated welding and cutting equipment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Prerequisites

Take All: WLD-110 and WLD-121

## WLD 270 – Orbital Welding TIG/Pipe

This course introduces automated tungsten inert gas (TIG) welding hardware, equipment, and processes required to apply specific, accurate, automated, and consistently repetitive pipe welds. Emphasis is placed on proper identification of automated welding process variables, how each

relates to the functionality of orbital equipment and components, and how changes in variables directly influence weld quality. Upon completion, students should be able to produce quality pipe welds through the appropriate operation and control of automated TIG welding equipment.

## Hours

CLASS	LAB	CLINICAL	WORK	SHC
2	6	0	0	4

## Prerequisites

Take WLD 110, WLD 131, and WLD 132





# Faculty and Staff





# Faculty

## Wendy Barnhardt

Dean, Health and Education  
Ed D, Community College Leadership, Wingate University  
Master of Arts, Education, East Carolina University  
Bachelor of Science, Echocardiography, Oregon Institute of Technology  
Associate in Applied Science, Cardiovascular Sonography Forsyth Technical Community College

## Van Madray

Dean, Business, Engineering & Public Services  
Ph.D, Educational Administration, University of South Carolina  
Master of Education, Counseling, Citadel  
Bachelor of Science, Psychology, College of Charleston

## Carol Scherczinger

Dean, Arts and Sciences  
Doctor of Philosophy, Cell Biology, University of Connecticut  
Bachelor of Arts, Biology Science, Cornell University

## Robert Abbate

Master of Arts, English, University of North Carolina at Charlotte  
Master of Divinity, Dominican School of Philosophy and Theology  
Master of Arts, Teaching Catholic School, University of San Francisco  
Bachelor of Arts, Liberal Studies, Pennsylvania State University

## Jacqueline Allen

Master of Business Administration, Gardner-Webb University  
Bachelor of Science, Business Administration, Gardner-Webb University  
Associate of Applied Science, Business Administration, Mitchell Community College

## Sharon D. Allen

Master of Education, Biology, University of North Carolina at Charlotte  
Bachelor of Arts, Biology, University of North Carolina at Charlotte

## Maria Atkinson

Master of Science, Nursing, East Carolina University  
Bachelor of Science, Nursing, University of North Carolina at Chapel Hill

## Thomas A. Atwell

Associate in Applied Science, Automotive, Rowan-Cabarrus Community College

## Amy Bartram

Master of Fine Arts, Creative Writing, Queens University  
Bachelor of Arts, English, Ashford University

## Karen Baucom

Master of Arts, Criminal Justice, Arizona State University  
Bachelor of Science, Criminal Justice, Indiana Wesleyan University  
Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College  
Associate in Applied Science, General Occupational Technology, Rowan-Cabarrus Community College  
North Carolina Licensed Cosmetologist  
North Carolina Licensed Cosmetology Instructor

## Barbara Beach

Master of Science, Art, Edinboro State University  
Bachelor of Science, Biology, Allegheny College  
Certificate of Graduate Studies, Theology, Institute for Christian Studies

## Tony Bean

Bachelor of Science, Engineering Technology, University of North Carolina at Charlotte

## Carol Beaver

Master of Science in Nursing, Duke University  
Bachelor of Science in Nursing, Lenoir-Rhyne College

## (James) Mark Beisler

Master of Arts, Sociology, State University of West Georgia  
Bachelor of Science, Sociology, University of West Georgia

## Melissa Bell

Bachelor of Health Services Administration, Baker College  
Associate in Applied Science, Radiography, Rowan-Cabarrus Community College  
American Registry of Radiologic Technologists Certification

## Amanda Belleville

Bachelor of Science, Dental Assisting, Siena Heights University  
Diploma, Dental Assisting, Wayne Community College

## Katherine “Kassy” Bender

Master of Arts, Mathematics Education, University of North Carolina at Charlotte  
Bachelor of Science, Mathematics, Appalachian State University

## Miriam Berrospi-Kish

Master of Arts, Spanish, University of North Carolina at Charlotte  
Bachelor of Arts, Spanish & Special Education, University of North Carolina at Wilmington

## John Berryman

Master of Science, Physics, University of Tennessee-Knoxville

## Jenny Billings

Doctor of Education, Community College Executive Leadership, Wingate University  
Master of Arts, Creative Writing, Queens University of Charlotte  
Bachelor of Arts, English, Wake Forest University

**Jade Love Bittle**

Master of Arts, Secondary English Education, Gardner-Webb University  
Bachelor of Arts, English, Communications & Middle Education, Lenoir-Rhyne University

**Teena Boone**

Master of Arts, Education and Adult Education and Training, University of Phoenix  
Bachelor of Arts, Early Childhood Education, Queens University

**Justin W. Bost**

Master of Arts, Mathematics, University of North Carolina at Charlotte  
Bachelor of Arts, History & Math, University of North Carolina at Chapel Hill

**John F. Brand**

Master of Business Administration, Queens University  
Bachelor of Science, Business, Taylor University

**Lisa Bratti**

Master of Science, Biochemistry, Wake Forest University  
Bachelor of Arts, Chemistry, Florida Atlantic University

**Phyllis Buie**

Bachelor of Science, Nursing, Graceland University  
Master's, Nursing, Gardner-Webb University  
Associate in Applied Science, Nursing, Davidson County Community College

**Aaron Cameron**

Bachelor of Science, Mechanical Engineering Technology, University of North Carolina at Charlotte,  
Associate in Applied Science, Mechanical Engineering Technology, Rowan-Cabarrus Community College

**Catherine Chandler**

Master of Science in Nursing, Walden University  
Bachelor of Science in Nursing, Winston-Salem State University  
Associate in Applied Science, Nursing, Sinclair Community College

**Joe A. Christie**

Associate in Applied Science, Air Conditioning Heating and Refrigeration, Central Piedmont Community College

**(Paul) Ken Clifton**

Master of Science, Electronic Commerce, University of Maryland University College  
Bachelor of Arts, Information Systems, Catawba College  
Associate in Applied Science, Aviation Maintenance Technology, Wayne Community College  
Associate in Applied Science, Computer Programming, Rowan-Cabarrus Community College

**Jessalyn Coble**

Master of Arts, Communications, Virginia Polytechnic Institute and State University  
Bachelor of Arts, Public Relations, Virginia Polytechnic Institute and State University

**Caroline Cook**

Master of Science, Mathematics, University of North Carolina at Charlotte  
Bachelor of Science, Mathematics, University of North Carolina at Charlotte  
Associate in Arts, Rowan-Cabarrus Community College

**Donna White-Cook**

Doctor of Education, University of North Carolina at Charlotte  
Master of Education, University of North Carolina at Charlotte  
Bachelor of Science, Math and Computer Science, Barber-Scotia College

**Martha Cranford**

Master of Arts, Accounting, Gardner-Webb University  
Master of Arts, Education, Western Carolina University  
Bachelor of Arts, Business Education, Gardner Webb University  
Associate in Applied Science, Accounting, Stanly Community College

**Jon D. Crockett**

Associate in Applied Science, Applied Science, Rowan-Cabarrus Community College  
Diploma, Air Conditioning, Heating and Refrigeration Technology, Rowan-Cabarrus Community College

**Anne Curlee**

Bachelor of Science, Economics and Business Administration, University of North Carolina at Greensboro  
Associate in Applied Science, Computer Programming, Rowan-Cabarrus Community College

**Meghan Davis**

Master of Science, Biotechnology, Johns Hopkins University  
Bachelor of Science, Biology, Middle Tennessee State University

**Jim DeFriess**

Master of Science, Electrical Engineering, University of North Carolina at Charlotte  
Bachelor of Arts, Physics, University of North Carolina at Charlotte  
Associate in Applied Science, Biomedical Equipment Tech, Stanly Community College

**Van Alan Dempsey**

Master of Divinity, Biblical Studies, Reformed Theological Seminary  
Bachelor of Science, Biblical Studies/General Studies, Columbia International University

**Leanne Dixon**

Bachelor of Arts, Mathematics, University of North Carolina at Charlotte

**Charles S. Dobbins**

Master of Science, Biology, University of North Carolina at Charlotte  
Bachelor of Science, Biology, Appalachian State University

### **Chelsea Edward**

Doctorate of Public Health, Epidemiology, Capella University  
Master of Science, Biology, Virginia State University  
Bachelor of Science, Sociology, Old Dominion University

### **Sara English**

Master of Science, Biology, University of Nebraska  
Bachelor of Science, Biology, Ecology/Environmental, University of North Carolina at Charlotte

### **Leslie Eury**

Master of Science, Nursing, California College for Health Sciences  
Bachelor of Science, Nursing, Gardner-Webb University  
Associate Degree of Applied Science, Nursing, Rowan-Cabarrus Community College

### **Emily R. Fink**

Master of Science, Nursing, Gardner-Webb University  
Bachelor of Science, Nursing, Gardner-Webb University

### **Shirley A. Foley**

Doctor of Philosophy, Food Science and Biotechnology, North Carolina State University  
Bachelor of Science, Zoology, University of South Florida

### **Bestos Fongoh**

Master of Education, Secondary Math, University of Buea

### **Jessica Fowler**

Master of Arts, Mathematics Education, University of North Carolina at Charlotte  
Bachelor Arts, Mathematics, University of North Carolina at Charlotte

### **Ginger S. Fox**

Master of Fine Arts, Goucher College  
Bachelor of Arts, Communication, Lenoir-Rhyne College

### **Leah Frazier**

Master of Arts, Mathematics, Bowling Green State University  
Bachelor of Science, Mathematics, Bowling Green State University

### **Kelly Freeze**

Bachelor of Science, Education, University of Pennsylvania

### **Garland Fulp**

Master of Business Administration, Elon College  
Bachelor of Arts, Political Science, Kent State University

### **Duane R. Galloway**

Master of Arts, History, University of North Carolina at Greensboro  
Bachelor of Arts, History, University of North Carolina at Chapel Hill  
Associate in Arts, Brevard College

### **James Graham**

Bachelor of Science, Management, University of Phoenix  
Associate in Applied Science, Business Management, Central Piedmont Community College

### **Stephen Graham**

Master of Arts, Mathematics Appalachian State University  
Bachelor of Science, Mathematics, Appalachian State University

### **Keith Grubb**

Master of Education, Information Systems, University of North Carolina at Greensboro  
Bachelor of Arts, Chemistry and Mathematics  
Catawba College

### **Amanda (Brown) Harris**

Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College  
Associate in Applied Science, General Occupational Technologies, Rowan-Cabarrus Community College  
North Carolina Licensed Cosmetologist  
North Carolina Licensed Cosmetology Instructor

### **Mary Jane Hartley**

Master in Education, Curriculum and Instruction, Arizona State University  
Master of Arts, Elementary Education, Appalachian State University  
Bachelor of Science, Elementary Education, Appalachian State University

### **Sonia Hatfield**

Master of Arts, Child Psychology, Universidad de Los Andes

### **James Hauss**

Bachelor of Science, Academic Studies, Wingate College  
Certificate, Electrical Installation and Maintenance, Rowan-Cabarrus Community College

### **Victoria Hayes**

Master of Arts, Mathematics, University of North Carolina at Greensboro  
Bachelor of Science, Mathematics, Appalachian State University

### **Adam Helmintoller**

Master of Arts, English, National University  
Bachelor of Science, English, Liberty University

### **Bridget Henderson**

Bachelor of Business Administration, Concentration in Administration of Justice, Catawba College

### **Matthew Hendricks**

Master of Science, Conservation Biology, University of West Alabama  
Bachelor of Science, Environmental Science, Catawba  
Associate in Arts, Rowan-Cabarrus Community College

### **Sallie Herrin**

Master of Arts, Psychology-Industrial & Organization St. Leo University  
Bachelor of Arts, Psychology, Belmont Abbey



**Jason Hill**

Associate in Applied Science, Mechanical Engineering Technology, Rowan-Cabarrus Community College  
Associate in Applied Science, Mechanical Drafting Technology, Rowan-Cabarrus Community College  
Associate in Applied Science, Machining and Welding Technology, Rowan-Cabarrus Community College

**Caroll Hodgson**

Master of Arts, Sociology, University of North Carolina at Charlotte  
Bachelor of Science, Human Development, University of North Carolina at Greensboro

**Jonathan Hoffman**

Master of Fine Arts, Painting and Drawing, Winthrop University  
Bachelor of Arts, Studio Art, Rowan University  
Associate in Applied Science, Gloucester County College

**Brandon Hoffner**

Associate in Applied Science, General Occupational Technology, Rowan-Cabarrus Community College  
Diploma, Welding Technology, Rowan-Cabarrus Community College

**Carissa Hooks**

Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College

**Zackary Hubbard**

Master of Business Administration, Appalachian State University  
Master of Arts, Business Administration, Appalachian State University  
Bachelor of Science, Business and Information Technology Education, Appalachian State University

**Mike Huffman**

Associate in Applied Science, Welding, Rowan-Cabarrus Community College

**Renee Hyde**

Master of Science in Nursing, Duke University  
Bachelor of Science in Nursing, University of North Carolina at Chapel Hill

**Lora Beth Johnson**

Master of Arts, English, University of North Carolina at Charlotte  
Bachelor of Arts, Education Administration in the Church, Southwest Baptist University  
Bachelor of Arts, General Psychology, Southwest Baptist University

**David Kanipe**

Associate in Applied Science, Welding, Rowan-Cabarrus Community College

**Hollie Kempton**

Master of Arts, Communication Studies, University of North Carolina at Charlotte  
Bachelor of Arts, Communication Studies, University of North Carolina at Charlotte

**Vixiene Keovilay**

Associate in Applied Science, General Occupational Technology, Rowan-Cabarrus Community College  
Associate in Applied Science, Air Conditioning Heating and Refrigeration, Rowan-Cabarrus Community College  
Diploma, Air Conditioning Heating and Refrigeration, Rowan-Cabarrus Community College

**Kathy Knight**

Master of Arts, Industrial Technology and Computer Network Management, East Carolina University  
Bachelor of Science, Systems Science, University of Florida  
Associate in Applied Science, Medical Secretary, Coastal Carolina Community College

**Debora Koo**

Master of Fine Arts, Painting, Ewha Womans University  
Bachelor of Arts, Studio Art: Painting, Smith College

**Ken Lambdin**

Master of Science, Physics, University of Texas at San Antonio  
Bachelor of Science, Physics, Stephen F. Austin State University

**Frank Laney**

Master of Science, Criminal Justice Administration, Columbia Southern University  
Master of Science, Emergency Services Management, Columbia Southern University  
Bachelor of Science, Criminal Justice, University of South Carolina

**Theresa Leflore**

Master of Business Administration, Business, Pfeiffer College  
Bachelor of Science, Accounting, Western Carolina University

**Jacqueline Loupis**

Master of Arts, Clinical Psychology, University of North Carolina at Charlotte  
Bachelor of Science, Psychology, University of Florida

**Fred J. Loving**

Associate in Applied Science, Air Conditioning Heating and Refrigeration, Central Piedmont Community College

**Matthew Lowder**

Master of Science, Biology, University of North Carolina at Charlotte  
Bachelor of Science, Biology and Business Administration, University of North Carolina at Charlotte

**Kelly M. Lowman**

Master of Arts, Math Education, University of North Carolina at Charlotte  
Bachelor of Arts, Education, University of North Carolina at Chapel Hill

**Sheryl Lyerly**

Associate Degree of Applicate Science, Nursing, Rowan-Cabarrus Community College

### **Denise Madrazo**

Master of Science, Biology, University of North Carolina at Charlotte  
Bachelor of Science, Biology, Queens University  
Associate in Arts, Central Piedmont Community College

### **Roberta Mahatha**

Master of Arts, Liberal Studies, University of North Carolina at Greensboro  
Bachelor of Arts, French, Denison University

### **Amy Mahle**

Master of Health Administration, Pfeiffer University  
Bachelor of Arts, Psychology, Houghton College  
Associate of Science, Occupational Therapy Assistant, Cabarrus College of Health Sciences

### **Karey Martin**

Doctor of Philosophy, Interprofessional Healthcare, Rosalind Franklin University  
Doctor of Physical Therapy, Boston University  
Bachelor of Science, Physical Therapy, Bradley University

### **David Mason**

Bachelor of Arts, English, University of North Carolina at Charlotte  
Master of Arts, Children's Literature, University of North Carolina at Charlotte

### **Kelly McCowan**

Master of Science, Health Administration, Pfeiffer University  
Bachelor of Science, Radiologic Sciences, Florida Hospital College Health Science  
Associate in Applied Science, Radiography, Rowan-Cabarrus Community College

### **Samantha McCoy-Neely**

Master of Science, Nursing, University of North Carolina at Charlotte  
Bachelor of Science, Nursing, American International College

### **Brandie McHale**

Master of Arts, Teaching and Learning with Technology, Ashford University  
Bachelor of Arts, Business Education, Marshall University

### **Terri McKnight**

Master of Arts, Mathematics, Appalachian State University  
Bachelor of Science, Mathematics, Appalachian State University

### **Adrian C. McManus, III**

Master of Business Administration, Western Carolina University  
Bachelor of Science, Industrial Engineering, Georgia Institute of Technology

### **Nicholas McEntire**

Master of Arts, History, High Point University  
Bachelor of Arts, History, University of North Carolina at Charlotte  
Bachelor of Science, Business Administration, University of North Carolina at Charlotte

### **Aaron McNeill**

Master of Education, Tiffin University  
Bachelor of Science, Physical Education North Carolina Central University

### **Birgit Meadows**

Master of Arts, Communication Studies, Wake Forest University  
Bachelor of Arts, Communications and Journalism, Pfeiffer University

### **Candice Mills**

Master of Arts, Clinical/Community Psychology, University of North Carolina at Charlotte  
Bachelor of Science, Psychology, University of North Carolina at Chapel Hill

### **Melissa Mohlere**

Master of Arts, English, University of North Carolina at Charlotte  
Bachelor of Arts, Literature/Language, University of North Carolina at Asheville

### **Keith Moore**

Master of Business Administration, American inter-Continental University  
Bachelor of Science, Business Administration, Livingstone College

### **Shauna Moser**

Master of Education, Special Education, University of North Carolina at Charlotte  
Bachelor of Science, English, Secondary Education, Appalachian State University

### **Nasrin Nazemzadeh**

Doctor of Philosophy, Educational Leadership, Prairie View A & M University  
Master in Business Administration, Business Administration, Southeastern Louisiana University  
Bachelor of Arts, University of Isfahan

### **Chris Nesbitt**

Master of Business Administration, Criminal Justice, Pfeiffer College  
Bachelor of Science, Criminal Justice, University of North Carolina at Charlotte

### **Kim Newcomb**

Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College  
Associate in Applied Science, General Occupational Technologies, Rowan-Cabarrus Community College  
North Carolina Licensed Cosmetologist  
North Carolina Licensed Cosmetology Instructor

### **Kelly Neymen**

Master of Education, Montessori Education, Loyola University of Maryland  
Bachelor of Science, Business Administration-Marketing, University of Missouri

**Chad Nichols**

Master in Accounting, Gardner-Webb University  
Bachelor of Science, Accounting, University of North Carolina at Charlotte

**Louise Ginger Pack**

Bachelor of Science, Mathematics Education, North Carolina State College

**Meredith Parker**

Bachelor of Applied Science, Health Care Management Diploma, Dental Assisting, Wayne County Community College

**Sharon Paul**

Master of Science, Information Technology, Southern New Hampshire University  
Bachelor of Arts, General Studies, Southern New Hampshire University  
Associate in Applied Science, Web Technologies, Rowan-Cabarrus Community College

**Matthew A. Peeler**

Doctor of Education, Educational Leadership, University of North Carolina at Charlotte  
Master of Arts, Mathematics, University of North Carolina at Charlotte  
Bachelor of Arts, Mathematics, Catawba College

**Renita Peeler**

Master of Arts, English, University of North Carolina at Charlotte  
Bachelor of Arts, Communication, Catawba College

**Alisha Pendergrass**

Doctor of Philosophy, Environmental Sciences, Tennessee Technological University  
Master of Science, Chemistry, Western Carolina University  
Bachelor of Science, Chemistry, Western Carolina University

**Paul “Travis” Phillips**

Master of Fine Arts, Conceptual Studio Art, University of North Carolina at Chapel Hill  
Bachelor of Fine Arts, Studio Fine Art-Humanities, Milligan College

**Terri Pickett**

Master of Arts in Teaching, Early Education and Leadership, Salem College  
Bachelor of Science, Elementary Education, Winston-Salem State University

**Chantle “Cassie” Plott**

Master of Arts, English, University of North Carolina at Charlotte  
Bachelor of Arts, English, University of North Carolina at Charlotte

**Anna Marie Prado**

Master of Education, Health Education, Slippery Rock University  
Bachelor of Science, Health Science, Slippery Rock University  
Associate in Applied Science, Physical Therapist Assistant, Butler County Community College

**Thomas Purser**

Associate in Applied Science, Computer-Integrated Machining, Rowan-Cabarrus Community College

**Melissa Reid**

Master of Arts, Mathematics, Appalachian State University  
Bachelor of Science, Mathematics, Appalachian State University

**Parker Reinecker**

Master of Fine Arts, Photography, Savannah College of Art and Design  
Bachelor of Arts, Photography, Marywood University

**Dana Richards**

Master of Science, Elementary Education, Northern Illinois University  
Bachelor of Science, Business, University of Evansville

**Jennifer Rosalino**

Master of Education, Special Education, University of Florida  
Bachelor of Arts, Special Education, University of Florida

**Suzanne Rumble**

Master of Science, Nursing, University of North Carolina Charlotte  
Bachelor of Science, Nursing, University of North Carolina at Charlotte

**Jacqueline Rumley**

Bachelor of Science, Management, Winston-Salem State University  
Associate of Applied Science, Motorsports Management Technology

**Danielle “Nikki” Russell**

Master of Arts, Secondary Mathematics Education, University of North Carolina at Charlotte  
Bachelor of Science, Mathematics, Gardner-Webb University

**Lori Safrit**

Associate in Applied Science, Welding, Rowan-Cabarrus Community College  
Diploma, Welding, Rowan-Cabarrus Community College

**Yacoub Saleh**

Doctor of Philosophy, Electrical Engineering, University of Bradford, United Kingdom  
Master of Science, Electrical Engineering, Illinois Institute of Technology West  
Bachelor of Science, Electrical Engineering, University of Illinois

**Robin G. Satterwhite**

Master of Arts, Humanities, California State University  
Bachelor of Science, Business, Mars Hill College

**Eric Savage**

Master of Science, Mathematics, University of Tennessee-Knoxville  
Bachelor of Science, Mathematics, Lees-McRae College

**Denise Schweizer**

Master of Religious Education, Loyola Institute for Ministry Extension  
Master of Science, Food Science and Nutrition, Ohio State University  
Bachelor of Science, Microbiology, Ohio State University

**Steven Seeley**

Associate in Applied Science, Welding Technology, Rowan-Cabarrus Community College

**Shynlie Simmons**

Master of Science, Technology Systems, East Carolina University  
Bachelor of Science, Business Administration, East Carolina University

**Robert R. Simpson**

Associate in Applied Science, Mechanical Drafting and Design, Rowan-Cabarrus Community College  
Diploma, Welding Technology, Rowan-Cabarrus Community College

**Carolyn Sithong**

Master of Science, Occupational Therapy, St. Francis University  
Bachelor of Science, Health Science, St. Francis University

**Carl L. Smith**

Bachelor of Business Administration, MGT, MIS and COMART, Catawba College  
Associate in Applied Science, Automotive Systems Technology, University of Northwestern Ohio

**Lindsay C. Smith**

Master of Arts, English, University of North Carolina at Charlotte  
Bachelor of Arts, English, University of North Carolina at Charlotte

**Nathan W. Snyder**

Associate in Applied Science, Automotive Systems Technology, University of Northwestern Ohio

**Michelle Sofia**

Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College  
Associate in Applied Science, General Occupational Technologies, Rowan-Cabarrus Community College  
North Carolina Licensed Cosmetologist  
North Carolina Licensed Cosmetology Instructor

**Sherry Stancliff**

Doctor of Occupational Therapy, Chatham University  
Bachelor of Science, Occupational Therapy, Towson State University  
Associate in Applied Science, General Studies, Prince George Community College

**Patricia A. Stirewalt**

Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College  
North Carolina Licensed Cosmetologist  
North Carolina Licensed Cosmetology Instructor

**Lara Swenson**

Master of Science, Biochemistry, University of Notre Dame  
Bachelor of Science, Chemistry, Allegheny College

**Arthalia “Waynett” Taylor**

Master of Science, Education, Capella University  
Master of Science, Special Education, Grand Canyon University  
Bachelor of Science, Education, Winston-Salem State University  
Associate in Applied Science, Early Childhood, Davidson County Community College

**Barbara Taylor-Lineberry**

Master of Arts, Mathematics, East Carolina University  
Bachelor of Science, Mathematics, Livingstone College

**Maureen Thayer**

Master of Education, Secondary Mathematics, Winthrop University  
Bachelor of Science, Mathematics and Secondary Education, Appalachian State University

**Chayree Thomas**

Master of Arts, Latin American Studies, University of North Carolina at Charlotte  
Bachelor of Science, Chemical Engineering, Industrial University of Santander – UIS, Bucaramanga, Colombia

**David Thompson**

Associated in Applied Science, Machining Technology

**Denice Traina**

Master of Arts, English, University of South Florida  
Bachelor of Arts, English, University of South Florida

**Denise Tucheck**

Associate of Arts, Foundations of Business, University of Phoenix  
Associate of Arts, Cosmetology, Central Piedmont Community College

**Karintha Tyree**

Master of Arts, Strategic Communication & Lead, Howard University  
Bachelor of Arts, Journalism, Seton Hall University

**Kao Vang**

Doctor of Education, Education Leadership, University of North Carolina at Charlotte  
Bachelor of Science, Industrial Engineering, East Carolina University

**(Milton) Wade Vernon**

Associate in Applied Science, Automotive Systems Technology, Guilford Technical Community College  
Diploma, Automotive Systems Technology, Rowan-Cabarrus Community College

**Pamela Vest**

Master of Science, Accounting, Appalachian State University  
Bachelor of Science, Business Administration/Accounting, Appalachian State University



**Nancy Waldrop**

Master of Arts, English, University of North Carolina at Charlotte  
Bachelor of Arts, Business Administration, University of North Carolina at Charlotte

**Leigh Anne P. Walker**

Master of Science, Nursing, University of Phoenix  
Bachelor of Science, Nursing, University of North Carolina at Charlotte

**(Mary) Linne Wallace**

Bachelor of Science, Medical Technology, Barton College

**Kimberley M. Webster**

Master of Health Administration, University of North Carolina at Charlotte  
Bachelor of Arts, Biology, Catawba College

**Kelly White**

Master of Nursing Education, Chamberlain College of Nursing  
Bachelor of Science, Nursing, Chamberlain College of Nursing

**John C. Williams**

Master of Fine Arts, Sculpture, SUNY Albany  
Bachelor of Fine Arts, Sculpture, Winthrop University

**Ronald Wolfe**

Associate in Applied Science, Information Systems:  
Network Administration & Support, Rowan-Cabarrus Community College  
Associate in Applied Science, Cosmetology, Rowan-Cabarrus Community College

**Patrick Wood**

Master of Arts, Sports Administration-Marketing, Kent State University  
Bachelor of Arts, Communications, Bowling Green State University

**Hope Yost**

Doctor of Philosophy, Curriculum and Instruction, University of North Carolina at Greensboro  
Master of Science in Nursing, University of North Carolina at Greensboro  
Bachelor of Science in Nursing, Wingate College

**Tracy Zanolini**

Master of Science, Mathematics, University of North Carolina at Charlotte  
Bachelor of Science, Mathematics, Drexel University

# Staff

## Dr. Carol S. Spalding

President  
 Doctorate in Education, Columbia University  
 Master's Degree in Human Resource Management,  
 Pepperdine University  
 Bachelor's Degree in International Studies, University of  
 Louisville

## Keri A. Allman

Bachelor of Science in Business Administration,  
 Business Administration, Economics and Philosophy,  
 University of North Carolina at Charlotte

## Rebecca Anderson

Associate in Applied Science, Information Systems -  
 Network Administration, Randolph Community  
 College  
 Associate in Arts, Early Childhood Associate, Community  
 College

## Alesia Burris

Bachelor of Science, Business Management, Catawba  
 College  
 Associate in Applied Science, Executive Secretarial  
 Science, Rowan-Cabarrus Community College

## Danny Carpenter

Bachelor of Science, Business Administration, Gardner-  
 Webb University  
 Associate in Applied Science, Architecture, University of  
 North Carolina at Charlotte

## Stephen Cathcart

Doctor of Education, Adult and Community College  
 Education, North Carolina State University  
 Master of Science, Adult Education, North Carolina A&T  
 State University  
 Bachelor of Arts, History, North Carolina A&T State  
 University

## Jonathan Chamberlain

Bachelor of Building Construction, Building  
 Construction, University of Florida

## Molly Cline

Bachelor of Music, Piano Pedagogy, Minor in Flute  
 Performance, Appalachian State University

## Scott Cozart

Associate of Applied Science, Information Systems  
 - Network Technology, Rowan-Cabarrus Community  
 College  
 Associate of Applied Science, Information Systems  
 Security, Rowan-Cabarrus Community College

## Joan Creeger

Bachelor of Technologies, Business Education,  
 Appalachian State University  
 Associate Degree, Office Administration, Mt. Olive  
 College

## Paula Dibley

Master of Public Administration, The University of North  
 Carolina at Chapel Hill  
 Bachelor of Arts, Public Communication and Political  
 Science, American University

## Deanna Dixon

Master of Arts, English, Clemson University  
 Bachelor of Arts, English, Florida State University

## J. Paul DuPree

Bachelor of Arts, Emergency and Disaster Management  
 American Military University  
 Associate of Applied Science, Emergency Preparedness  
 Technology, Caldwell Community College

## Lee Ennis

Master of Arts, Liberal Studies, University of North  
 Carolina at Greensboro  
 Bachelor of Science, Fire Service Administration, Eastern  
 Oregon University  
 Associate in Applied Science, Fire Protection Technology,  
 Central Piedmont Community College

## Nekita Eubanks

Master of Science, Human Resource Management,  
 Southern New Hampshire University  
 Bachelor of Arts, Human Relations in the Public and  
 Private Sector, High Point University

## Catherine Garcia

Master of Arts, Sociology, California State University at  
 Fullerton  
 Bachelor of Arts, Sociology, Chapman University

## Barbara Hall

Master of Entrepreneurship, Western Carolina  
 University  
 Master of Science, Indiana University  
 Bachelor's Degree, Ohio Wesleyan University

## Kathy Hall

Master of Science, Rehabilitation Counseling, West  
 Virginia University,  
 Bachelor of Arts, Sociology, Concord College

## Katie Herring

Bachelor of Science, Business Administration,  
 Appalachian State University

## Casey Hinson

Associate Degree Nursing, Rowan-Cabarrus Community  
 College  
 Bachelor in Nursing, Winston Salem State University

## Rebecca Hooks

Bachelor of Science, Environmental Science, Winthrop  
 University

## Timothy Hunter

Master of Library and Information Studies, University of  
 North Carolina at Greensboro  
 Bachelor of Arts, Psychology and Political Science,  
 University of North Carolina at Charlotte

**Kenneth Ingle**

Master of Science, Management Information Systems,  
Bellevue University  
Bachelor of Science, Information Systems Programming,  
University of North Carolina at Asheville

**Faith Jelley**

Master of Project Management, Project Management,  
Western Carolina University  
Bachelor of Science, Business Administration and  
Business Information Systems, Western Carolina  
University

**David A. King**

Master of Business Administration, Management, Laurel  
University  
Bachelor of Arts, History/Secondary Teacher  
Certification, University of North Carolina at Charlotte

**Craig Lamb**

Master of Arts, Adult and Community Education, Ball  
State University  
Bachelor of Arts, Organizational Communication,  
Purdue University

**Lisa Ledbetter**

Bachelor of Science, Business Administration -  
Management, Appalachian State University

**Carol Lewis**

Master of Business Administration, National-Louis  
University  
Bachelor of Science, Management, National-Louis  
University

**Natasha Lipscomb**

Master of Management, Public Administration,  
University of Phoenix  
Bachelor of Science, Psychology and Education,  
Elizabeth State University

**Donna Ludwig**

Bachelor of Business Administration, Marketing,  
Business Administration, Georgia Southern University

**Tashina Mahatha**

Master of Business Administration, Human Resources  
Management, Northcentral University  
Bachelor of Arts, Public Policy, University of North  
Carolina at Chapel Hill

**Angelo Markantonakis**

Master of Science, Adult Education, Elmira College  
Bachelor of Arts, English and Literature, Saint Lawrence  
University

**Roger McDaniel**

Emergency Medical Technician, Basic and Firefighter  
1 & 2

**Barbara Meidl**

Master of Science, Leadership, Pfeiffer University  
Bachelor of Science, Communications, East Carolina  
University  
Associate in Arts, Rowan-Cabarrus Community College

**Ann Morris**

Master of Education, Middle Grades Education,  
Concentration in Science, University of North Carolina  
at Charlotte  
Bachelor of Arts, Early Childhood Education, University  
of North Carolina at Chapel Hill

**Kerry Motley**

Bachelor of Arts, Psychology, Minor in Criminal Justice,  
Meredith College

**Sherie Jenkins Neely**

Bachelor of Science, Human Services, Wingate  
University

**Debra NeeSmith**

Master of Technology, Georgia Southern University  
Bachelor of Business Administration, Marketing, Georgia  
Southern University

**Michael Quillen**

Doctor of Education, Educational Policy Studies and  
Evaluation, University of Kentucky  
Master of Science, Biology, Morehead State University  
Bachelor of Science, Biology, Morehead State  
University

**Allison Robinson**

Bachelor of Science, Advertising and Graphic Design,  
Appalachian State University

**Crystal Ryerson**

Master of Business Administration, Business  
Administration, Ashford University  
Bachelor of Business Administration, Business  
Administration, Georgia College

**Dusty Saine**

Bachelor of Science, Marketing and Retailing, Clemson  
University

**Steven Saine**

Bachelor of Science, Networking Technology, ECPI  
University  
Associate of Applied Science, Networking Technology,  
ECPI University

**Allison Scott**

Bachelor of Arts, Psychology, University of North  
Carolina at Charlotte

**Jennifer L. Selby**

Master of Arts, Fine Art, University of Arts in London  
Bachelor of Arts, Political Science, North Carolina State  
University

**Megan Smit**

Bachelor of Science, Secondary Education and History,  
Toccoa Falls College  
Master of Science, Organizational Leadership and HR  
Management

**Tricia Staggers**

Master of Science in Public Health, Health  
Administration University of North Carolina at  
Charlotte  
Bachelor of Liberal Arts, Pre-Medicine, Xavier University

**Stephen Swanson**

Bachelor of Science, Business Administration, Wingate  
University

**Jay D. Taylor**

Master of Arts, Education, California University of  
Pennsylvania  
Bachelor of Science, Education, Mental/Physical  
Handicapped, California University of Pennsylvania

**(Alan) David Thompson**

Bachelor of Science, Emergency and Disaster  
Management, Western Carolina University  
Associate in Applied Science, Emergency Medical  
Science, Davidson Community College

**Sarah Walker**

Master of Public Administration, University of North  
Carolina at Pembroke  
Bachelor of Science, Biology, Catawba



## 2019-2020 pdf Catalog Addendum

**“Date” is the date these corrections were made to the  
online catalog**

Item	Correction(s)	Date
Early Childhood Education Transfer B-K Teacher Licensure AAS A55220TL	The math requirement is “Take MAT-143 or MAT-171,” not “Take MAT-143”; either course fulfills the math requirement.	8/29/2019
Mechanical Engineering Technology A40320	The program total is 66-67, not 65-66.	9/6/2019

*Updated 8/6/2018*