NC COMMUNITY COLLEGES

CREATING SUCCESS

# North Carolina Community College System Catalog

**June 15, 2018**
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## *SECTION 1*
## GENERAL INFORMATION

This catalog is your guide to educational opportunities in the North Carolina Community College System.

The mission of the North Carolina Community College System is to open the door to high-quality, accessible educational opportunities that minimize barriers to post-secondary education, maximize student success, develop a globally and multi-culturally competent workforce, and improve the lives and well-being of individuals by providing:

- Education, training and retraining for the workforce, including basic skills and literacy education, occupational and pre-baccalaureate programs.
- Support for economic development through services to and in partnership with business and industry and in collaboration with the University of North Carolina System and private colleges and universities.
- Services to communities and individuals which improve the quality of life.

The System is committed to providing the State with a well-trained workforce to meet employers' needs and help attract new business and industry.  College transfer programs are available, and the colleges are the primary delivery system of literacy training for the state. Thus, the System offers a comprehensive listing of training and educational opportunities.

Located within commuting distance of nearly every North Carolinian, the System colleges provide accessible, low-cost programs for any adult who wants to learn.  Some programs are offered at convenient, off-campus sites.  Many colleges offer "anytime, anywhere" learning through distance education classes.  These classes may be offered on the Internet, through telecourses, via the North Carolina Information Highway and through a combination of technologies such as teleweb courses.

In this catalog, you'll find an overview of the System colleges programs.

**Please Note:** While information here reflects the currently approved program offerings, offerings at individual colleges vary according to local needs.  Each community college may add or delete programs during the course of the academic school year.  Contact your local community college to determine which programs are available.  College addresses and telephone numbers are listed in Section 4.

### *Administration*

The North Carolina Community College System Office staff provides State-level administration of the NC Community College System under the direction of the State Board of Community Colleges.  The State Board, consisting of 18 members appointed by the Governor and the NC General Assembly, the Lieutenant Governor (ex-officio), the State Treasurer (ex-officio) and the President of the NC Comprehensive Community College Student Government Association (ex-officio) has the authority to adopt and administer all policies, regulations and standards it deems necessary to operate the System.

A local board of trustees governs each college and elects a president as the college's chief executive officer.  The State Board of Community Colleges approves the president.

### *Admissions*

Admission is open to any individual who is a high school graduate or at least 18 years of age.  Students are admitted regardless of race, national origin, religion, sex, handicap, age or political affiliation.  Applicants for curriculum programs should submit a high school transcript and a transcript of any prior college academic work if requested by the local college.  Prospective applicants should also plan to take the appropriate placement and /or diagnostic tests and meet with a counselor/advisor.  This assessment information aids individuals in establishing realistic education and career goals.

Applicants who wish to transfer credits and/or applicants applying to distance learning programs or courses should contact an admissions counselor or college advisor.

## *Prerequisites*

While admission to a community college is open to all adult citizens, some programs of study require students to meet certain standards or to have taken specific courses before being accepted into the program. Students who do not meet these standards may be required to enroll in a learning module or series of modules to strengthen skills in specific areas.

To be admitted to an associate degree program, including college transfer programs, individuals should possess a high school diploma or its equivalency. Colleges offer free programs through College and Career Readiness to help adults obtain a diploma or high school equivalency certificate.

## *Multiple Measures*

In February 2013 the State Board approved a Multiple Measures for Placement Policy to use recent High School Transcript GPA and/or Standardized Test Scores for placement of students in curriculum courses. Students should contact the community college which they plan to attend to determine if they meet the specific requirements of the multiple measures policy.

## *Tuition and Fees*

Residents: The per credit hour charge is $76.00; up to a maximum per semester of $1,216, based upon 16 credit hours of instruction.

Non-Residents: The per credit hour charge is $268.00; up to a maximum per semester of $4,288, based upon 16 credit hours of instruction.

The state-wide Residency Determination Services (RDS) is the authority for determining residency for tuition purposes and for state grants at all public universities and community colleges to include students' initial decision, reconsiderations, and appeals. For more information or to start the online interview, visit https://ncresidency.cfnc.org/residencyInfo/home .

Registration fees for continuing education occupational extension courses shall be based on the course length. Continuing education occupational extension registration fees for 2016-17 courses are $70 for 0 to 24 hours, $125 for 25 to 50 hours and $180 for 50+ hours. Fees for self-supporting and community service programs vary according to fees established by each local Board of Trustees.

There are no registration fees for Basic Skills programs which include Adult Basic Education (ABE), Adult Secondary Education (ASE), and English as a Second Language (ESL). In addition, there are no fees assessed to students who participate in occupational extension and/or curriculum course that are part of a State Board approved Basic Skills Plus programs. Waivers associated with a Basic Skills Plus program may not exceed 12 credit hours for curriculum courses, or 96 hours for continuing education courses, or a single continuing education course that is longer than 96 hours.

Tuition is waived for curriculum courses taken by high school students at community colleges as part of approved Career and College Promise pathways. There are other groups of citizens for whom tuition may be waived; contact your local college for details.

Colleges per 1E SBCCC 700.1 may charge local fees that are established by the local board of trustees to curriculum and continuing education students for items not covered by tuition and registration fees. Under current State Board policy they include:
- Instructional Technology Fee- Curriculum ($48 per academic term maximum)
- Instructional Technology Fee- Continuing Education ($5 per semester maximum)

- Student Activity Fee ($35.00 per academic term maximum)
- College Access, Parking, and Security Fee (no maximum)
- Required Specific Course Fees (no maximum)

Colleges per 1E SBCCC 700.6 may assess students with fines for overdue books and materials or book replacement.

If a student damages college property through gross negligence or maliciousness, he or she is expected to reimburse the college. The student's academic credit may be withheld until proper payment is made.

Colleges may sponsor on a self-supporting basis recreational programs, seminars, cultural exhibits and other programs in addition to normal, organized class instruction.

***Tuition and fees are subject to change by the North Carolina General Assembly and the North Carolina State Board of Community Colleges.***

## *Student Development Services*

The System's 58 colleges provide a wide range of student services designed to assist learners in successfully setting and achieving their educational goals. In addition to admissions counseling and processing, these services include, but are not limited to, the following: financial aid, advising, counseling, disability services, student government, student activities, career services, registration & records, student success centers, student conduct, and placement testing. Student service programs are designed to advance the overall mission of the college by providing programs and services that foster academic success, and student development.

## *Student Financial Aid*

There are many financial aid opportunities in the community college system to assist learners in meeting their educational expenses for college. Financial aid is available in the form of grants, scholarships, work-study, and federal loans. Direct Loans are not offered at all North Carolina community colleges. Students interested in applying for a student loan should contact the college's financial aid office directly.

The Financial Aid Office provides the best source of information and counseling to students seeking information about financial aid. Financial aid professionals can provide information to help students attain their educational goals. Gaining the correct type of assistance will require timely preparation, planning, and action.

To qualify for need-based financial aid, a student must complete and file the Free Application for Federal Student Aid (FAFSA) form. This form is available from a high school guidance counselor, via the Internet at http://www.fafsa.ed.gov, or the college's financial aid office. The FAFSA application should be completed as early as possible during the academic year. State, local, and private grants and scholarships may be available for students who do not meet federal aid requirements.

## *Preparation for Academic Success*

Students should contact the Student Development Services Office at their college for guidance in determining appropriate programs and services for their academic and personal development. The Student Development Services Office assists students in admissions and individual counseling, placement/diagnostic assessment, personal counseling, career/educational counseling and planning, financial aid, veterans' services, college orientation, and services to students with disabilities.

## *Support Services and Programs*

Colleges may provide support services such as childcare funding, mentoring and tutoring based on student qualifications and availability of funds. These funds and activities may be coordinated with community service agencies, to serve as many students as possible without duplicating resources. Programs provided through Campus

College and Career Readiness Departments offer a strong focus on workforce readiness and transitions to postsecondary education and training through programs including Adult Basic Education, English as a Second Language (ESL), Adult High School, and Adult High School Equivalency Certificate preparation and testing.

## *Services to Students with Disabilities*

Each of the 58 community colleges provides a variety of services to accommodate students with disabilities.  If a student has special needs that require reasonable accommodations to meet their educational goals and/or to access campus services, they should contact the college's Disability Services Office. Each campus complies with the Americans with Disability Act of 1990 (ADA), the ADA Amendment Act of 2008, and the requirements of Section 504 of the Rehabilitation Act of 1973 as amended.

**Title IX**
As a recipient of federal funds, all 58 North Carolina community colleges are required to comply with Title IX of the Higher Education Amendments of 1972, 20 U.S.C. § 1681 et seq. ("Title IX"), which prohibits discrimination by sex in educational programs or activities, admission, and employment.  Additionally, all colleges are required to comply with the federal Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (Clery Act).  This Clery Act which requires colleges and universities, both public and private, participating in federal student aid programs to disclose campus safety information, and imposes certain basic requirements for handling incidents of sexual violence and emergency situations. Colleges must make disclosures about crime statistics and summaries of security policies once a year in an Annual Security Report (ASR).  Information about specific crimes and emergencies is made publicly available on an ongoing basis throughout the year.

## *Drug Education Programs/Campus Safety/Counseling*

Colleges are encouraged and supported in their efforts to develop and maintain a drug education program. Counselors may provide assistance with issues that impact a student's educational experience.  All community colleges comply with the Drug-Free Schools and Communities Act of 1989 as part of their on-going efforts to maintain a safe environment for learners, faculty and staff.  Each campus maintains security and upon request, will furnish information required by the Student Right-to-Know and Campus Security Act of 1990.

## *Student Life and Engagement*

A variety of co-curricular activities are available in the community college system, and students are encouraged to participate in those that match their interests.  Some of the activities include, but are not limited to NJCAA athletics, clubs, intramural sports, student government, honor organizations, and special interest groups.  These activities afford students an opportunity to develop leadership and interpersonal skills, to supplement classroom learning, and the opportunity to interact with faculty and staff outside of the classroom setting.

## *College/University Transfer and/or Transition to Work*

Colleges assist students in making a successful transition from the community college to the world of work or to four-year colleges and universities by providing the following:

Articulation Agreements

> **Comprehensive Articulation Agreement** – The North Carolina Comprehensive Articulation Agreement (CAA) establishes the procedures governing the transfer of credits for students who transfer from a North Carolina community college to one of the 16 universities in the University of North Carolina System. The CAA enables NC community college eligible graduates of two-year Associate in Arts and Science degree programs who have earned 60 semester hours in approved transfer course with a grade of "C" or better and an overall GPA of at least 2.0 on a 4.0 scale to receive at least 60 semester hours of academic credit upon admission to a UNC institution.

**Independent Comprehensive Articulation Agreement** – The Independent Comprehensive Articulation Agreement (ICAA) is designed to provide a smooth transfer for community college students who wish to continue their education at one of the signatory North Carolina Independent Colleges and Universities (NCICU). The ICAA enables NC community college eligible graduates of two-year Associate in Arts and Science degree programs who have earned 60 semester hours in approved transfer course with a grade of "C" or better and an overall GPA of at least 2.0 on a 4.0 scale to receive at least 60 semester hours of academic credit upon admission to a signatory NCICU institution.

**Uniform Articulation Agreement between the University of North Carolina Baccalaureate Engineering Programs and the North Carolina Community College System Associate in Engineering (AE) Programs** promotes educational advancement opportunities for Associate in Engineering (A10500) degree completers moving between the NC community colleges and the constituent institutions of The University of North Carolina in order to complete Bachelor of Science in Engineering degrees.

**Uniform Articulation Agreement between the University of North Carolina RN to BSN Programs and North Carolina Community College System Associate Degree Nursing Programs** promotes educational advancement opportunities for registered nurses moving between North Carolina community colleges and the constituent institutions of The University of North Carolina in order to complete BSN degrees. It describes a progression degree plan that includes required general education and nursing prerequisite courses that are acceptable to all state funded RN to BSN programs. Students who follow the progression degree plan will meet the entrance requirements at all of the North Carolina public RN to BSN programs.

**Bilateral Articulation Agreements** – Under bilateral agreements, individual universities and one of more community colleges may join in a collaborative effort to facilitate the transfer of students from Associate in Fine Arts or Associate in Applied Science degree programs to baccalaureate degree programs. Please contact your local community college for additional information about existing agreements.

For additional information concerning articulation agreements, please see pages 8-10 of this publication and visit the NC Community College website at:

http://www.nccommunitycolleges.edu/academic-programs/college-transferarticulation-agreements

**Job Development and Placement** - Developing job opportunities for students and assisting students in matching their skills with those required by various jobs is a critical component at each community college. Colleges offer current students, career, and employment resources through a series of presentations focused on professional preparedness. Students are provided information on how to project a professional image; what attire to wear and how to develop acceptable interviewing skills. Professional development opportunities are intended to provide success strategies to assist the student in marketing themselves successfully for job prospects. Students needing assistance should contact the community college Career Services office.

**Transfer Counseling** - Communicating transfer policies and procedures to students and prospective students to facilitate transfer to or from other community colleges or universities;

**Student Records** - Student academic records are contained in the Registration and Records office on the community college campuses. The department is responsible for verifying student academic records, providing transcripts of coursework under the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA) and facilitating the student's progress between the community college and other educational institutions or prospective employers. Students seeking transcripts or information regarding academic records should contact the community college Registration and Records office.

**Workshops and Classes on Employment Skills** - Assisting students with interviewing, resume preparation and other job-hunting and job-retention skills maybe offered through the campus Career Services Office. Students should contact the Career Services Office at the community college which they attend to obtain more information.

### *Health Services*

Colleges may provide student health services ranging from first-aid treatment to referrals to hospitals for major illnesses or injuries. All students are encouraged to maintain private health and accident insurance.

### *Housing*

Although community colleges do not provide dormitories, the Student Development Services Office may assist students who live outside the commuting area in finding a residence.

### *The Calendar*

Community colleges typically operate on a semester system of two 16-week terms in the fall and spring and a shorter term in the summer. Each college develops its daily schedule to accommodate local needs, which may include evening and weekend opportunities.

*During the summer term, some colleges have abbreviated work periods and may be closed or only work half days on Fridays.

<p align="center">*SECTION 2*</p>

# PROGRAM DESCRIPTIONS

The North Carolina Community College System serves a broad range of persons with differing needs, skills and interests. Colleges meet those varied demands through an extensive continuum of training and educational programs which enable a student to begin study at the level most comfortable for him or her and to progress to meet future goals. Each college offers those programs best suited to its community's needs.

## Curriculum Programs

Colleges offer a wide variety of planned educational programs, called "curriculum" programs, which range in length from one semester to two years. These programs lead to certificates, diplomas or associate degrees, depending on the nature of the curriculum. Curriculum programs include certificate, diploma, Associate in Applied Science, Associate in Arts, Associate in Engineering, Associate in Fine Arts, Associate in Science and Associate in General Education programs.

### *Certificate*

Certificate programs are designed to provide entry-level employment training and are offered at all System colleges.

Certificate programs range from 12 to 18 semester hour credits and can usually be completed within one semester by a full-time student. Associate degree level courses within a certificate program may also be applied toward a diploma or an associate in applied science degree.

### *Diploma*

Diploma programs are designed to provide entry-level employment training and are offered at all System colleges.

Diploma programs range from 36 to 48 semester hour credits and can usually be completed by a full-time student within two semesters and one summer session. Associate degree level courses within a diploma program may also be applied toward an Associate in Applied Science degree.

### *Associate in Applied Science*

Associate in Applied Science (AAS) programs are designed to provide entry-level employment training and are offered at all System colleges. AAS programs range from 64 to 76 semester hour credits. A full-time student can typically complete one of these programs within two years. In addition to major course work, associate in applied science degree programs require a minimum of 15 semester hour credits of general education. General education requirements include course work in communications, humanities/fine arts, social/behavioral sciences and natural sciences/mathematics. Certain courses in associate degree programs may be accepted by a four-year college or university for transfer credit in an associated field.

### *College Transfer (Associate in Arts, Associate in Engineering, Associate in Science and Associate in Fine Arts)*

Community colleges offer college transfer through the Associate in Arts (AA), Associate in Science (AS), Associate in Engineering (AE) and Associate in Fine Arts (AFA) degree programs. The college transfer program is offered at all of the community colleges through one of more of these degrees programs.

**Associate in Arts (A10100) and Associate in Science (A10400)**

The Comprehensive Articulation Agreement (CAA) addresses the transfer of Associate in Arts and Associate in Science students between institutions in the North Carolina Community College System and the constituent institutions of the University of North Carolina. Information about the Comprehensive Articulation Agreement can be located at: http://www.nccommunitycolleges.edu/academic-programs/college-transferarticulation-agreements

The Independent Comprehensive Articulation Agreement (ICAA) between signatory institutions of the North Carolina Independent Colleges and Universities (NCICU) and the North Carolina Community College System (NCCCS) is intended to provide smooth transfer for community college AA and AS students who wish to continue their education at an NCICU institution which has signed the agreement. Information about the Independent Comprehensive Articulation Agreement can be located at:

http://www.nccommunitycolleges.edu/academic-programs/college-transferarticulation-agreements

The Associate in Arts (A10100) degree and the Associate in Science (A10400) program are approved to be offered at all of the 58 community colleges.

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

The Uniform Articulation Agreement between the University of North Carolina Baccalaureate of Fine Arts Visual Arts program and the North Carolina Community College System Associate in Fine Arts in Visual Arts programs was approved by the State Board of Community Colleges and The UNC Board of Governors in the Spring of 2017. This agreement promotes educational advancement opportunities for Associate in Fine Arts in Visual Arts (A10600) degree completers moving between the NC community colleges and the constituent institutions of The University of North Carolina in order to complete Baccalaureate of Fine Art degrees.  The following colleges are approved to offer the Associate in Fine Arts in Visual Arts (A10600) program:

| | |
|---|---|
| Alamance Community College | Lenoir Community College |
| Asheville-Buncombe Technical Community College | Mitchell Community College |
| Blue Ridge Community College | Piedmont Community College |
| Caldwell Community College and Technical Institute | Pitt Community College |
| Cape Fear Community College | Richmond Community College |
| Carteret Community College | Roanoke-Chowan Community College |
| Catawba Valley Community College | Rockingham Community College |
| Central Piedmont Community College | Rowan-Cabarrus Community College |
| Cleveland Community College | Sandhills Community College |
| Coastal Carolina Community College | South Piedmont Community College |
| College of The Albemarle | Southwestern Community College |
| Craven Community College | Surry Community College |
| Durham Technical Community College | Tri-County Community College |
| Fayetteville Technical Community College | Vance-Granville Community College |
| Forsyth Technical Community College | Wake Technical Community College |
| Gaston College | Western Piedmont Community College |
| Guilford Technical Community College | |

## Associate in Fine Arts in Music (A10700)

The following colleges are approved to offer the Associate in Fine Arts in Music (A10700) program:

| | |
|---|---|
| Alamance Community College | Guilford Technical Community College |
| Blue Ridge Community College | Isothermal Community College |
| Caldwell Community College and Technical Institute | Lenoir Community College |
| Cape Fear Community College | Mitchell Community College |
| Catawba Valley Community College | Montgomery Community College |
| Central Piedmont Community College | Pitt Community College |
| Coastal Carolina Community College | Roanoke-Chowan Community College |
| Craven Community College | Sandhills Community College |
| Fayetteville Technical Community College | |

**Associate in Fine Arts in Theatre (A10800)**
The following colleges are approved to offer the Associate in Fine Arts in Theatre (A10800) program:

| | |
|---|---|
| Blue Ridge Community College | Fayetteville Technical Community College |
| Cape Fear Community College | Forsyth Technical Community College |
| Catawba Valley Community College | Guilford Technical Community College |
| Central Piedmont Community College | Pitt Community College |
| Coastal Carolina Community College | Western Piedmont Community College |
| College of The Albemarle | |

**Associate in Engineering (A10500)**
The Uniform Articulation Agreement between the University of North Carolina Baccalaureate Engineering programs and the North Carolina Community College System Associate in Engineering (AE) programs was approved by the State Board of Community Colleges and The UNC Board of Governors in February of 2015. This agreement promotes educational advancement opportunities for Associate in Engineering (A10500) degree completers moving between the NC community colleges and the constituent institutions of The University of North Carolina in order to complete Bachelor of Science in Engineering degrees. The following colleges are approved to offer the Associate in Engineering (A10500) degree program:

| | |
|---|---|
| Alamance Community College | Halifax Community College |
| Asheville-Buncombe Technical Community College | Haywood Community College |
| Blue Ridge Community College | Johnston Community College |
| Brunswick Community College | Lenoir Community College |
| Carteret Community College | McDowell Technical Community College |
| Catawba Valley Community College | Mitchell Community College |
| Central Carolina Community College | Montgomery Community College |
| Central Piedmont Community College | Nash Community College |
| Coastal Carolina Community College | Pitt Community College |
| College of The Albemarle | Richmond Community College |
| Craven Community College | Rowan-Cabarrus Community College |
| Durham Technical Community College | Sandhills Community College |
| Fayetteville Technical Community College | Tri-County Community College |
| Forsyth Technical Community College | Wake Technical Community College |
| Gaston College | Wayne Community College |
| Guilford Technical Community College | Wilkes Community College |

*Associate in General Education (AGE)(A10300)*

The Associate in General Education program is designed for individuals wishing to broaden their education, with emphasis on personal interest, growth and development. The two-year AGE program provides students opportunities to study English, literature, fine arts, philosophy, social science, science and mathematics at the college level. All courses in the program are college-level courses. Many of the courses are equivalent to college transfer courses; however, the program is not principally designed for college transfer.

Successful completion of 64-65 semester hour credits leads to an associate in general education degree. The General Education program (A10300) is approved to be offered at the following community colleges:

| | |
|---|---|
| Alamance Community College | Fayetteville Technical Community College |
| Beaufort County Community College | Forsyth Technical Community College |
| Bladen Community College | Gaston College |
| Blue Ridge Community College | Guilford Technical Community College |
| Caldwell Community College & Technical Institute | Halifax Community College |
| Cape Fear Community College | Haywood Community College |
| Catawba Valley Community College | James Sprunt Community College |
| Cleveland Community College | Johnston Community College |
| College of The Albemarle | Lenoir Community College |
| Craven Community College | Martin Community College |
| Davidson County Community College | McDowell Technical Community College |
| Durham Technical Community College | Mitchell Community College |
| Edgecombe Community College | Montgomery Community College |

Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College

South Piedmont Community College
Southeastern Community College
Southwestern Community College
Stanly Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wayne Community College
Western Piedmont Community College
Wilkes Community College

## *Associate in General Education-Nursing (A1030N)*

The Associate in General Education (AGE)-Nursing is designed for students who wish to begin their study toward the Associate in Nursing degree and a Baccalaureate degree in Nursing as based on Blocks 1 through 3 of the Uniform Articulation Agreement between the University of North Carolina's Registered Nurse (RN) to Bachelor of Science in Nursing (BSN) programs and the North Carolina Community College Associate Degree Nursing Programs which was approved by the State Board of Community Colleges and the UNC Board of Governors in February 2015.  The AGE-Nursing shall be granted for a planned program of study consisting of a minimum of 60 semester hours of credit (SHC) of courses.

A student who completes an Associate in Applied Science (AAS) in Nursing with a GPA of at least 2.0 and a grade of C or better in the AGE-Nursing courses listed below and who holds a current unrestricted license as a Registered Nurse in North Carolina will have fulfilled the UNC institutions lower-division general education requirements as well as nursing program entry requirements.  However, because nursing program admissions are competitive, no student is guaranteed admission to the program of his or her choice.  The General Education-Nursing program (A1030N) is approved to be offered at the following community colleges:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Carteret Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Craven Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Gaston College
Guilford Technical Community College
Haywood Community College
Isothermal Community College

James Sprunt Community College
Johnston Community College
Lenoir Community College
Mayland Community College
McDowell Technical Community College
Mitchell Community College
Nash Community College
Piedmont Community College
Pitt Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southeastern Community College
Southwestern Community College
Stanly Community College
Surry Community College
Tri-County Community College
Wayne Community College
Western Piedmont Community College
Wilkes Community College

## *Developmental Education*

Developmental Education supports the open-door admissions policy. Some students may find themselves under-prepared for their chosen programs of study. Developmental Education enables those persons to acquire the knowledge, skills, and behaviors that are necessary for college-level work, giving them a good probability of success in subsequent learning experiences.

The majority of developmental courses are in the areas of reading, writing, and mathematics, with enrollment in these courses based on the college placement testing for those areas. Enrollment in other developmental courses is based on testing or skills assessment specific to the content area(s) included in the learner's chosen program of study. Instruction in positive learner behaviors, such as test taking, time management and study skills, is provided in both formal and informal settings. Counseling, tutoring, and other academic and personal resource development activities and services are available.

## *Career and College Promise*

Session Law 2011-145, the Appropriations Act of 2011, authorized the State Board of Education and the State Board of Community Colleges to establish the Career and College Promise program, effective January 1, 2012. The purpose of Career and College Promise is to offer structured opportunities for qualified high school students to dually enroll in community college courses that provide pathways that lead to a certificate, diploma, degree, or State or industry-recognized credential as well as provide entry-level jobs skills.

Career and College Promise offers North Carolina high school students a clear path to success in college or in a career. The program is free to all students who maintain a "B" average and meet other eligibility requirements. Through a partnership of the Department of Public Instruction, the N.C. Community College System, the University of North Carolina system and many independent colleges and universities, North Carolina is helping eligible high school students to begin earning college credit at a community college campus at no cost to them or their families. The three pathways include:

1. College Transfer Pathways (CTP) requires the completion of at least 30 semester hours of transfer courses including English and mathematics.

2. Career and Technical Education Pathways (CTE):
a) a curriculum Career and Technical Education Pathway leading to a certificate or diploma aligned with a high school career cluster.

b) a Workforce Continuing Education Pathway (WCEP) leading to a state or industry recognized credential aligned with a high school career cluster.

3. Cooperative Innovative High School Programs (CIHSP) are located on college campuses (unless a waiver was provided) and provide opportunities for students to complete an associate degree program or earn up to two years of college credit within five years. Examples include Early and Middle College High Schools.

For additional information about Career and College Promise, please visit the following website:

http://www.nccommunitycolleges.edu/academic-programs/career-college-promise

## *College Tech Prep*

College Tech Prep (CTP) in North Carolina has a vision of a well-educated, high-performance, 21st century workforce created through its mission of strategic partnerships among secondary and postsecondary education, business and industry, and economic and workforce development. The goal of CTP is to prepare students for employment and continuous learning through rigorous, relevant, and integrated academic and technical instruction in secondary and postsecondary education programs.

CTP is a seamless educational strategy that begins in high school and continues through community college resulting in a two-year college certificate, associate degree, baccalaureate degree, or completion of a registered apprenticeship. CTP combines a rigorous academic core of courses with a focused sequence of technical courses in any career pathway within the 16 Career Clusters. Students who excel in their high school Career and Technical Education (CTE) courses also may receive community college credit when those courses have comparable competencies with college courses.

CTP helps prepare students to enter and succeed in the 21st century workforce by requiring cooperation and mutual collaboration among educators, employers, families, and policy makers in the community. CTP requires the same high level of achievement for all students while recognizing and addressing a variety of learning styles. CTP integrates relevant applications into academics and encourages critical thinking and lifelong learning.

**Career Credit**

Access to high-quality educational opportunities supporting lifelong career and personal enrichment is a primary mission of the North Carolina Community College System.  Through its career credit programs, the System addresses the continuous learning needs of adults as individuals, members of society and the workforce.  Career Credit programs offer numerous opportunities for in-demand job training, career building reskilling, basic skills education and enhanced use of leisure time.

**Workforce Continuing Education**

Workforce Continuing Education programs are designed to provide training opportunities for individuals seeking to gain new or upgrade current job-related skills.  Course offerings are specifically designed to meet industry requirements for initial certification/licensure, renewal, registry listing, CEUs, skill development, or exam preparation.

The Workforce Continuing Education programs promote industrial and business growth, respond to changes in economic development patterns, and train the citizens of North Carolina to qualify for challenging employment opportunities created by the State's dynamic economic growth.  For more information, visit the North Carolina Community College website for workforce continuing education at: http://www.nccommunitycolleges.edu/workforce-continuing-education.

**NCWorks Career Centers**

NCWorks Career Centers are user friendly facilities which provide job seekers, training seekers, and employers access to a variety of employment and training services and information all under one roof.  The core services available in each NCWorks Career Center are: Job Listings, Job Placement; Labor Marker Information; Career Information and Guidance; Assessment; Case Management; and Information About Education and Training Services. North Carolina community colleges are integral partners with the NCWorks Career Centers.  For additional information on Career Centers throughout North Carolina, visit the following web site:  http://www.nccommerce.com/wf/job-seekers.

**Community Service**

Community Service programs provide courses, seminars, and community activities that contribute to an individual's cultural, civic, and/or personal growth.  The cultural and civic component of this program meets community needs through lecture and concert series, art shows, the use of college facilities by community groups, providing speakers to community organizations, and providing visiting artist activities for college communities.

**Basic Skills**

**Adult High School**

The Adult High School (AHS) Diploma is designed for adults who would like to complete their high school education. It is offered in cooperation with the North Carolina Department of Public Instruction. The program of study follows the graduation requirements listed in the Future-Ready Core Course of Study adopted by the State Board of Education. Students must be 18 years of age or older to enroll in the program, however some 16 and 17 year old students may enroll if they have permission from their local educational agency. Course delivery varies and may be offered in a classroom setting, learning laboratory, distance learning, or through a combination of methods. Courses are available free of charge. An AHS diploma is awarded upon program completion.

**High School Equivalency Diploma**

North Carolina's High School Equivalency Diploma program provides free instruction to assist students prepare and successfully pass a designated high school equivalency assessment. The three nationally-recognized assessments used to obtain a state-issued High School Equivalency Diploma in North Carolina are GED®, HiSET® and TASC. While the instruction is free, there is a cost for each individual assessment. Each assessment is approved for implementation in North Carolina by the State Board of Community Colleges. Students must be 18 years of age or older to enroll in the program, however some 16 and 17 year old students may enroll if they have permission from their local educational agency.

**Adult Basic Education**

The Adult Basic Education (ABE) program is designed for adults, 16 or older, who are no longer enrolled in high school and are functioning below the high school level. The major objective of the program is to provide instruction in reading, writing, mathematics, and technology.

**English Language Acquisition**

The English Language Acquisition Program is a program of instruction –
- A) designed to help eligible individuals who are English language learners achieve competence in reading, writing , speaking, and comprehension of the English language; and that
- B) leads to –
    - i) the attainment of a secondary school diploma or its recognized equivalent; and
    - ii) transition to postsecondary education and training; or
    - iii) employment.

## Economic and Workforce Development

### Customized Training

The Customized Training Program provides training assistance for full-time production and direct customer services positions for new and existing companies in North Carolina.  The program is dedicated to the enhancement of workforce skills essential to successful employment.  Eligible companies must demonstrate two of the following criteria: 1) The business is making an appreciable capital investment; 2) The business is deploying new technology; 3) The business is creating jobs, expanding an existing workforce, or enhancing the productivity and profitability of the operations within the State; and 4) The skills of the workforce will be enhanced by the assistance.  For additional information on Customized Training throughout North Carolina, visit the North Carolina Community College System Economic Development website at: http://www.nccommunitycolleges.edu/ncworks-customized-training

### Small Business Center Network (SBCN)

The programs and services of the Small Business Center Network promote entrepreneurship and the development of small businesses across North Carolina. The Small Business Center Network is made up of 58 Small Business Centers, one at each of our state's 58 community colleges.  The centers are local, community-based resources that help existing and potential small business owners plan and operate successfully.  The specialized staff assist with business plan development and review, information on financial support, one-on-one business counseling, and referrals to other agencies and sources of business assistance. Additionally, the centers provide free and low cost seminars and courses and serve as a resource library of relevant business publications, videos/audios and software.

### JobLink Career Centers

JobLink Career Centers are user friendly facilities which provide job seekers, training seekers, and employers access to a variety of employment and training services and information all under one roof.  The core services available in each JobLink Career Center are: Job Listings, Job Placement; Labor Marker Information; Career Information and Guidance; Assessment; Case Management; and Information About Education and Training Services.

North Carolina community colleges are integral partners in the JobLink Career Centers.  For additional information on Career Centers throughout North Carolina, visit the following web site:  http://www.nccommerce.com/workforce/job-seekers.

**Human Resources Development (HRD)**

The Human Resources Development (HRD) program provides employability skills training to individuals in transition.  The goal of the HRD program has three primary purposes: to provide program outreach and student recruitment activities, to enhance and develop employability skills, and to provide career exploration opportunities to meaningful training and employment opportunities to unemployed and underemployed individuals.

HRD programs focus on providing instructional training in employability skills specifically designed to meet the needs of individuals facing job transition. Training focuses on skill and self- assessment activities designed to identify the individual's

interests, work values, aptitudes, and/or job readiness as related to career and educational goals, job search strategies for the 21st century, skills to negotiate job retention and progression, and linkages to community support services.

HRD courses are open to all and are fee waived for unemployed individuals, dislocated workers, and workers earning at or below 200% of the federal poverty standards.

### *Learning Laboratory*

Learning laboratory programs provide an opportunity for adults to continue their education regardless of the starting level. In a learning laboratory, students can learn to read, write, work mathematics or speak well. The laboratory program can help students pass examinations, complete requirements for the Adult High School Equivalency test or Adult High School Diploma, and/or keep pace in a regular curriculum program. Learning labs also offer individuals the opportunity to be better prepared for a present job, to prepare for advancement or to take courses for self-improvement.

The laboratories present material in small, sequential steps, moving gradually from basic and easily learned material to difficult concepts. Students may enroll in a learning laboratory at any time during the year. Students set up their own schedules and progress at their own rates.

### *Apprenticeship*

The apprenticeship program is recognized as one of the leading methods for acquiring skills and knowledge necessary to become a craftsman. Business and industry, the North Carolina Department of Commerce and community colleges work together to provide apprenticeship programs consisting of on-the-job training and related instruction. Colleges provide the related instruction for both registered and non-registered apprentices. Related instruction may be provided through classroom instruction, correspondence or individualized instructional programs. Anyone interested in an apprenticeship program should consult his or her employer, the local community college or the nearest Department of Commerce office.

### *Work-Based Learning*

Work-Based Learning (WBL) courses are designed to provide students with the opportunity to engage in supervised on-the-job work experiences. They are joint ventures between the educational institution, student, and employer, which serves to prepare students for productive and successful careers. Students may earn college credit for Work-Based Learning when it directly relates to their program of study.

The North Carolina Department of Commerce administers a Registered Apprenticeship program that helps workers learn new specialized skills needed in today's workforce. The apprenticeship program combines on-the-job training with invaluable classroom instruction. A student enrolled in a community college technical education program, may utilize WBL for the on-the-job training requirement of the apprenticeship.

# SECTION 3
## CERTIFICATE, DIPLOMA AND ASSOCIATE IN APPLIED SCIENCE PROGRAMS

Currently, colleges in the North Carolina Community College System offer more than 200 different certificate, diploma and Associate in Applied Science programs. These programs are divided among ten different occupational program areas.

Descriptions of the certificate, diploma and Associate in Applied Science programs follow. These programs are arranged according to their occupational categories. If you are unsure how a particular program is categorized, consult the index in the back of the catalog. *Program listings do not guarantee program availability and are subject to change as the needs change. For more information about a particular program, please contact the college offering the program in which you are interested.*

### Key to Curriculum Title Code Listings:

The first character of the program code denotes the program's credential level:

> A=associate degree          C=certificate          D=diploma

The second and third digits of the program code denote the program group title:

| | |
|---|---|
| 15  Agricultural and Natural Resources Technologies | 40  Engineering Technologies |
| 20  Biological and Chemical Technologies | 45  Health Sciences |
| 25  Business Technologies | 50  Industrial Technologies |
| 30  Commercial and Artistic Production Technologies | 55  Public Service Technologies |
| 35  Construction Technologies | 60  Transport Systems Technologies |

The fourth and fifth digits of the program code denote the individual program.

The sixth digit of the program code denotes a concentration within a program.

### *College Tech Prep Programs

The Tech Prep/Associate Degree course of study has been developed to guide students from high school preparation to the Associate in Applied Science degree at community colleges. The Tech Prep course of study forms a firm academic and technological foundation for high school students to move through community college associate degree programs into successful participation in the world of work. The curriculums marked by an asterisk (*) are appropriate curriculums to articulate with the high school Tech Prep program.

### Career Clusters

Many of the curriculum programs, especially in the areas of Agricultural, Biological/Chemical, Construction, Industrial, Engineering, and Transportation technologies, are based on a national career and technical education (CTE) standardized curriculum model that is designed to support and promote articulation. Additional information about Career Clusters is included in the *North Carolina Career Clusters Guide* which was developed by the North Carolina Department of Public Instruction and the North Carolina Community College system to link the academic and Career and Technical Education programs at the secondary and postsecondary levels to increase student achievement. Additional information about Career Clusters is located at: http://www.nc-net.info/NC_career_clusters_guide.php or http://www.careertech.org.

*Agricultural and Natural Resources Technologies*

The Agricultural and Natural Resources Technologies programs prepare graduates for occupations concerned with producing, processing and distributing agricultural products and with the care, management and preservation of natural resources for food, fiber and recreation.

Graduates should qualify for jobs in agricultural production and management, agri-business firms, horticultural enterprises, agricultural chemical companies, agricultural research facilities, food processing businesses, forest service and industries, soil and water conservation districts, waste water treatment plants, animal care facilities and parks and recreation firms. This program area consists of the following curriculums:

Agribusiness Technology (A15100)
Agriculture Education (A15330)
Applied Animal Science Technology (A15280)
Aquaculture Technology (A15120)
Brewing, Distillation and Fermentation (A15250)
Equine Business Technology (A15170)
Equine Training Technology (A15190)
Fish and Wildlife Management Technology (A15160)
Forestry Management Technology (A15200)
Golf Course Management Technology (A15230)

Greenhouse and Grounds Maintenance (Certificate)(C15220)
Horticulture Technology (A15240)
Landscape Gardening (A15260)
Marine Science (A15310)
Marine Technology (A15320)
Sustainable Agriculture (A15410)
Swine Management Technology (A15150)
Turfgrass Management Technology (A15420)
Viticulture and Enology Technology (A15430)

## *Agribusiness Technology (A15100)

*Agribusiness: Agricultural Science Technology Curriculum Standard/Agribusiness Systems Pathway*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Agribusiness Technology curriculum is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. The objective is the development of a workforce knowledgeable in sustainable agriculture practices.

Students will learn the fundamentals of agriculture, focusing on crop production and business. Emphasis is placed on entrepreneurial and field training. Students will also learn the basic principles of our economic system and government policies and programs relating to agriculture.

Graduates should qualify for a variety of jobs in agricultural businesses such as equipment, feed, and agricultural supply sales; store management; farm operations; wholesale and retail produce management; nursery operations; and environmental and agricultural education.

This program prepares individuals to manage agricultural businesses and agriculturally related operations within diversified corporations. Potential course work includes instruction in agriculture, agricultural specialization, business management, accounting, finance, marketing, planning, human resources management, and other managerial responsibilities.

The following colleges are approved to offer this program:

Beaufort County Community College
Bladen Community College
College of The Albemarle
Isothermal Community College
James Sprunt Community College
Mayland Community College

Mitchell Community College
Piedmont Community College
South Piedmont Community College
Stanly Community College
Wayne Community College

## *Agriculture Education (A15330)

*Agribusiness: Agricultural Science Technology Curriculum Standard/Agribusiness Systems Pathway*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Agriculture Education curriculum is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. The objective is the development of a workforce knowledgeable in sustainable agriculture practices.

Students will learn the fundamentals of agriculture, focusing on crop production and business. Emphasis is placed on entrepreneurial and field training. Students will also learn the basic principles of our economic system and government policies and programs relating to agriculture.

Graduates should qualify for a variety of jobs in agricultural businesses such as equipment, feed, and agricultural supply sales; store management; farm operations; wholesale and retail produce management; nursery operations; and environmental and agricultural education.

This program provides students with agriculture and education foundation courses. Course work focuses on the foundational aspects of agriculture and education theory. Students will be introduced to classroom theory and management as well as soil, plant, and animal science. This curriculum will provide students with the knowledge and skills to be eligible to become extension agents, farm management specialists, 4-H specialists, crop service representatives, agri-tourism tour guides or work in agriculture sales, or environmental community education programs. Successful completion of the program will provide students with an opportunity to articulate their coursework to university programs in Agriculture Education.

The following college is approved to offer this program:

Lenoir Community College
Mitchell Community College

## *Applied Animal Science Technology (A15280)

*Animal Systems: Applied Animal Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Applied Animal Science Technology curriculum is designed to prepare students for careers in the production, processing, and distribution of livestock, swine, and poultry and their products according to scientific principles essential to efficient and profitable operation.

Students should learn skills necessary for the operation of efficient and profitable livestock, swine, and poultry enterprises. Coursework includes production practices, animal health, nutrition, reproduction, and management.

Graduates should qualify for entry-level jobs as herd or flock managers, field service persons, feed salespersons, equipment salespersons, feed mill workers, buyers of poultry and livestock, owners/operators, farm managers, department supervisors, field service representatives, and waste management technicians.

This program prepares individuals to select, breed, care for, process, and market livestock and small farm animals. Potential course work includes instruction in basic animal science, animal nutrition, and animal health as applied to various species and breeds; design and operation of housing, feeding, and processing facilities; and related issues of safety, applicable regulations, logistics, and supply.

The following colleges are approved to offer this program:

James Sprunt Community College
Sampson Community College

Wayne Community College
Wilkes Community College

### *Aquaculture Technology (A15120)

*Animal Systems: Aquaculture Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Aquaculture Technology curriculum prepares individuals for careers in aquaculture and management of aquatic ecosystems. It provides a broad background in science and math as well as specialized course work and practical experience in fish, shellfish, and aquatic plant production and management.

Course work includes biology, chemistry, and math, as well as water quality and limnology, nutrition and feeding, genetics and breeding, facilities construction, and business. Students will spend time working in the industry through the cooperative work experience or conducting an individualized study through the aquaculture project.

Graduates may find employment on private farms and government hatcheries or at public aquariums. Graduates may also start new businesses in fish, shellfish, or aquatic plant farming; pond and lake management services; or home/office aquarium or water garden management services.

This program prepares individuals to select, culture, propagate, harvest, and market domesticated fish, shellfish, and marine plants, both freshwater and saltwater. Potential course work includes instruction in the basic principles of aquatic and marine biology; health and nutrition of aquatic and marine life; design and operation of fish farms, breeding facilities, culture beds, and related enterprises; and related issues of safety, applicable regulations, logistics, and supply.

The following colleges are approved to offer this program:

Brunswick Community College                                       Carteret Community College

### *Brewing, Distillation and Fermentation (A15250)

*Career Cluster: Agriculture, Food and Natural Resources*

The Brewing, Distillation and Fermentation curriculum is designed to prepare individuals for various careers in the brewing, distillation and fermentation industry. Classroom instruction, practical laboratory applications of brewing, distillation and fermentation principles and practices are included in the program of study.

Course work in brewing, distillation and fermentation includes production, operations, safety and sanitation, and associated process technologies. Related course work is offered in fermentation production, safety and sanitation, applied craft beverage microbiology, agriculture, marketing, management, equipment, packaging, and maintenance.

Graduates should qualify for employment opportunities in the brewing, distillation and fermentation industry. Students may be eligible to sit for the professional Institute of Brewing and Distilling (IBD) certification exams which correspond to the program of study.

This program prepares individuals to apply technical knowledge and skills to brew, distill and ferment various products, including beverages. Includes instruction in production of fermented products, cultivating, marketing, management, legal issues, inspection, maintenance, service and repair of equipment, facility operations, packaging, sanitation, and welding.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College          Nash Community College
Blue Ridge Community College                                       Rockingham Community College

## *Equine Business Technology (A15170)

*Animal Systems: Equine Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Equine Business Technology curriculum is designed to prepare students for positions within the horse industry. The curriculum is management oriented, preparing graduates for the widest range of available equine jobs; areas of specialization may be pursued during the internship.

Course work includes farm management, breeding, nutrition, selection/judging, and health. Training, teaching, and riding are also included. Students are assigned a horse and practice day-to-day management at an equine facility.

Graduates should qualify for jobs with many different types of equine operations: grooms to assistant managers; private to recreational and racing barns; breed to discipline-oriented farms.

This program prepares individuals to manage the selection, breeding, care, and maintenance of work, athletic, and show horses; and to manage horse farms, stables, tracks and related equipment and operations. Potential course work includes instruction in applicable principles of animal science, care, and health; stable and track management; design and operation of facilities and equipment; and related issues such as regulations, business management; and logistics.

The following college is approved to offer this program:

Martin Community College

## *Equine Training Technology (A15190)

*Animal Systems: Equine Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Equine Training Technology curriculum is designed to prepare students for positions within the horse industry. The curriculum is management oriented, preparing graduates for the widest range of available equine jobs; areas of specialization may be pursued during the internship.

Course work includes farm management, breeding, nutrition, selection/judging, and health. Training, teaching, and riding are also included. Students are assigned a horse and practice day-to-day management at an equine facility.

Graduates should qualify for jobs with many different types of equine operations: grooms to assistant managers; private to recreational and racing barns; breed to discipline-oriented farms.

This program focuses on the horse, horsemanship, and related subjects and prepares individuals to care for horses and horse equipment; ride and drive horses for leisure, sport, show, and professional purposes; and manage the training of horses and riders. Potential course work includes instruction in horse breeding, nutrition, health, and safety; history of the horse and horsemanship; horse development and training; riding and equestrian technique; stable, paddock, and track management; and equipment maintenance and repair.

The following college is approved to offer this program:

Martin Community College

### *Fish and Wildlife Management Technology (A15160)

*Natural Resources Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Natural Resources System curriculum is designed to provide the practice and academic skills essential for success in Natural Resource Management.

Students will gain an understanding of the principles and develop competencies and technical skills in the production, utilization and conservation of natural resources. Students will also learn many technical and conservation skills.

Graduates qualify for positions in natural resources technician positions in a wide range of outdoor national venues.

This program prepares individuals to conserve and manage wilderness areas and the life therein, and manage wildlife reservations and zoological/aquarium facilities for recreational, commercial, and ecological purposes. Potential course work includes instruction in wildlife biology, marine/aquatic biology, environmental science, freshwater and saltwater ecosystems, natural resources management and policy, outdoor recreation and parks management, the design and operation of natural and artificial wildlife habitats, applicable law and regulations, and related administrative and communications skills.

The following college is approved to offer this program:

Haywood Community College


### *Forestry Management Technology (A15200)

*Natural Resources Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Natural Resources System curriculum is designed to provide the practice and academic skills essential for success in Natural Resource Management.

Students will gain an understanding of the principles and develop competencies and technical skills in the production, utilization and conservation of natural resources. Students will also learn many technical and conservation skills.

Graduates qualify for positions in natural resources technician positions in a wide range of outdoor national venues.

This program prepares individuals to manage and produce forest resources. Potential course work includes instruction in woods and field skills, tree identification, timber measurement, logging and timber harvesting, forest propagation and regeneration, forest fire-fighting, resource management, equipment operation and maintenance, record-keeping, sales and purchasing operations, and personnel supervision.

The following colleges are approved to offer this program:

Haywood Community College                                    Wayne Community College
Montgomery Community College

**\*Golf Course Management Technology (A15230)**

*Plant Systems: Horticultural Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Golf Course Management Technology curriculum is designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science.  Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens.  Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

This program prepares individuals to manage the operation of golf courses. Potential course work includes instruction in turf grass science and management, golf course design and construction, grounds equipment and operation, pest control, and grounds management.

The following college is approved to offer this program:                    Sandhills Community College


**Greenhouse and Grounds Maintenance (Certificate) (C15220)**

*Career Cluster: Agriculture, Food, and Natural Resources*

The Greenhouse and Grounds Maintenance curriculum provides individuals from special populations with experience in general horticultural principles and applications.  This training provides a setting that is conducive to students' vocational and personal growth.

Course work includes extensive hands-on experience in identification and use of horticultural materials, greenhouse production, nursery production, landscape and grounds maintenance practices, and other related topics.

Graduates should qualify for entry-level positions in the horticultural industry and related fields.

The following college is approved to offer this program:

Halifax Community College

**\*Horticulture Technology (A15240)**

*Plant Systems: Horticultural Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Horticulture Technology curriculum is designed to prepare individuals for various careers in horticulture.  Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science.  Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens.  Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

This program focuses on the general production and management of cultivated plants, shrubs, flowers, foliage, trees, groundcovers, and related plant materials; the management of technical and business operations connected with horticultural services; and the basic scientific principles needed to understand plants and their management and care.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Mayland Community College |
| Blue Ridge Community College | *awards the credential in collaboration with:* |
| Brunswick Community College | Caldwell Community College & |
| Carteret Community College | Technical Institute |
| Catawba Valley Community College | Pamlico Community College |
| Central Piedmont Community College | Pitt Community College |
| Fayetteville Technical Community College | Rockingham Community College |
| Forsyth Technical Community College | Sampson Community College |
| Haywood Community College | Surry Community College |
| Johnston Community College | Western Piedmont Community College |
| Lenoir Community College | Wilkes Community College |

**\*Landscape Gardening (A15260)**

*Plant Systems: Horticultural Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Landscape Gardening curriculum is designed to prepare individuals for various careers in horticulture.  Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science.  Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens.  Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

This program prepares individuals to manage and maintain indoor and/or outdoor ornamental and recreational plants and groundcovers and related conceptual designs established by landscape architects, interior designers, enterprise owners or managers, and individual clients. Potential course work includes instruction in applicable principles of horticulture, gardening, plant and soil irrigation and nutrition, turf maintenance, plant maintenance, equipment operation and maintenance, personnel supervision, and purchasing.

The following colleges are approved to offer this program:

Cape Fear Community College

Caldwell Community College and Technical Institute

Sandhills Community College
## *Marine Science (A15310)
*Natural Resource Systems: Marine Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Marine Science curriculum prepares individuals for a variety of marine-related occupations such as marine conservation, water analysis, marine scientific research support and commercial fishing. Individuals will be prepared as naturalists within the ecotourism industry and be trained in observational and measurement techniques aboard a variety of vessels including ocean-going research vessels.

Course work includes a unique blend of traditional and contemporary vocational, technical, and scientific marine education. Course work specific for Marine Sciences includes instruction in biological sciences, environmental sciences, and marine sciences. Field and laboratory experiences prepare students to identify, observe, and collect scientific data associated with the fauna and flora found in the rivers, estuaries, sounds, and ocean. Course work in Marine Technologies includes instruction in the use of physical, chemical, meteorological, biological, and geological oceanographic instrumentation and sampling equipment.

Graduates are prepared for employment opportunities with aquariums, fisheries, corps of engineers, marine patrol, ecotourism companies, commercial fishing industries, entry-level field or laboratory positions with industries, state and federal agencies, and educational facilities associated with marine science and research. Career opportunities include oceanography, environmental science, marine biology, geophysical exploration, and fisheries-related employment.

This program focuses on the scientific study of the ecology and behavior of microbes, plants, and animals inhabiting oceans, coastal waters, and saltwater wetlands and their interactions with the physical environment. Potential course work includes instruction in chemical, physical, and geological oceanography; molecular, cellular, and biochemical studies; marine microbiology; marine botany; ichthyology; mammalogy; marine population dynamics and biodiversity; reproductive biology; studies of specific species, phyla, habitats, and ecosystems; marine paleocology and palentology; and applications to fields such as fisheries science and biotechnology.

No colleges are currently approved to offer this program.

## *Marine Technology (A15320)
*Natural Resource Systems: Marine Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Marine Technology curriculum prepare individuals for a variety of marine-related occupations such as marine conservation, water analysis, marine scientific research support and commercial fishing. Individuals will be prepared as naturalists within the ecotourism industry and be trained in observational and measurement techniques aboard a variety of vessels including ocean-going research vessels.

Course work includes a unique blend of traditional and contemporary vocational, technical, and scientific marine education. Course work specific for Marine Sciences includes instruction in biological sciences, environmental sciences, and marine sciences. Field and laboratory experiences prepare students to identify, observe, and collect scientific data associated with the fauna and flora found in the rivers, estuaries, sounds, and ocean. Course work in Marine Technologies includes instruction in the use of physical, chemical, meteorological, biological, and geological oceanographic instrumentation and sampling equipment.

Graduates are prepared for employment opportunities with aquariums, fisheries, corps of engineers, marine patrol, ecotourism companies, commercial fishing industries, entry-level field or laboratory positions with industries, state and federal agencies, and educational facilities associated with marine science and research. Career opportunities include oceanography, environmental science, marine biology, geophysical exploration, and fisheries-related employment.

This program provides the practical and academic skills essential for success in marine scientific support. Training in the operation and maintenance of seismic and hydrographic instrumentation including: side scan sonar, multibeam echo sounders, and sub-bottom profilers is provided in the classroom and underway at sea. Additional course work includes: classic and digital navigation techniques, practical applications of boat handling, seamanship, marlinspike seamanship, and safety at sea. Instruction applicable to fisheries science and environmental assessment is provided. The following college is approved to offer this program:

Cape Fear Community College

**\*Sustainable Agriculture (A15410)**

*Agribusiness: Agricultural Science Technology Curriculum Standard/Agribusiness Systems Pathway*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Sustainable Agriculture curriculum is designed to provide the entrepreneurial and technical skills necessary to manage a profitable, environmentally sound, community based small farm or agricultural business. The objective is the development of a workforce knowledgeable in sustainable agriculture practices.

Students will learn the fundamentals of agriculture, focusing on crop production and business. Emphasis is placed on entrepreneurial and field training. Students will also learn the basic principles of our economic system and government policies and programs relating to agriculture.

Graduates should qualify for a variety of jobs in agricultural businesses such as equipment, feed, and agricultural supply sales; store management; farm operations; wholesale and retail produce management; nursery operations; and environmental and agricultural education.

This program focuses on agricultural principles and practices that, over the long term, enhance environmental quality, make efficient use of nonrenewable resources, integrate natural biological cycles and controls, and are economically viable and socially responsible; and that may prepare individuals to apply this knowledge to the solution of agricultural and environmental problems. Potential course work includes instruction in principles of agroecology, crop and soil sciences, entomology, horticulture, animal science, weed science and management, soil fertility and nutrient cycling, applied ecology, agricultural economics, and rangeland ecology and watershed management.

The following colleges are approved to offer this program:

Central Carolina Community College
College of The Albemarle
Lenoir Community College
Wayne Community College
Western Piedmont Community College

**\*Swine Management Technology (A15150)**

*Animal Systems: Applied Animal Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Swine Management Technology curriculum is designed to prepare students for careers in the production, processing, and distribution of livestock, swine, and poultry and their products according to scientific principles essential to efficient and profitable operation.

Students should learn skills necessary for the operation of efficient and profitable livestock, swine, and poultry enterprises. Coursework includes production practices, animal health, nutrition, reproduction, and management.

Graduates should qualify for entry-level jobs as herd or flock managers, field service persons, feed salespersons, equipment salespersons, feed mill workers, buyers of poultry and livestock, owners/operators, farm managers, department supervisors, field service representatives, and waste management technicians.

This program focuses on the application of biological and chemical principles to the production and management of swine animals and the production and handling of meat and other products. Potential course work includes instruction in animal sciences, range science, nutrition sciences, food science and technology, biochemistry, and related aspects of human and animal health and safety.

The following colleges are approved to offer this program:

James Sprunt Community College
Wayne Community College

**\*Turfgrass Management Technology (A15420)**
*Plant Systems: Horticultural Science Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Turfgrass Management Technology curriculum is designed to prepare individuals for various careers in horticulture. Classroom instruction and practical laboratory applications of horticultural principles and practices are included in the program of study.

Course work includes plant identification, pest management, plant science and soil science. Also included are courses in sustainable plant production and management, landscaping, and the operation of horticulture businesses.

Graduates should qualify for employment in a variety of positions associated with nurseries, garden centers, greenhouses, landscape operations, governmental agencies/parks, golf courses, sports complexes, highway vegetation, turf maintenance companies, and private and public gardens. Graduates should also be prepared to take the North Carolina Pesticide Applicator's Examination and/or the North Carolina Certified Plant Professional Examination.

This program focuses on turfgrasses and related groundcover plants and prepares individuals to develop ornamental or recreational grasses and related products; plant, transplant, and manage grassed areas; and to produce and store turf used for transplantation. Potential course work includes instruction in applicable plant sciences, genetics of grasses, turf science, use analysis, turf management, and related economics.

The following colleges are approved to offer this program:Brunswick Community College
Catawba Valley Community College
Central Piedmont Community College
Guilford Technical Community College
Wayne Community College

**\*Viticulture and Enology Technology (A15430)**
*Plant Systems: Viticulture and Enology Technology*
*Career Cluster: Agriculture, Food, and Natural Resourses*

The Viticulture and Enology Technology curriculum is designed to prepare individuals for various careers in the grape growing and wine making industry. Classroom instruction, practical laboratory applications of viticulture/enology principles and practices are included in the program of study.

Course work in viticulture includes aspects of plant science, vineyard stock selection and propagation, soils, vine nutrition and pest management, planning, layout, economics and management of vineyards. Those interested in enology will receive training in the classroom, laboratory and field in the tools and techniques of wine making. Related courses in microbiology and fermentation science, sensory analysis, winery economics and marketing are offered.

Graduates should qualify for employment opportunities in vineyards, wineries, garden centers, greenhouses, related sales areas and government agencies. Graduates should also be prepared to take the North Carolina Pesticide Applicators Examination and the North Carolina Certified Plant Professional Examination.

This program focuses on the application of scientific and agribusiness principles to the production of grapes, the making of wine, and the wine business. Potential course work includes instruction in grapes and wines of the world; grape production; winemaking technology; plant biology; chemistry; food science, safety, and packaging; soil science; pest management; and marketing and business management.

The following colleges are approved to offer this program:

James Sprunt Community College
Surry Community College

### *Biological and Chemical Technologies*

The Biological and Chemical Technologies programs prepare individuals to work in occupations whose focus is on laboratory analysis in biological, chemical and environmental testing, and consulting.  This program area contains the following curriculums:

| | |
|---|---|
| Agricultural Biotechnology (A20110) | Environmental Management Technology (A20230) |
| Aquarium Science Technology (A20260) | Environmental Science Technology (A20140) |
| Biopharmaceutical Technology (A20180) | Marine Biotechnology (A20170) |
| Biotechnology (A20100) | Nanotechnology (A20190) |
| Chemical Technology (A20120) | Zoological Science Technology (A20250) |

### *Agricultural Biotechnology (A20110)
*Science and Math: Biotechnology*
*Career Cluster: Science, Technology, Engineering, and Math*

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/instrumentation technician, and quality control/quality assurance technician.

Graduates should be qualified for employment in various areas of industry and government, including research and development, manufacturing, sales, and customer service.

This program focuses on the application of molecular biology, biochemistry, and biophysics to the study of biomolecular structures, functions, and processes specific to plants and plant substances. Potential course work includes instruction in the biochemistry of plant cells, nuclear-cytoplasmic interactions, molecular cytostructures, photosynthesis, plant molecular genetics, and the molecular biology of plant diseases.

No colleges are currently approved to offer this program.

### *Aquarium Science Technology (A20260)
*Science and Math: Zoo and Aquarium Science Technology*
*Career Cluster: Science, Technology, Engineering and Math*

The Science and Math: Zoo and Aquarium Science Technology curriculum prepares students for employment in zoological parks, aquaria, or other settings requiring animal care, breeding, education/conservation, or health of exotic animals.

Course work emphasizes anatomy, physiology, reproduction, behavior, and nutrition of exotic animals that are on exhibit for education and/or conservation purposes or for animals maintained for medical purposes.  Students have practical experiences with basic husbandry skills, animal handling/capture/restraint skills, the ability to detect illness, and creative design of exhibits.

Graduates of the curriculum should qualify for entry-level employment opportunities in a variety of settings, including zoos, aquaria, nature science centers, and animal research facilities.

This program prepares individuals to conserve and manage wilderness areas and the flora, marine and aquatic life therein, and manage wildlife reservations and **zoo**logical/aquarium facilities for recreational, commercial, and ecological purposes. Potential course work includes instruction in wildlife biology, marine/aquatic biology, freshwater and saltwater ecosystems, the design and operation of natural and artificial wildlife habitats, limnology, wildlife pathology, and vertebrate zoological specializations such as mammalogy, herpetology, ichthyology, ornithology, and others.

The following college is approved to offer this program:        Davidson County Community College

**\*Biopharmaceutical Technology (A20180)**

*Career Cluster: Science, Technology, Engineering, and Math*

The Biopharmaceutical Technology curriculum is designed to prepare individuals for employment in pharmaceutical manufacturing and related industries.  Major emphasis is placed on manufacturing processes and quality assurance procedures.

Course work includes general education, computer applications, biology, chemistry, industrial safety, and an extensive array of very detailed pharmaceutically specific classes.

Graduates should qualify for numerous positions within the industry.  Employment opportunities include, but are not limited to, the following: Chemical Quality Assurance, Microbiological Quality Assurance, Product Inspection, Documentation Review, Manufacturing, and Product/Process Validation.

The following college is approved to offer this program:        Wake Technical Community College


**\*Biotechnology (A20100)**

*Science and Math: Biotchnology*
*Career Cluster: Science, Technology, Engineering, and Math*

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/instrumentation technician, and quality control/quality assurance technician.

Graduates should be qualified for employment in various areas of industry and government, including research and development, manufacturing, sales, and customer service.

This program focuses on the application of the biological sciences, biochemistry, and genetics to the preparation of new and enhanced agricultural, environmental, clinical, and industrial products, including the commercial exploitation of microbes, plants, and animals. Potential course work includes instruction in general biology, general and organic chemistry, physics, biochemistry, molecular biology, immunology, microbiology, genetics, and cellular biology.

The following colleges are approved to offer this program:

Alamance Community College
 *awards the credential in collaboration with:*
        Guilford Technical Community College
Brunswick Community College
Cleveland Community College
Forsyth Technical Community College
Gaston College

Pitt Community College
 *awards the credential in collaboration with:*
        Craven Community College
        Edgecombe Community College
        James Sprunt Community College
        Martin Community College
        Nash Community College
        Pamlico Community College
        Roanoke-Chowan Community College
Rowan-Cabarrus Community College
Wilson Community College

**\*Chemical Technology (A20120)**

*Career Cluster: Science, Technology, Engineering, and Math*

The Chemical Technology curriculum prepares individuals for work as analytical technicians in chemical laboratories associated with chemical production, environmental concerns, pharmaceuticals, or general analysis.

Course work includes general chemistry, organic chemistry, introductory chemical engineering, qualitative analysis, and quantitative analysis, including such instrumental techniques as spectroscopy (UV-Vis, IR, AA) and chromatography (GC, LC). Students also utilize computerized data collection, reduction, and graphic presentation.

Graduates should qualify as entry-level chemical laboratory technicians. Their duties may include chemical solution preparation; raw material, product, or environmental sampling; and/or sample testing via wet chemistry or instrumental techniques.

The following college is approved to offer this program:

Cape Fear Community College

**\*Environmental Management Technology (A20230)**
*Science and Math: Environmental Science Technology*
*Career Cluster: Science, Technology, Engineering, and Math*

The Environmental Science Technology curriculum is designed to prepare individuals for employment in environmental testing, consulting, remediation, and related industries. Major emphasis is placed on biological and chemical evaluation of societal impact and sustainable management of the environment. Coursework includes optional emphasis in invasive species treatment, and management of the environment.

Coursework includes computer applications, biology, chemistry, industrial safety, water quality, environmental health, and waste management. Coursework specific for Invasive Species includes assessment, management, identification, and control of both invasive plants and animals and GIS/GPS. Coursework specific for Environmental Management includes land resource management, field sampling and analysis, environmental health pathogens, and rural watershed protection.

Graduates are prepared for employment opportunities with numerous positions within the industry. Employment opportunities include, but not limited to, the following: Chemical and Biological Analysis, Water and Wastewater Treatment, EPA Compliance, Hazardous Material Handling, Contaminated Site Assessment and Remediation, Federal, State, and Local land management agencies, Private conservation organizations, Environmental Regulatory Compliance and Enforcement.

This program focuses on the studies and activities relating to the natural environment and its conservation, use, and improvement. Potential course work includes instruction in subjects such as climate, air, soil, water, land, fish and wildlife, and plant resources; in the basic principles of environmental science and natural resources management; and the recreational and economic uses of renewable and nonrenewable natural resources.

The following college is approved to offer this program:

Pamlico Community College

## *Environmental Science Technology (A20140)

*Science and Math: Environmental Science Technology*
*Career Cluster: Science, Technology, Engineering, and Math*

The Environmental Science Technology curriculum is designed to prepare individuals for employment in environmental testing, consulting, remediation, and related industries. Major emphasis is placed on biological and chemical evaluation of societal impact and sustainable management of the environment. Coursework includes optional emphasis in invasive species treatment, and management of the environment.

Coursework includes computer applications, biology, chemistry, industrial safety, water quality, environmental health, and waste management. Coursework specific for Invasive Species includes assessment, management, identification, and control of both invasive plants and animals and GIS/GPS. Coursework specific for Environmental Management includes land resource management, field sampling and analysis, environmental health pathogens, and rural watershed protection.

Graduates are prepared for employment opportunities with numerous positions within the industry. Employment opportunities include, but not limited to, the following: Chemical and Biological Analysis, Water and Wastewater Treatment, EPA Compliance, Hazardous Material Handling, Contaminated Site Assessment and Remediation, Federal, State, and Local land management agencies, Private conservation organizations, Environmental Regulatory Compliance and Enforcement.

This program focuses on environment-related issues using scientific, social scientific, or humanistic approaches or a combination. Potential course work includes instruction in the basic principles of ecology and environmental science and related subjects such as policy, politics, law, economics, social aspects, planning, pollution control, natural resources, and the interactions of human beings and nature.

The following colleges are approved to offer this program:

Blue Ridge Community College
  *awards the credential in collaboration with:*
        Southwestern Community College
Forsyth Technical Community College

Pamlico Community College
Wake Technical Community College
Western Piedmont Community College

## Marine Biotechnology* (A20170)

*Science and Math: Biotchnology*
*Career Cluster: Science, Technology, Engineering, and Math*

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/instrumentation technician, and quality control/quality assurance technician.

Graduates should be qualified for employment in various areas of industry and government, including research and development, manufacturing, sales, and customer service.

This program focuses on the scientific study of the ecology and behavior of microbes, plants, and animals inhabiting aquatic environments. Potential course work includes instruction in geology and hydrology; **aqua**tic ecosystems; microbiology; mycology; botany; ichthyology; mammalogy; population biology and biodiversity; studies of specific species, phyla, and habitats; and applications to fields such as natural resources conservation, fisheries science, and biotechnology.

The following college is approved to offer this program:          Brunswick Community College

**\*Nanotechnology (A20190)**

*Career Cluster: Science, Technology, Engineering, and Math*

The Nanotechnology curriculum prepares students to characterize and fabricate materials for biological, textile, chemical, and electrical applications at the atomic level in entry-level positions in engineering, manufacturing and/or medical research and development.

Course work includes biology, chemistry, physics, mathematics, manufacturing engineering technology, and an extensive array of very detailed nanotechnology-specific courses, using high-tech equipment and complying with high-precision quality control and clean-room protocols.

Graduates should qualify for various positions of industry and government, including research and development, materials testing and processing, optics and sensors, electron microscopy, and emerging nanotechnology industries.

The following college is approved to offer this program:     Forsyth Technical Community College


**\*Zoological Science Technology (A20250)**

*Science and Math: Zoo and Aquarium Science Technology*
*Career Cluster: Science, Technology, Engineering and Math*

The Science and Math curriculum prepares students for employment in zoological parks, aquaria, or other settings requiring animal care, breeding, education/conservation, or health of exotic animals.

Course work emphasizes anatomy, physiology, reproduction, behavior, and nutrition of exotic animals that are on exhibit for education and/or conservation purposes or for animals maintained for medical purposes. Students have practical experiences with basic husbandry skills, animal handling/capture/restraint skills, the ability to detect illness, and creative design of exhibits.

Graduates of the curriculum should qualify for entry-level employment opportunities in a variety of settings, including zoos, aquaria, nature science centers, and animal research facilities.

This program focuses on the application of biological principles to the study of vertebrate wildlife, wildlife habitats, and related ecosystems in remote and urban areas. Potential course work includes instruction in animal ecology; adaptational biology; urban ecosystems; natural and artificial habitat management; limnology; wildlife pathology; and vertebrate zoological specializations such as mammalogy, herpetology, ichthyology, ornithology, and others.

The following college is approved to offer this program:     Davidson County Community College

## *Business Technologies*

Business Technologies programs offer training in a variety of business-related areas, preparing graduates for positions in accounting, computer technologies, finance, hospitality and travel, insurance, management, marketing, and office support occupations.  Technical training is integrated into all business programs, along with essential workplace skills such as communication, critical thinking, problem solving, team building, and decision making.  Many programs include opportunities for practical work experiences through cooperative education arrangements with local employers.  The following curriculums are included in this program area:

Accounting and Finance (A25800)
Business Administration (A25120)
Business Analytics (A25350)
Digital Media Technology (A25210)
Entertainment Technologies (A25190)
Entrepreneurship (A25490)
Healthcare Business Informatics (A25510)
Healthcare Management Technology (A25200)
Hospitality Management (A25110)
Hunting and Shooting Sports Management (A25600)
Information Technology (A25590)

Intelligence Studies (A25700)
Medical Office Administration (A25310)
Nonprofit Leadership and Management (A25410)
Office Administration (A25370)
Paralegal Technology (A25380)
Project Management Technology (A25390)
Real Estate (A25400)
Real Estate Licensing (Certificate) (C25480)
Simulation and Game Development (A25450)
Supply Chain Management (A25620)

**\*Accounting and Finance (A25800)**

*Career Cluster: Finance*

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..

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Blue-Ridge Community College
Brunswick Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
Craven Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
   *Awards the credential in collaboration with:*
      Bladen Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Haywood Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College
Lenoir Community College

Martin Community College
McDowell Technical Community College
Mitchell Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southwestern Community College
Stanly Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilkes Community College
Wilson Community College

**\*Business Administration (A25120)**

*Career Cluster: Business Management and Administration*

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 and 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.

The program is approved to be offered at all of the 58 community colleges.

**\*Business Analytics  (A25350)**

*Career Cluster: Information Technology*

The Business Analytics curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in analytical professions. Business analysts process and analyze essential information about business operations and also assimilate data for forecasting purposes.

Students will complete course work in business analytics, including general theory, best practices, data mining, data warehousing, predictive modeling, project and operations management, statistical analysis, and software packages. Related skills include business communication, critical thinking and decision making.

Graduates should qualify for employment as data technicians, data scientists, business and data analytics engineers, and business analysts in the fields of finance, banking, logistics, marketing, healthcare, manufacturing, information technology, and government organizations.

The following college is approved to offer this program:　　　Wake Technical Community College


**\*Digital Media Technology (A25210)**

*Career Cluster: Information Technology*

The Digital Media program prepares students for entry-level jobs in the digital design and multimedia industry.  Students learn to synthesize multimedia, hypertext, computer programming, information architecture, and client/server technologies using both Internet and non-network-based media.

Students develop skills in communication, critical thinking, and problem solving as well as interface design, multimedia formats, application programming, data architecture, and client/server technologies.  The program develops technical skills through practical applications that employ current and emerging standards and technologies.

Graduates should qualify for employment as web designers, graphic artists/designers, multimedia specialists, web developers, web content specialists, media specialists, information specialists, digital media specialists, animation specialists, interface designers, and many new jobs yet to be defined in this expanding field.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Sandhills Community College |
| Mitchell Community College | Surry Community College |


**Entertainment Technologies (A25190)**

*Career Cluster: Information Technology*

The Entertainment Technologies curriculum prepares individuals for entry-level employment in entertainment, particularly in the fields of sound and lighting. Instruction provides training not only in these technical aspects, but also prepares students to manage careers in this contract-to-contract type of work.

Course work includes exposure to the entire live concert and sound recording processes. Course work will also include music business fundamentals, including entertainment law and marketing/promotion.  Students will also receive course work in music theory and electronic music.

Graduates may find employment as entry-level crew and/or production assistants in concert or event setups, with recording companies, or sound/lighting companies. Graduates will also be prepared to manage their careers (or others' careers) in the sound/lighting area or professional music entertainment.

The following college is approved to offer this program:　　　Guilford Technical Community College

**\*Entrepreneurship  (A25490)**

*Career Cluster: Business Management and Administration*

The Entrepreneurship curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth as self-employed business owners.

Course work includes developing a student's ability to make informed decisions as future business owners.  Courses include entrepreneurial concepts learned in innovation and creativity, business funding, and marketing.  Additional course work includes computers and economics.

Through these skills, students will have a sound education base in entrepreneurship for lifelong learning.  Graduates are prepared to be self-employed and open their own businesses.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Fayetteville Technical Community College |
| Catawba Valley Community College | Forsyth Technical Community College |
| Cleveland Community College | Isothermal Community College |
| Craven Community College | Pitt Piedmont College |
| Durham Technical Community College | South Piedmont College |

**\*Healthcare Business Informatics  (A25510)**

*Career Cluster: Information Technology*

The Healthcare Business Informatics curriculum prepares individuals for employment as specialists in installation, data management, data archiving/retrieval, system design and support, and computer training for medical information systems.

Students learn about the field through multidisciplinary coursework including the study of terminology relating to informatics, systems analysis, networking technology, computer/network security, data warehousing, archiving and retrieval of information, and healthcare computer infrastructure support.

Graduates should qualify for employment as database/data warehouse analysts, technical support professionals, informatics technology professionals, systems analysts, networking and security technicians, and computer maintenance professionals in the healthcare field.   The following colleges are approved to offer this program:

| | |
|---|---|
| Brunswick Community College | Gaston College |
| Cape Fear Community College | Nash Community College |
| College of The Albemarle | Pitt Community College |
| Forsyth Technical Community College | |

## *Healthcare Management Technology (A25200)

*Career Cluster: Business Management and Administration*

The Healthcare Management Technology curriculum is designed to prepare students for employment in healthcare business and financial operations. Students will gain a comprehensive understanding of the application of management principles to the healthcare environment.

The curriculum places emphasis on planning, organizing, directing, and controlling tasks related to healthcare organizational objectives including the legal and ethical environment. Emphasis is placed on the development of effective communication, managerial, and supervisory skills.

Graduates may find employment in healthcare settings including hospitals, medical offices, clinics, long-term care facilities, and insurance companies. Graduates are eligible to sit for various certification exams upon completion of the degree with a combination of a minimum of two years administrative experience. Eligible certifications include, but are not limited to, the Professional Association of Healthcare Office Managers (PAHCOM), the Healthcare Financial Management Association (HFMA), the Certified Patient Account Manager (CPAM) and the Certified Manager of Patient Accounts (CMPA) examinations.

The following colleges are approved to offer this program:

Catawba Valley Community College
Central Carolina Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Guilford Technical Community College
Mitchell Community College
Piedmont Community College

Pitt Community College
   *awards the credential in collaboration with:*
      Beaufort County Community College
      Edgecombe Community College
      Lenoir Community College
      Nash Community College
Randolph Community College
Richmond Community College


## *Hospitality Management (A25110)

*Career Cluster: Hospitality and Tourism*

The Hospitality Management curriculum prepares individuals to understand and apply the administrative and practical skills needed for supervisory and managerial positions in hotels, motels, resorts, inns, restaurants, institutions, and clubs.

Course work includes guest services, leadership, management, restaurant operations, lodging operations, marketing, sanitation, food preparation, food and beverage management and other critical areas.

Graduates should qualify for management or entry-level supervisory positions in food and lodging operations, including restaurants, foodservice, beverage service, catering, front office, reservations and housekeeping. Opportunities are also available in product services, and technology support and sales.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Caldwell Community College
Cape Fear Community College
Carteret Community College
Central Piedmont Community College
Coastal Carolina Community College

Fayetteville Technical Community College
   *awards the credential in collaboration with:*
      Bladen Community College
Guilford Technical Community College
Nash Community College
Sandhills Community College
Wake Technical Community College

**\*Hunting and Shooting Sports Management (A25600)**

*Career Cluster: Marketing, Sales and Service*

The Hunting and Shooting Sports Management curriculum is designed to prepare students for a career in hunting and shooting sports retail businesses.

Course work includes concepts such as accounting, basic gunsmithing, business management, advertising and sales promotion, introduction to shooting sports, gun shop management and sports hunting.

Graduates should be prepared for employment opportunities in large and small retail sporting centers, private hunting and shooting sports businesses, and shooting sports equipment manufacturing.

The following colleges are approved to offer this program:

Edgecombe Community College                                          Tri-County Community College
Montgomery Community College


**\*Information Technology (A25590)**

*Career Cluster: Information Technology*

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.

The program is approved to be offered at all of the 58 community colleges.

**Intelligence Studies (A25700)**

*Career Cluster: Government and Public Relations*

The Intelligence Studies curriculum is designed to provide students with the knowledge and skills necessary for employment and growth in the intelligence profession.

Course work includes various subject areas related to intelligence studies involving information systems, military and criminal intelligence, intelligence operations, intelligence collection methods, intelligence research, cybercrime intelligence, geospatial intelligence, and counterintelligence.

Graduates may qualify for entry-level intelligence positions in the public and private sectors. Occupations may include positions specific to the military, intelligence agencies, cybersecurity, counterterrorism and homeland security.

The following college is approved to offer this program:        Fayetteville Technical Community College

**\*Medical Office Administration (A25310)**

*Career Cluster: Business Management and Administration*

The Medical Office Administration curriculum prepares individuals for employment in medical and other health-care related offices.

Course work will include medical terminology; information systems; office management; medical coding, billing and insurance; legal and ethical issues; and formatting and word processing.  Students will learn administrative and support functions and develop skills applicable in medical environments.

Employment opportunities are available in medical and dental offices, hospitals, insurance companies, laboratories, medical supply companies, and other health-care related organizations.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Carteret Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Craven Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Halifax Community College
Haywood Community College
Isothermal Community College
Johnston Community College
Lenoir Community College

Martin Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
    *Awards the credential in collaboration with:*
        Brunswick Community College
Randolph Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southeastern Community College
Southwestern Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilson Community College

**\*Nonprofit Leadership and Management  (A25410)**

*Career Cluster: Business Management and Administration*

The Nonprofit Leadership and Management curriculum is designed to prepare individuals for a leadership or management role in the nonprofit sector.

Course work includes an overview of nonprofit organizations (NPO), philanthropy, legal and ethical concerns, funding issues, and strategic planning.  Additional coursework introduces grant writing, international non-governmental organizations (NGO), public relations and sustainable communities.

Graduates should qualify for positions at various levels of leadership and management in the non-profit sector.

The following colleges are approved to offer this program:

Forsyth Technical Community College                      Richmond Community College

## *Office Administration (A25370)

*Career Cluster: Business Management and Administration*

The Office Administration curriculum prepares individuals for positions in administrative support careers. It equips office professionals to respond to the demands of a dynamic computerized workplace.

Students will complete courses designed to develop proficiency in the use of integrated software, oral and written communication, analysis and coordination of office duties and systems, and other support topics. Emphasis is placed on non-technical as well as technical skills.

Graduates should qualify for employment in a variety of positions in business, government, and industry. Job classifications range from entry-level to supervisor to middle management.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Caldwell Community College & Technical Institute
Carteret Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albermarle
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Halifax Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College
Lenoir Community College

Martin Community College
McDowell Technical Community College
Mitchell Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
Southeastern Community College
Southwestern Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilson Community College

**\*Paralegal Technology (A25380)**

*Career Cluster: Law, Public Safety, Corrections and Security*

The Paralegal Technology curriculum prepares individuals to work under the supervision of attorneys by performing routine legal tasks and assisting with substantive legal work.  A paralegal/legal assistant may not practice law, give legal advice, or represent clients in a court of law.

Course work includes substantive and procedural legal knowledge in the areas of civil litigation, legal research and writing, real estate, family law, wills, estates, trusts, and commercial law.  Required courses also include subjects such as English, mathematics, and computer utilization.

Graduates are trained to assist attorneys in probate work, investigations, public records search, drafting and filing legal documents, research, and office management.  Employment opportunities are available in private law firms, governmental agencies, banks, insurance agencies, and other business organizations.  The following colleges are approved to offer this program:

| | |
|---|---|
| Caldwell Community College and Technical Institute | Guilford Technical Community College |
| Cape Fear Community College | Johnston Community College |
| Carteret Community College | Pitt Community College |
| Central Carolina Community College | South Piedmont Community College |
| Central Piedmont Community College | Southwestern Community College |
| Coastal Carolina Community College | Surry Community College |
| Davidson County Community College | *awards the credential in collaboration with:* |
| Durham Technical Community College | Wilkes Community College |
| Fayetteville Technical Community College | Vance-Granville Community College |
| Forsyth Technical Community College | Western Piedmont Community College |
| Gaston College | Wilson Community College |

**\*Project Management Technology  (A25390)**

*Career Cluster: Business Management and Administration*

The Project Management Technology curriculum is designed to introduce students to processes of initiating, planning/executing, monitoring/controlling, and closing projects.  Students will be provided the nine knowledge areas of Project Management (integration, scope, time/cost, quality, human resources, risk/procurement management, and communication).

Course work may include concepts in accounting, finance, information systems, human resource management, project management, organizational behavior, purchasing, business ethics, and economics.  The curriculum develops project management skills that may be used in all lines of work.

Graduates may qualify for positions requiring project management in governmental, nonprofit, merchandising, manufacturing, utilities, and construction agencies and industries. Students should be able to apply the Body of Knowledge areas established by the Project Management Institute.

The following college is approved to offer this program:        Forsyth Technical Community College

**\*Real Estate (A25400)**

*Career Cluster: Marketing, Sales and Service*

The Real Estate curriculum provides the prelicensing education required by the North Carolina Real Estate Commission, prepares individuals to enter the profession, and offers additional education to meet professional development needs.

Course work includes the practices and principles of real estate, emphasizing financial and legal applications, property development, and property values.

Graduates should qualify for North Carolina Real Estate Sales and Broker examinations.  They should be able to enter apprenticeship training and to provide real estate services to consumers in a competent manner.  The following college is approved to offer this program:

Cape Fear Community College

**Real Estate Licensing (Certificate)  (C25480)**

*Career Cluster: Marketing, Sales and Service*

The Real Estate Licensing curriculum provides licensing education required by the North Carolina Real Estate Commission for students preparing to take the real estate license examination and for provisional brokers that are seeking removal of the provisional status.

Course work includes the practices and principles of real estate, broker relationships as they apply to customers, sellers and buyers, contract procedures, fair housing and real estate methodology.  Course work also includes professional development opportunities.

Graduates who have passed the real estate license examination and obtained a real estate provisional broker license should then qualify for removal of the provisional status and be able to provide basic, residential real estate services as a broker affiliated with a real estate brokerage firm.

*A student must secure his/her provisional broker license before proceeding into the post-licensure courses and must complete the three mandatory post-licensing courses within three years of licensure in order to avoid cancellation of his/her license.*

The following college is approved to offer this program:        Cape Fear Community College

**\*Simulation and Game Development (A25450)**

*Career Cluster: Information Technology*

The Simulation and Game Development curriculum provides a broad background in simulation and game development with practical applications in creative arts, visual arts, audio/video technology, creative writing, modeling, design, programming and management.

Students will receive hands-on training in design, 3D modeling, and programming for the purpose of creating simulations and games.

Graduates should qualify for employment as designers, artists, animators, programmers, testers, quality assurance analysts, engineers and administrators in the entertainment industry, health care, education, corporate training, and government organizations.

The following colleges are approved to offer this program:

| | |
|---|---|
| Blue-Ridge Community College | Stanly Community College |
| Central Piedmont Community College | Wake Technical Community College |
| *Awards the credential in collaboration with:* | *Awards the credential in collaboration with:* |
| South Piedmont Community College | Vance-Granville Community College |
| Fayetteville Technical Community College | Wayne Community College |
| Guilford Technical Community College | Western Piedmont Community College |
| Pitt Community College | Wilkes Community College |
| Sandhills Community College | |

**\*Supply Chain Management (A25620)**
*Career Cluster: Business Transportation, Distribution and Logistics*
The Supply Chain Management curriculum prepares individuals for a multitude of career opportunities in distribution, transportation, warehousing, trucking operations, supply chain, and manufacturing organizations.

Course work includes the international and domestic movement of goods from the raw materials source(s) through production and ultimately to the consumer.  Courses in economics and finance, transportation, warehousing, inventory control, material handling, purchasing, computerization, supply chain operations, federal transportation and safety regulations are emphasized.

Graduates should qualify for positions in a wide range of supply chain and logistics positions in government agencies, manufacturing, and service organizations.  Employment opportunities include entry-level distribution, planning, material management, warehousing, inventory, transportation, trucking operations, international freight, and logistics.

The following colleges are approved to offer this program:

| | |
|---|---|
| Caldwell Community College and Technical Institute | Guilford Technical Community College |
| Central Piedmont Community College | Lenoir Community College |
| College of The Albemarle | Nash Community College |
| Davidson County Community College | Randolph Community College |
| Edgecombe Community College | Sampson Community College |
| Fayetteville Technical Community College | Surry Community College |
| Forsyth Technical Community College | Vance-Granville Community College |
| Gaston College | Wake Technical Community College |

*Commercial and Artistic Production Technologies*

Commercial and Artistic Production Technologies programs provide opportunities for the specialized training of individuals with artistic and creative abilities. Study and development of skills are in the areas of visual communications, professional presentations, publications, advertising, broadcasting and media industry, sales and business procedures.

These programs train students for a variety of occupations including: designers, interior decorators, advertising artists, photographers, broadcasters, film production assistants, illustrators and craftspersons. This program area consists of the following curriculums:

| | |
|---|---|
| Advertising and Graphic Design (A30100) | Metal Engraving (Diploma) (D30240) |
| Broadcasting and Production Technology (A30120) | Photographic Technology (A30280) |
| Digital Effects and Animation Technology (A30130) | Professional Arts and Crafts: Sculpture (A30290) |
| Film and Video Production Technology (A30140) | Professional Crafts: Clay (A30300) |
| Graphic Arts and Imaging Technology (A30180) | Professional Crafts: Fiber (A30320) |
| Graphic Arts and Imaging Technology/Flexography (A3018A) | Professional Crafts: Jewelry (A30340) |
| Gunsmithing (A30200) | Professional Crafts: Wood (A30360) |
| Gunsmithing (Diploma) (D30210) | Taxidermy (Diploma) (D30380) |
| Interior Design (A30220) | |

## *Advertising and Graphic Design (A30100)

*Career Cluster: Arts, Audio/Video Technology and Communications*

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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Pitt Community College |
| Catawba Valley Community College | Randolph Community College |
| Central Piedmont Community College | Rowan-Cabarrus Community College |
| Fayetteville Technical Community College | South Piedmont Community College |
| Guilford Technical Community College | Southwestern Community College |
| Isothermal Community College | Stanly Community College |
| James Sprunt Community College | Surry Community College |
| Johnston Community College | Wake Technical Community College |
| McDowell Technical Community College | Wilkes Community College |
| Nash Community College | |

**\*Broadcasting and Production Technology (A30120)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

Students enrolled in the Broadcasting Production Technology curriculum will develop professional skills in radio, television, audio, video, and related applications.

Training will emphasize speech, script writing, production planning, editing, and post production.  Students will also study the development of the broadcasting industry, sales, ethics, law, marketing, and management.  Hands-on training and teamwork approaches are essential to the instructional process.

Upon successful completion, students are prepared to enter broadcasting, production, and related industries in a variety of occupations.

The following colleges are approved to offer this program:

| | |
|---|---|
| Central Carolina Community College | Gaston College |
| Central Piedmont Community College | Isothermal Community College |
| Cleveland Community College | Nash Community College |
| Forsyth Technical Community College | Southeastern Community College |

**\*Digital Effects and Animation Technology (A30130)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Digital Effects and Animation Technology curriculum is designed to provide students with the training necessary to become competent in creating, manipulating, and animating digital images. These skills have application in the production of a variety of moving image forms.

Students will take courses covering computer hardware/software applications, computer animation, creation and manipulation of digital images and nonlinear editing.  They will become proficient at using media industry standard hardware/software to generate and manipulate images, and create digital special effects.

Upon completion of this program, students will be able to generate moving images and manipulate captured images for a variety of media production applications. Graduates should qualify for employment in the creation and/or editing of a variety of media forms.

The following colleges are approved to offer this program:

| | |
|---|---|
| Forsyth Technical Community College | Western Piedmont Community College |
| Piedmont Community College | |

**\*Film and Video Production Technology (A30140)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Film and Video Production Technology curriculum prepares students for entry-level employment in production support and selected technical areas of film, video, and associated media production.  Instruction provides training for entry-level crew and/or production and post-production assistants in many moving image media forms.

The first year content includes exposure to the entire production process.  Students are taught by industry professionals who provide extensive hands-on instruction.  In the second year, students receive professional training by performing in various crew positions on actual production projects.

Graduates may find employment as entry-level crew and/or production assistants in feature and short films, commercials, and industrial, educational, and documentary productions.  Other opportunities include entry-level employment in pre-production and post-production areas for film and video.

The following colleges are approved to offer this program:

| | |
|---|---|
| Blue-Ridge Community College | Piedmont Community College |
| Cape Fear Community College | |

**\*Graphic Arts and Imaging Technology (A30180)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Graphics Arts and Imaging Technology curriculum is designed to provide students with knowledge and skills necessary for employment in the printing, publishing, packaging, and related industries.

Students will receive hands-on training in computer publishing, imaging technology, offset lithography, screen printing, and emerging printing technologies.  Training may also include flexography, graphic design, and multimedia.

Graduates should qualify for career opportunities within the printing and publishing industries.

The following colleges are approved to offer this program:

Central Piedmont Community College
Forsyth Technical Community College

Lenoir Community College


**\*Graphic Arts and Imaging Technology/Flexography (A3018A)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

Flexography is a concentration under the Graphic Arts and Imaging Technology curriculum.  This curriculum is designed to allow students to gain further study into the flexographic printing production process.

Students will produce jobs for labels, tags, boards, packaging, and corrugated jobs found in segments of the flexographic industry.  Students will concentrate on color reproduction and produce products while understanding the limitations within the production process.

Graduates should qualify for career opportunities within the printing, publishing, and packaging industries.

The following college is approved to offer this program:        Central Piedmont Community College

**\*Gunsmithing (A30200)**

*Career Cluster: Manufacturing*

The Gunsmithing curriculum is designed to provide the student with the required skills needed to refurbish metal and wood as applicable to firearms, to diagnose malfunctions for repair, and to accomplish more complex custom gunsmithing tasks.

Course work includes manufacturing of tools used in the gunsmithing trade, restoration of firearms, stock making, barrel work, repair work, and custom work.  The student will accomplish this work by performing actual gunsmithing tasks in a hands-on environment.

Graduates should qualify as a professional gunsmith, able to complete any task in general gunsmithing. The following college is approved to offer this program:

Fayetteville Technical Community College
Johnston Community College

Lenoir Community College
Montgomery Community College

**Gunsmithing (Diploma) (D30210)**

*Career Cluster: Manufacturing*

The Gunsmithing curriculum is designed to provide the student with the required skills needed to refurbish metal and wood as applicable to firearms, to diagnose malfunctions for repair, and to accomplish more complex custom gunsmithing tasks.

Course work includes manufacturing of tools used in the gunsmithing trade, restoration of firearms, stock making, barrel work, repair work, and custom work.  The student will accomplish this work by performing actual gunsmithing tasks in a hands-on environment.

Graduates should qualify as a professional gunsmith, able to complete any task in general gunsmithing.

The following college is approved to offer this program:        Piedmont Community College

### *Interior Design (A30220)

*Career Cluster: Architecture and Construction*

The Interior Design curriculum is designed to prepare students for a variety of job opportunities in the field of both residential and non-residential interior design. The focus of the studies is technical knowledge, professional practices, and aesthetic principles and design process.

Curriculum content includes residential and non-residential interior design, architectural drafting, computer-aided design, and universal design. Also included are basic design, code standards, history of interiors and furnishings, color theory, products, professional practices, visual presentations, and sustainable principles.

Graduates should qualify for interior design opportunities in numerous residential and commercial environments such as hospitality, corporate, mercantile, educational, and healthcare. Interior designers also have employment opportunities in real estate, entertainment, visual merchandising, government, sales and marketing, and other specialties dealing with interiors.

The following colleges are approved to offer this program:

| | |
|---|---|
| Cape Fear Community College | Randolph Community College |
| Central Piedmont Community College | Wake Technical Community College |
| Forsyth Technical Community College | |

### Metal Engraving (Diploma) (D30240)

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Metal Engraving curriculum is designed to train students in eye-hand coordination, artistic vision, and the technology necessary in occupations involving the embellishment of metals.

Course work will include embellishments utilizing the hammer and chisel, power engraving devices, acid etching, the inlaying of precious metals and jewels into a metal base, bas-relief graving, and the sinking of scenes into the medium.

Graduates should be able to apply the acquired skills in occupations requiring sound bench work skills. Such occupations might include gold and/or silver smithing, gunsmithing, the tool and die trades, printing plates, and jewelry.

The following college is approved to offer this program:        Montgomery Community College

### *Photographic Technology (A30280)

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Photographic Technology curriculum offers training in photographic techniques and their application in professional photographic disciplines. Students will receive comprehensive course work in one of the following subject areas: Photographic Technology, Biocommunications Photography, Photojournalism, Commercial Photography, or Portrait Studio Management.

Course work includes developing skills in the following areas: fundamentals of camera systems, lighting, photographic process, digital imaging, design, multimedia and business practices.

Graduates should qualify for entry-level jobs in the photographic industry. Employment opportunities exist in the following areas: commercial photography, photojournalism, biomedical photography, portrait photography, equipment sales, photographic laboratories, and imagining technologies depending upon courses offered and completed.

The following colleges are approved to offer this program:

Carteret Community College
Catawba Valley Community College
McDowell Technical Community College
Randolph Community College

**\*Professional Arts and Crafts: Sculpture (A30290)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Professional Arts and Crafts: Sculpture curriculum is designed to prepare individuals to become professional craftsman and entrepreneurs in the areas of clay and metal sculpture.

Course work concentrates on the development of skills in each area of craftsmanship.  Emphasis is placed on hands-on training and the design skills needed to aid students in personalizing their own work.

Graduates will be able to open and operate their own professional craft studio, work for an existing professional craftsman, or obtain employment in craft retail sales.

The following college is approved to offer this program:

Western Piedmont Community College


**\*Professional Crafts: Clay (A30300)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Professional Crafts: Clay curriculum is designed to prepare individuals for employment as professional potters or in pottery-related fields.  Using traditional and contemporary concepts, instruction includes technical knowledge, design skills, and marketing and business essentials.

Course work includes development of basic and advanced throwing skills with emphasis on form and design.  Study will include a pottery studio and marketing procedures.

Graduates will be able to open and operate their own pottery business, work for existing pottery businesses, or transfer to a four-year degree program.

The following colleges are approved to offer this program:

Haywood Community College                                        Western Piedmont Community College
Montgomery Community College


**\*Professional Crafts: Fiber (A30320)**

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Professional Crafts: Fiber curriculum is designed to train individuals as professional handweavers.  Instruction includes technical weaving knowledge, dye work, design skills, and marketing and business essentials.

Students will learn warping techniques, weaving theory and technique, dye applications, and finishing methods.  Students will receive design skills to aid them in personalizing their own work.  Additional instruction will provide the bases for starting and running a small business.

Graduates will be able to open and operate their own weaving studio, work for an existing weaving business, or transfer to a four-year degree program.

The following college is approved to offer this program:        Haywood Community College

### *Professional Crafts: Jewelry (A30340)

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Professional Crafts: Jewelry curriculum prepares individuals to become professional metalsmiths.  Instruction includes jewelry techniques, design, and marketing.

Students will learn metal forming techniques, metal decorative techniques, and basic information to start and operate a small business.  The course work will also include jewelry design, studio safety, and tool and machine orientation.

Graduates will be able to start and operate their own jewelry studio, work for an established jeweler, or transfer to a four-year degree program.

The following colleges are approved to offer this program:

College of The Albemarle                                         Haywood Community College


### *Professional Crafts: Wood (A30360)

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Professional Crafts: Wood curriculum provides individuals with traditional values of fine craftsmanship, creative design, and an entrepreneurial spirit for a small woodworking enterprise.

The course work includes a strong emphasis on creative thinking and problem solving.  Study involves a mix of theoretical and hands-on training combined with a blend of historical and modern methods of woodworking and small business management.

Upon completion of required course work, graduates may earn a degree or a diploma.  They should be prepared for self-employment, for positions in the craft industry, or for continued study toward a bachelor's degree at a four-year institution.

The following colleges are approved to offer this program:

Haywood Community College                                       Western Piedmont Community College


### Taxidermy (Diploma) (D30380)

*Career Cluster: Arts, Audio/Video Technology and Communications*

The Taxidermy curriculum is designed to develop skills while teaching preservation of birds, fish, game heads, and mammals.  Related subjects are included for a better understanding of customer relations and natural habitat construction.  Students are also versed in state/federal regulations.

Course work includes basic proper measuring, skinning, fleshing, preserving, form selection, and preparation.  Students will learn basic mounting procedures and finishing and painting of selected specimens.  Students will learn how to construct natural habitats and the artistic display of mounted items.

Opportunities exist for graduates to set up their own business.  Job opportunities are found in conjunction with sports shops, game preserves, museums, art galleries, interior decorators, plus guides and outfitters.  Graduates will qualify for North Carolina and Federal Taxidermy licenses.

The following college is approved to offer this program:        Montgomery Community College

## *Construction Technologies*

Construction Technologies are closely allied to the construction industry, though it may be in such areas as management, design, production, construction, or maintenance.

There are many entry levels for individuals who are preparing to work in this broad field.  Students may choose a variety of careers as HVAC technicians, carpenters, electricians, masons, plumbers or heavy equipment operators or choose to study further and become involved in construction management. This program area consists of the following curriculums:

Air Conditioning, Heating, and Refrigeration Technology
     (A35100)
Boat Building (Diploma) (D35120)
Building Construction Technology (A35140)
Carpentry (Diploma) (D35180)
Commercial Refrigeration Technology (A35200)
Construction Management Technology (A35190)

Electric Line Construction Technology (A35230)
Electrical Systems Technology (A35130)
Heavy Equipment Operator (Diploma) (D35240)
Historic Preservation Technology (A35110)
Masonry (Diploma) (D35280)
Plumbing (Diploma) (D35300)

## *Air Conditioning, Heating, and Refrigeration Technology (A35100)

*Air Conditioning, Heating, and Refrigeration Technology*
*Career Cluster: Architecture and Construction*

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.

The following colleges are approved to offer this program:

Alamance Community College
Asheville Buncombe Community College
Blue Ridge Community College
Cape Fear Community College
Catawba Valley Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Davidson County Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Johnston Community College
Martin Community College
McDowell Community College (Diploma)
Mitchell Community College
Montgomery Community College

Pitt Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
South Piedmont Community College
Southeastern Community College
Southwestern Community College
    *Awards the credential in collaboration with:*
        Haywood Community College
        Tri-County Community College
Stanly Community College (Diploma)
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Wilson Community College

**Boat Building (Diploma) (D35120)**

*Construction: Boat Building*
*Career Cluster: Architecture and Construction*

The Boat Building curriculum prepares individuals for employment in the boat building and boat repair industry. Today's boat builders are highly skilled craftspeople who can create complex shapes out of wood.

Course work includes reading boat plans, lofting, setting up the building jig, fashioning the structural timbers, and different planking techniques. Interior joinery, exterior joinery, and yacht rigging is also covered.

Graduates may find work with yacht manufacturers, high end furniture shops, architectural millwork shops, and companies installing built in furniture in homes. Other opportunities can be found in boat maintenance and repair yards.

The following college is approved to offer this program:　　　Cape Fear Community College


**\*Building Construction Technology (A35140)**

*Construction: Architecture and Construction Technology*
*Career Cluster: Architecture and Construction*

The Building Construction Technology curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

This program prepares individuals to apply technical knowledge and skills to residential and commercial building construction and remodeling. Includes instruction in construction equipment and safety; site preparation and layout; construction estimating; print reading; building codes; framing; masonry; heating, ventilation, and air conditioning; electrical and mechanical systems; interior and exterior finishing; and plumbing.

The following colleges are approved to offer this program:

| | |
|---|---|
| Central Carolina Community College | Pitt Community College |
| Fayetteville Technical Community College | Sampson Community College |
| Haywood Community College | Western Piedmont Community College |
| Isothermal Community College | Wilkes Community College |

**Carpentry (Diploma) (D35180)**

*Construction: Architecture and Construction Technology*
*Career Cluster: Architecture and Construction*

The Carpentry curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

This program prepares individuals to apply technical knowledge and skills to lay out, cut, fabricate, erect, install, and repair wooden structures and fixtures, using hand and power tools. Includes instruction in technical mathematics, framing, construction materials and selection, job estimating, print reading, foundations and roughing-in, finish carpentry techniques, and applicable codes and standards.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Guilford Technical Community College |
| Bladen Community College | Mayland Community College |
| Cape Fear Community College | McDowell Technical Community College |
| Central Carolina Community College | Piedmont Community College |
| Cleveland Community College | Southwestern Community College |
| Fayetteville Technical Community College | Surry Community College |
| Forsyth Technical Community College | Vance-Granville Community College |

## *Commercial Refrigeration Technology (A35200)

*Career Cluster: Architecture and Construction*

The Commercial Refrigeration Technology curriculum is designed to provide technicians with the knowledge and skills necessary for the installation, troubleshooting, and repair of refrigeration equipment found in commercial environments.

Students will work on commercial refrigeration systems including walk-in units, reach-in refrigerators and freezers, ice machines, and other refrigeration equipment found in restaurants, supermarkets, convenience markets, and food processing plants.

Graduates should be able to assist in the startup, preventive maintenance, service, repair, and/or installation of commercial refrigeration equipment and systems.

The following college is approved to offer this program:

Martin Community College

**\*Construction Management Technology (A35190)**

*Construction: Architecture and Construction Technology*
*Career Cluster: Architecture and Construction*

The Construction Management Technology curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

This program prepares individuals to supervise, manage, and inspect construction sites, buildings, and associated facilities. Includes instruction in 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. The following colleges are approved to offer this program:

Asheville Buncombe Technical Community College
Cape Fear Community College
Central Piedmont Community College
Guilford Technical Community College

Rowan-Cabarrus Community College
Surry Community College
Wake Technical Community College

**\*Electric Line Construction Technology (A35230)**

*Career Cluster: Architecture and Construction*

The Electric Line Construction Technology curriculum prepares individuals to work as electric line construction technicians in the preparation and repair of rural electrical utility service. Students will combine electrical theory with laboratory and practical applications in the course of study.

Students will be expected to master competencies such as those included in elements of electricity, overhead pole and electrical line construction, safety codes and applications, electric power system, transformer and meter installations, and exploration of underground electrical distribution.

Upon successful completion of the program, individuals will receive the Associate of Applied Science degree and will possess the necessary skills for employment in the dynamic electrical utility field.

The following college is approved to offer this program:

Nash Community College
    *awards the credential in collaboration with the following colleges:*
    Edgecombe Community College
    Halifax Community College
    Pamlico Community College
    Randolph Community College

**\*Electrical Systems Technology (A35130)**

*Electrical Systems Technology*
*Career Cluster: Architecture and Construction*

The Electrical Systems 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.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Bladen Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Catawba Valley Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Haywood Community College
Isothermal Community College
James Sprunt Community College
Martin Community College

McDowell Technical Community College
Mitchell Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
South Piedmont Community College
Southwestern Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wilson Community College

## Heavy Equipment Operation, Management, and Service (A35340)

*Career Cluster: Architecture and Construction*

The Heavy Equipment Operation, Management, and Service curriculum prepares students to efficiently operate heavy equipment such as dozers, loaders, scrapers, and graders, to perform maintenance on various types of heavy equipment, and to manage equipment systems.

Course work includes construction safety, proper equipment operation, grades, drawings, environmental concerns, heavy equipment design characteristics and features, equipment maintenance and service, and common equipment systems.

Graduates of this program may find employment with state and local government agencies and private contractors engaged in highway or other construction activities.

The following college is approved to offer this program:

Stanly Community College
Wake Technical Community College

## *Historic Preservation Technology  (A35110)

*Construction: Historic Preservation Technology*
*Career Cluster: Architecture and Construction*

The Historic Preservation Technology curriculum provides courses related to the documentation and preservation of cultural and historic buildings and sites.  The program emphasizes technical training in historic site and historic building preservation and restoration.

Course work includes archival research, building design, drafting, conservation techniques, building renovation, field data collection, historic preservation, documentation, sustainable building design, and the application of preservation law.

Graduates of this pathway should qualify for work as building renovation and site specialists, historic preservation consultants or as assistants to professional historic preservationists.

The following college is approved to offer this program:

Edgecombe Community College

**Masonry (Diploma) (D35280)**

*Construction: Architecture and Construction Technology*
*Career Cluster: Architecture and Construction*

The Masonry curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

This program prepares individuals to apply technical knowledge and skills in the laying and/or setting of exterior brick, concrete block, and related materials, using trowels, levels, hammers, chisels, and other hand tools. Includes instruction in technical mathematics, print reading, structural masonry, decorative masonry, foundations, reinforcement, mortar preparation, cutting and finishing, and applicable codes and standards.

The following colleges are approved to offer this program:

Central Carolina Community College                    Mayland Community College

**Plumbing (Diploma) (D35300)**

*Construction: Architecture and Construction Technology*
*Career Cluster: Architecture and Construction*

The Plumbing curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

This  program prepares individuals to work in the field of plumbing by applying technical knowledge and skills to lay out, assemble, install, and maintain piping fixtures and systems for natural gas, lp gas, hot water, drainage, sprinkling, and plumbing processing systems in residential and commercial environments. Includes instruction in source determination, water service and distribution, waste removal, pressure adjustment, basic physics, technical mathematics, print reading, pipe installation, pumps, soldering, plumbing inspection, and applicable codes and standards.

The following colleges are approved to offer this program:

Cape Fear Community College                          Forsyth Technical Community College
Cleveland Community College                          Guilford Technical Community College
Fayetteville Technical Community College             Wake Technical Community College

## *Engineering Technologies*

The Engineering Technologies programs prepare individuals for job opportunities as technicians in a variety of engineering-related, scientific, and technical fields.  The curriculums will include the fundamentals of oral and written communications, mathematics, physics, computer skills, and computer-aided design (CAD).  In some curriculums, graduates will acquire the skills to design, build, install, test, troubleshoot, repair, program, operate, maintain, service, and modify developmental and production electronic components, equipment, and systems such as automated manufacturing systems.  In some curriculums, graduates will acquire the skills to perform materials testing, structures analysis, project estimation and management, hydraulics and environmental analysis, surveying, construction document preparation, and building codes and specifications interpretations.  In some curriculums, graduates will acquire the skills associated with the design, development, testing, and repair of mechanical equipment, process specification, tooling selection, fabrication, research and development, and automation programming.  All curriculums will stress critical thinking, planning, and problem solving.  The following curriculums are included in this program area:

Applied Engineering Technology (A40130)
Architectural Technology (A40100)
Automation Engineering Technology (A40120)
Civil Engineering Technology (A40140)
Computer Engineering Technology (A40160)
Electrical Engineering Technology (A40180)
Electronics Engineering Technology (A40200)
Environmental Engineering Technology (A40150)
Geomatics Technology (A40420)
Geospatial Technology (A40220)

Industrial Engineering Technology (A40240)
Landscape Architecture Technology (A40260)
Laser and Photonics Technology (A40280)
Mechanical Engineering Technology (A40320)
Mechatronics Engineering Technology (A40350)
Mission Critical Operations (A40430)
Sustainability Technologies (A40370)
Telecommunications and Network Engineering Technology (A40400)

**\*Applied Engineering Technology (A40130)**
*Engineering and Technology: Applied, Automation, Mechatronics Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Applied Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and 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.

This course of study prepares the students to use basic engineering principles and technical skills to solve technical problems in various types of industry. The course work emphasizes analytical and problem-solving skills. The curriculum includes courses in safety, math, physics, electricity, engineering technology, and technology-specific specialty areas.  Graduates should qualify for employment in a wide range of positions in research and development, manufacturing, sales, design, inspection, or maintenance. Employment opportunities exist in automation, computer, electrical, industrial, or mechanical engineering fields, where graduates will function as engineering technicians.

The following college is approved to offer this program:

Davidson County Community College
Johnston Community College
Mayland Community College
Wilkes Community College
Wilson Community College

**\*Architectural Technology (A40100)**

*Construction: Architecture and Construction Technology*
*Career Cluster: Architecture and Construction*

The Architectural Technology curriculum is designed to prepare individuals to apply technical knowledge and skills to the fields of architecture, construction, construction management, and other associated professions.

Course work includes instruction in sustainable building and design, print reading, building codes, estimating, construction materials and methods, and other topics related to design and construction occupations.

Graduates of this pathway should qualify for entry-level jobs in architectural, engineering, construction and trades professions as well as positions in industry and government.

This program prepares individuals to assist architects, engineers, and construction professionals in developing plans and related documentation for residential and commercial projects in both the private and public sectors. Includes instruction in architectural drafting, computer-assisted drafting, construction materials and methods, environmental systems, codes and standards, structural principles, cost estimation, planning, graphics, and presentation.

The following colleges are approved to offer this program:

| | |
|---|---|
| Cape Fear Community College | Guilford Technical Community College |
| Central Piedmont Community College | Nash Community College |
| Coastal Carolina Community College | Pitt Community College |
| College of The Albemarle | *awards the credential in collaboration with:* |
| Durham Technical Community College | Roanoke-Chowan Community College |
| Fayetteville Technical Community College | Sandhills Community College |
| Forsyth Technical Community College | Wake Technical Community College |
| Gaston College | Wilkes Community College |

**\*Automation Engineering Technology (A40120)**

*Engineering and Technology: Applied, Automation, Mechatronics Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Automation Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and 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.

This course of study prepares the students to use basic engineering principles and technical skills to develop, install, calibrate, modify and maintain automated systems. Includes instruction in computer systems; electronics and instrumentation; programmable logic controllers (PLCs); electric, hydraulic and pneumatic control systems; actuator and sensor systems; process control; robotics; applications to specific industrial tasks. The graduates of this curriculum will be prepared for employment in industries that utilize control systems, computer hardware and software, electrical, mechanical and electromechanical devices in their automation systems.

The following college is approved to offer this program:

Cleveland Community College

**\*Civil Engineering Technology (A40140)**

*Engineering and Technology: Civil Engineering and Geomatics Technologies*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Civil Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares students to use basic engineering principles and technical skills to carry out planning, documenting and supervising tasks in sustainable land development and  public works and facilities projects. Includes instruction in the communication and computational skills required for materials testing, structural testing, field and laboratory testing, site analysis, estimating, project management, plan preparation, hydraulics, environmental technology, and surveying.  Graduates should qualify for technician-level jobs with both public and private engineering, construction, and surveying agencies.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Central Piedmont Community College
Fayetteville Technical Community College
Gaston College
Guilford Technical Community College

Sandhills Community College
Southwestern Community College
Wake Technical Community College
Western Piedmont Community College

**\*Computer Engineering Technology (A40160)**

*Engineering and Technology: Electrical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Computer Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares the students to use basic engineering principles and technical skills for installing, servicing, and maintaining computers, peripherals, networks, and microprocessor and computer controlled equipment.  Includes instruction in mathematics, computer electronics and programming, prototype development and testing, systems installation and testing, solid state and microminiature circuitry, peripheral equipment, and report preparation.  Graduates should qualify for employment opportunities in electronics technology, computer service, computer networks, server maintenance, programming, and other areas requiring knowledge of electronic and computer systems.  Graduates may also qualify for certification in electronics, computers, or networks.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Cape Fear Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
College of The Albemarle
Forsyth Technical Community College
Gaston College
Isothermal Community College

Lenoir Community College
Mayland Community College
Nash Community College
Richmond Community College
Sandhills Community College
Southwestern Community College
Stanly Community College
Wake Technical Community College
Western Piedmont Community College

**\*Electrical Engineering Technology (A40180)**

*Engineering and Technology: Electrical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Electrical Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares the 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. Includes instruction in electrical circuitry, prototype development and testing, systems analysis and testing, systems maintenance, instrument calibration, and report preparation.  Graduates may seek 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.

The following colleges are approved to offer this program:

Beaufort County Community College
Central Piedmont Community College
Craven Community College

Southeastern Community College
Tri-County Community College
Western Piedmont Community College

**\*Electronics Engineering Technology (A40200)**

*Engineering and Technology: Electrical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Electronics Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares the students to apply basic engineering principles and technical skills to become technicians who design, build, install, test, troubleshoot, repair, and modify developmental and production electronic components, equipment, and systems such as industrial/computer controls, manufacturing systems, communication systems, and power electronic systems. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, and microprocessors or programmable logic controllers.  Graduates should qualify for employment as electronics engineering technician, field service technician, instrumentation technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Guilford Technical Community College |
| Beaufort County Community College | Haywood Community College |
| Blue Ridge Community College | Isothermal Community College |
| Brunswick Community College | Mayland Community College |
| Caldwell Community College and Technical Institute | Mitchell Community College |
| Cape Fear Community College | Nash Community College |
| Catawba Valley Community College | Pitt Community College |
| Central Carolina Community College | Richmond Community College |
| Central Piedmont Community College | Rockingham Community College |
| Cleveland Community College | Rowan-Cabarrus Community College |
| Coastal Carolina Community College | Southwestern Community College |
| Craven Community College | Stanly Community College |
| Davidson County Community College | Surry Community College |
| Durham Technical Community College | Vance-Granville Community College |
| Fayetteville Technical Community College | Wake Technical Community College |
| Forsyth Technical Community College | Wayne Community College |
| Gaston College | Wilson Community College |

**\*Environmental Engineering Technology  (A40150)**

*Engineering and Technology: Civil Engineering and Geomatics Technologies*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Environmental Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares students to use mathematical and scientific principles to modify, test, and operate equipment and devices used in the prevention, control and remediation of environmental problems and development of environmental remediation devices.  Includes instruction in environmental safety principles, environmental standards, testing and sampling procedures, laboratory techniques, instrumentation calibration, safety and protection procedures, equipment maintenance, and report preparation.

The following college is approved to offer this program:

Asheville-Buncombe Technical Community College

**\*Geomatics Technology (A40420)**

*Engineering and Technology: Civil Engineering and Geomatics Technologies*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Geomatics Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares students to use mathematical and scientific principles for the delineation, determination, planning and positioning of land tracts, boundaries, contours and features applying principles of route surveying, construction surveying, photogrammetry, mapping, global positioning systems, geographical information systems, and other kinds of property description and measurement to create related maps, charts and reports. Includes instruction in applied geodesy, computer graphics, photointerpretation, plane and geodetic surveying, mensuration, traversing, survey equipment operation and maintenance, instrument calibration, and basic cartography.  Graduates should qualify for jobs as survey party chief, instrument person, surveying technician, highway surveyor, mapper, GPS technician, and CAD operator.  Graduates will be prepared to pursue the requirements necessary to become a Registered Land Surveyor in North Carolina.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Sandhills Community College |
| Brunswick Community College | Southwestern Community College |
| Central Piedmont Community College | Wake Technical Community College |
| Fayetteville Technical Community College | Western Piedmont Community College |
| Guilford Technical Community College | |

### *Geospatial Technology (A40220)

*Engineering and Technology: Geospatial Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Geospatial Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, process improvement technicians, engineering technicians, construction technicians, industrial and technology managers, or research technicians.

This course of study prepares students to use technical skills and advanced computer hardware and software for programming, database management and internet applications using geographic data and geographic information systems. Includes instruction in mathematics, computer-assisted cartography, geographic information systems, map design and layout, photogrammetry, air photo interpretation, remote sensing, spatial analysis, geodesy, cartographic editing, global navigation satellite system technology and applications to specific industrial, commercial, research, and governmental mapping problems. Graduates should find employment as field technicians or as database and mapping assistants.

The following colleges are approved to offer this program:

Edgecombe Community College

### *Industrial Engineering Technology (A40240)

*Manufacturing Production and Process Development: Manufacturing and Industrial Engineering Technology*
*Career Cluster: Manufacturing*

The Industrial Engineering Technology curriculum is designed to prepare 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.

Course work includes mathematics, systems analysis, leadership and management skills, quality and productivity improvement methods, cost analysis, facilities planning, manufacturing materials and processes, and computerized production methods.

Graduates should qualify as quality improvement technicians, quality assurance and control technicians, front-line supervisors, production planners, inventory supervisors, and manufacturing technicians.

This course of study prepares the students to use basic engineering principles and technical skills to develop, implement, and improve industrial and service systems. Includes 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 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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Lenoir Community College | Rowan-Cabarrus Community College |
| | Wake Technical Community College |

**\*Landscape Architecture Technology (A40260)**

*Construction: Landscape Architecture Technology*
*Career Cluster: Architecture and Construction*

The Landscape Architecture Technology curriculum prepares individuals as landscape architecture technicians in landscape design, construction, and architecture fields. The well-trained landscape technician will find excellent prospects for employment and advancement, including large-scale site design and supervision and residential landscape design.

Students receive instruction in landscape construction materials and methods, environmental planning, principles of horticulture, building codes, and computer applications. They develop drafting and computer skills through progressive hands-on courses. Students may choose from a library of courses to suit specific interest areas.

Graduates will demonstrate a working knowledge of landscape architectural practices, including site planning, storm water engineering, road and parking layouts, and grading and plant selection according to zoning/code requirements.

The following college is approved to offer this program:

Wake Technical Community College


**\*Laser and Photonics Technology (A40280)**

*Engineering and Technology: Electrical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Laser and Photonics Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares the students to apply basic engineering principles and technical skills for specifying, operating, and maintaining laser-based systems. Includes instruction in mathematics, science, communications, electronics, and optics courses emphasizing laboratory learning experiences that develops the hands-on skills needed. Graduates of the curriculum qualify for current and emerging employment opportunities in fiber optic communications, materials processing, laser surgery, research, and a variety of related fields.

The following college is approved to offer this program:

Central Carolina Community College

**\*Mechanical Engineering Technology (A40320)**
*Engineering and Technology: Mechanical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Mechanical Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and 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.

This course of study prepares the students to use basic engineering principles and technical skills to design, develop, test, and troubleshoot projects involving mechanical systems. Includes instruction in 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.  Engineering technicians may obtain professional certification by application to organizations such as ASQC, SME, and NICET.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Isothermal Community College |
| Beaufort County Community College | Lenoir Community College |
| Blue Ridge Community College | Mitchell Community College |
| Caldwell Community College and Technical Institute | Pitt Community College |
| Cape Fear Community College | Richmond Community College |
| Catawba Valley Community College | Rowan-Cabarrus Community College |
| Central Piedmont Community College | South Piedmont Community College |
| Craven Community College | Wake Technical Community College |
| Forsyth Technical Community College | Wayne Community College |
| Gaston College | Western Piedmont Community College |
| Guilford Technical Community College | |

## Mechatronics Engineering Technology  (A40350)

*Engineering and Technology: Applied, Automation, Mechatronics Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Mechatronics Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and 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.

This course of study prepares the students to use basic engineering principles and technical skills in developing and testing automated, servomechanical, and other electromechanical systems. Includes instruction in 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.  The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Richmond Community College |
| Blue Ridge Community College | Roanoke-Chowan Community College |
| Cape Fear Community College | Rowan-Cabarrus Community College |
| Catawba Valley Community College | South Piedmont Community College |
| Central Piedmont Community College | Southeastern Community College |
| Craven Community College | Southwestern Community College |
| Gaston College | Surry Community College |
| Guilford Technical Community College | Vance-Granville Community College |
| Mitchell Community College | Wayne Community College |
| Piedmont Community College | Western Piedmont Community College |
| Randolph Community College | |

## Mission Critical Operations  (A40430)

*Engineering and Technology: Applied, Automation, Mechatronics Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Mission Critical Operations curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and 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.

The Mission Critical Operations curriculum prepares graduates for employment in a wide range of positions in specific mission critical environments, operations technology, and maintenance. Course work includes the development of a student's ability to maintain technically sophisticated systems for business continuity and near continuous uptime using engineering, information technology, and industrial management and maintenance skills. The course work emphasizes analytical and problem-solving skills required to sustain high availability national security interests and includes instruction in electromechanical systems, networking, automation, cybersecurity, emergency management and systems integration. Graduates should qualify for employment as entry-level technicians with businesses, industries, educational systems, and governmental agencies in national critical infrastructure areas including, but not limited to, communications, emergency services, energy, financial services, healthcare, information technology, and transportation.  The following colleges are approved to offer this program:

| | |
|---|---|
| Cleveland Community College | Wake Technical Community College |

**\*Sustainability Technologies  (A40370)**

*Sustainability Technologies*
*Career Cluster: Science, Technology, Engineering, and Mathematics*

The Sustainability Technologies curriculum is designed to prepare individuals for employment in environmental, construction, renewable energy, or related industries, where key emphasis is placed on energy production and waste reduction along with sustainable technologies.

Course work includes renewable energy, green building technology, and environmental technologies. Additional topics may include sustainability, energy management, waste reduction, renewable energy, site assessment, and environmental responsibility.

Graduates should qualify for positions within the renewable energy, construction, and/or environmental industries. Employment opportunities exist in both the government and private industry sectors where graduates may function as renewable energy technicians, sustainability consultants, environmental technicians, or green building supervisors.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College

College of The Albemarle

Cape Fear Community College

Surry Community College

Central Carolina Community College

Wayne Community College

Central Piedmont Community College


**\*Telecommunications and Network Engineering Technology (A40400)**

*Engineering and Technology: Electrical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, Mathematics*

The Telecommunications and Network Engineering Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study that prepares the students to apply basic engineering principles and technical skills for positions in the telecommunication networking industry. Includes instruction in mathematics, basic electricity, solid-state fundamentals, digital concepts, microprocessors, telecommunications and network systems with an emphasis on analyzing and troubleshooting telecommunications and network systems. Graduates should qualify for employment as electronic engineering technician, field service technician, maintenance technician, network system technician, network specialist, network systems integrator, and network administrator.

The following college is approved to offer this program:

Guilford Technical Community College

## Health Sciences

The Health Sciences programs are designed to prepare the graduate for licensure, certification or registration by examination. Professional program accreditation applies to specific Health Sciences programs and is awarded by the accrediting body of the appropriate professional society or association. Completion of an approved educational program is required for several of the Health Sciences programs in order for the graduates of the programs to be eligible to apply to take the required examinations.

High school graduation or its equivalent is required for admission to most Health Science programs. Individuals desiring careers in the health science field should take biology, algebra and chemistry courses prior to entering the program. The curriculums in this program area include:

Advanced Medical Coding (Certificate (C45530)
Anesthesia Technology (A45330)
Associate Degree Nursing (A45110)
Breast Sonography (Certificate) (C45490)
Cancer Information Management (A45130)
Cardiovascular Sonography (A45160)
Cardiovascular Technology (Invasive and Non-Invasive) (A45170)
Central Sterile Processing (Certificate) (C45180)
Clinical Trials Research Associate (A45190)
Computed Tomography & Magnetic Resonance Imaging Technology (Diploma) (D45200)
Cytotechnology (Certificate) (C45220)
Dental Assisting (Diploma) (D45240)
Dental Hygiene (A45260)
Dental Laboratory Technology (A45280)
Dialysis Technology (Diploma) (D45300)
Electroneurodiagnostic Technology (A45320)
Emergency Medical Science (A45340)
Health and Fitness Science (A45630)
Health Care Technology (Certificate) (C45350)
Health Information Technology (A45360)
Healthcare Interpreting (A45430)
Histotechnology (A45370)
Human Services Technology (A45380)
Human Services Technology/Animal Assisted Interactions (A4538F)
Human Services Technology/Developmental Disabilities (A4538A)
Human Services Technology/Gerontology (A4538B)
Human Services Technology/Mental Health (A4538C)
Human Services Technology/Social Services (A4538D)
Human Services Technology/Substance Abuse (A4538E)
Interventional Cardiac and Vascular Technology (A45410)

Licensed Practical Nurse Refresher (Certificate) (C45390)
Magnetic Resonance Imaging (A45800)
Mammography (Certificate) (C45830)
Medical Assisting (A45400)
Medical Dosimetry (Diploma) (D45450)
Medical Laboratory Technology (A45420)
Medical Product Safety and Pharmacovigilance (A45810)
Medical Sonography (A45440)
Musculoskeletal Sonography (Certificate) (C45850)
Nuclear Medicine Technology (A45460)
Nurse Aide (Certificate) (C45840)
Nutrition and Dietetics Technician (A45860)
Occupational Therapy Assistant (A45500)
Ophthalmic Medical Personnel (A45210)
Optical Apprentice (Certificate) (C45520)
Opticianry (A45560)
Pharmacy Technology (A45580)
Phlebotomy (Certificate) (C45600)
Physical Therapist Assistant (1+1) (A45640)
Physical Therapist Assistant (2-year program) (A45620)
Polysomnography (A45670)
Polysomnography (Certificate) (C45650)
Positron Emission Tomography (Diploma) (D45820)
Practical Nursing (Diploma) (D45660)
Radiation Therapy Technology (A45680)
Radiography (A45700)
Recreational Therapy Assistant (A45150)
Respiratory Therapy (A45720)
Speech-Language Pathology Assistant (A45730)
Surgical First Assistant (Certificate) (C45870)
Surgical Technology (A45740)
Therapeutic Massage (A45750)
Veterinary Medical Technology (A45780)

**Advanced Medical Coding (Certificate) (C45530)**

*Career Cluster: Health Science*

The Advanced Medical Coding curriculum provides the didactic and clinical experience necessary to become competent credentialed coders.

Coursework includes reimbursement, advanced International Classification of Diseases-10th Revision-Clinical Modification/Procedure Coding System (ICD-10-CM/PCS), Current Procedural Terminology (CPT), and Healthcare Common Procedure Coding System (HCPCS).

Graduates may be eligible to take either of the Certified Coding Specialist exams: the Certified Coding Specialist and/or the Certified Coding Specialist-Physician Based (CCS/CCS-P).

Individuals entering this curriculum must be a graduate of a Commission on Accreditation for Health Informatics and Information Management (CAHIIM) accredited health information program. The following college is approved to offer this program:

Pitt Community College

**\*Anesthesia Technology (A45330)**

*Career Cluster: Health Science*

The Anesthesia Technology program prepares students to work as a vital member of the Anesthesia Care Team.  The anesthesia technologist provides safe care at the direction of the anesthesia provider in the care of patients undergoing anesthesia.

Students will become proficient in fundamentals and advanced skills in the acquisition, preparation, and application of various types of equipment required for the delivery of anesthesia care.

Graduates are eligible to complete the Certified Anesthesia Technologists credentialing process through the American Society of Anesthesia Technologists and Technicians (ASATT).  Employment opportunities are available in hospitals, surgical centers, imaging, emergency departments, dental suites, and ambulatory care centers. The following college is approved to offer this program:

Durham Technical Community College

**\*Associate Degree Nursing (A45110)**

*Career Cluster: Health Science*

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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Lenoir Community College |
| Asheville-Buncombe Technical Community College | Mayland Community College |
| Beaufort County Community College | McDowell Technical Community College |
| Bladen Community College | Mitchell Community College |
| Blue Ridge Community College | Nash Community College |
| Brunswick Community College | Piedmont Community College |
| Caldwell Community College and Technical Institute | Pitt Community College |
| Cape Fear Community College | Randolph Community College |
| Carteret Community College | Richmond Community College |
| Catawba Valley Community College | Roanoke-Chowan Community College |
| Central Carolina Community College | Robeson Community College |
| Central Piedmont Community College | Rockingham Community College |
| Cleveland Community College | Rowan-Cabarrus Community College |
| Coastal Carolina Community College | Sampson Community College |
| College of The Albemarle | Sandhills Community College |
| Craven Community College | South Piedmont Community College |
| Davidson County Community College | Southeastern Community College |
| Durham Technical Community College | Southwestern Community College |
| Edgecombe Community College | Stanly Community College |
| Fayetteville Technical Community College | Surry Community College |
| Forsyth Technical Community College | Tri-County Community College |
| Gaston College | Vance-Granville Community College |
| Guilford Technical Community College | Wake Technical Community College |
| Halifax Community College | Wayne Community College |
| Haywood Community College | Western Piedmont Community College |
| Isothermal Community College | Wilkes Community College |
| James Sprunt Community College | Wilson Community College |
| Johnston Community College | |

**Breast Sonography (C45490)**

*Career Cluster: Health Science*

The Breast Sonography curriculum provides registered mammographers the didactic and clinical experience necessary to become registered breast sonographers.

Course work includes breast pathophysiology; physics, instrumentation, and equipment operation necessary to perform diagnostic and interventional breast sonography procedures; and clinical breast image production and evaluation.

Graduates may be eligible to apply to take the American Registry of Radiologic Technologists (ARRT) certification exam in Breast Sonography. The following colleges are approved to offer this program:

Pitt Community College

**\*Cancer Information Management (A45130)**

*Career Cluster: Health Science*

The Cancer Information Management curriculum is designed to provide individuals with the knowledge and skills necessary to maintain a cancer data collection system that is consistent with medical, administrative, ethical, legal and accreditation requirements.

Students will analyze health records according to standards set by various agencies, compile, maintain, monitor, and report cancer data for research, quality management, facility planning and marketing; abstract and code clinical data; and obtain survival data through yearly follow-up.

Graduates may be eligible to take the national certifying examination given by the National Cancer Registrars Association to become a Certified Tumor Registrar (CTR). Employment opportunities include health care facilities, data organizations, and government agencies.

The following college is approved to offer this program:

Davidson County Community College

**\*Cardiovascular Sonography (A45160)**

*Career Cluster: Health Science*

The Cardiovascular Sonography curriculum provides the individual with the knowledge and skills necessary to acquire, process, and evaluate the human heart and vascular structures. A cardiovascular sonographer uses high frequency sound waves to produce images of the heart and vascular structures.

Course work includes effective communication and patient care skills combined with a knowledge of physics, human anatomy, physiology, and pathology, all of which are essential to obtaining high quality sonographic images.

Graduates may be eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in physics, cardiovascular physics, vascular physics, and adult echocardiography. Graduates may find employment in hospitals, physicians' offices, mobile services, and educational institutions. The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Forsyth Technical Community College
Johnston Community College
Pitt Community College
South Piedmont Community College

**\*Cardiovascular Technology (Invasive and Non-Invasive) (A45170)**

*Career Cluster: Health Science*

Cardiovascular Technology is an allied health career that prepares individuals to develop attributes necessary to perform procedures leading to diagnosis and treatment of cardiovascular disease.

Course work emphasizes technical and cognitive skills by applying the concepts of echocardiography, electrocardiography, cardiac catheterization, and cardiovascular anatomy and physiology.

Graduates selecting the non-invasive track (Cardiac Sonography) are eligible for the Noninvasive Registry to become a Registered Diagnostic Cardiac Sonographer through American Registry of Medical Sonography (ARDMS) or a Registered Cardiac Sonography (RCS) through Cardiovascular Credentialing International, Inc. (CCI). Graduates selecting the invasive track (Cardiovascular Invasive Specialist) may be eligible for the Invasive Registry to become a Registered Cardiovascular Invasive Specialist (RCIS) through Cardiovascular Credentialing International, Inc. (CCI).

The following college is approved to offer this program:

Central Piedmont Community College

**Central Sterile Processing (Certificate) (C45180)**

*Career Cluster: Health Science*

The Central Sterile Processing curriculum is designed to prepare individuals for the field of Sterile Processing and Central Service Supply.

Students will develop skills necessary to properly disinfect, prepare, process, store, and issue both sterile and nonsterile supplies, instrumentation, and equipment for patient care. Additionally, students will learn to operate sterilizing units and monitor effectiveness of the sterilization process.

Graduates will be eligible to take the Certification Board for Sterile Processing and Distribution, Inc. "Sterile Processing and Distribution (SPD) Technician Exam", earning the title of Central Sterile Processing and Distribution Technician (CSPDT). Employment opportunities include surgery centers, central sterile processing departments in hospitals, and traveling consultation services.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College          Fayetteville Technical Community College
Davidson County Community College

**\*Clinical Trials Research Associate (A45190)**

*Career Cluster: Health Science*

The Clinical Trials Research Associate curriculum prepares individuals to assist physicians and clinical researchers in the initiation, administration, coordination, and management of clinical research studies for the development of new drugs, clinical products, and treatment regimens.

Course work includes in-depth study of drug development, Federal regulations, and clinical research processes. Supervised fieldwork provides skill application in subject recruitment, regulatory compliance, accountability for drugs/devices, and documentation of subject involvement in clinical research studies.

Graduates may be eligible to sit for national certification examinations. Research employment opportunities may include medical centers, hospitals, pharmaceutical industries, clinics, research facilities, biotechnology or device companies, and physicians' offices.

The following college is approved to offer this program:

Durham Technical Community College

**Computed Tomography & Magnetic Resonance Imaging Technology (Diploma) (D45200)**

*Career Cluster: Health Science*

The Computed Tomography and Magnetic Resonance Imaging Technology curriculum prepares the individual to use specialized equipment to visualize cross-sectional anatomical structures and aid physicians in the demonstration of pathologies and disease processes. *Individuals entering this curriculum must be registered or registry- eligible radiologic technologist, radiation therapist, or nuclear medicine technologist.*

Course work prepares the technologist to provide patient care and perform studies utilizing imaging equipment, professional communication, and quality assurance in scheduled and emergency procedures through academic and clinical studies.

Graduates may be eligible to sit for the American Registry of Radiologic Technologist Advanced-Level testing in Computed Tomography and/or Magnetic Resonance Imaging examinations. They may find employment in facilities which perform these imaging procedures.

The following colleges are approved to offer this program:

Cleveland Community College

Edgecombe Community College
   *awards the credential in collaboration with:*
     Johnston Community College
     Vance-Granville Community College

Forsyth Technical Community College

Pitt Community College

Wake Technical Community College

## Cytotechnology (Certificate) (C45220)

*Career Cluster: Health Science*

Cytotechnology is an advanced allied health career which prepares the individual to use specialized equipment to study cells for detecting cancer, hormonal abnormalities, and other pathological disease processes. *Individuals entering this curriculum must have earned a Bachelor's degree with a concentration in the Biological Sciences.*

Course work includes entry-level knowledge and skills in cell collection and preparation and microscopic use to interpret specimens. Graduates work in conjunction with pathologists to perform special diagnostic procedures.

Upon successful completion of the program, graduates receive a certificate in cytotechnology and may be eligible to take the National Registry Examination of the American Society of Clinical Pathologists. Cytotechnologists may find employment in hospital laboratories, universities, and private laboratories.

The following college is approved to offer this program:

Central Piedmont Community College

## Dental Assisting (Diploma) (D45240)

*Career Cluster: Health Science*

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/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. The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Cape Fear Community College
Central Carolina Community College
Central Piedmont Community College
Coastal Carolina Community College
Davidson County Community College
Fayetteville Technical Community College
Forsyth Technical Community College
  *Awards the credential in collaboration with:*
      Surry Community College
Guilford Technical Community College

Martin Community College
  *awards the credential in collaboration with:*
      Beaufort County Community College
      College of The Albemarle
      Edgecombe Community College
      Nash Community College
      Roanoke-Chowan Community College
Montgomery Community College
Rowan-Cabarrus Community College
Wake Technical Community College
Wayne Community College
  *awards the credential in collaboration with:*
      Lenoir Community College
Western Piedmont Community College
Wilkes Community College

## Dental Hygiene (A45260)

*Career Cluster: Health Science*

The Dental Hygiene curriculum provides individuals with the knowledge and skills to access, plan, implement, and evaluate dental hygiene care for the individual and the community.

Students will learn to prepare the operatory, take patient histories, note abnormalities, plan care, teach oral hygiene, clean teeth, take x-rays, apply preventive agents, complete necessary chart entries, and perform other procedures related to dental hygiene care.

Graduates of this program may be eligible to take national and state/regional examinations for licensure which are required to practice dental hygiene.  Employment opportunities include dental offices, clinics, schools, public health agencies, industry, and professional education.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Cape Fear Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Coastal Carolina Community College
Fayetteville Technical Community College
Forsyth Technical Community College
  *awards the credential in collaboration with:*
        Surry Community College

Guilford Technical Community College
Halifax Community College
  *awards the credential in collaboration with:*
        Edgecombe Community College
        Nash Community College
Wake Technical Community College
Wayne Community College
  *awards the credential in collaboration with:*
        Lenoir Community College

## *Dental Laboratory Technology (A45280)

*Career Cluster: Health Science*

The Dental Laboratory Technology curriculum prepares individuals in the art and science of fabricating dental restorations. The dental technician fabricates dentures, partials, metal or porcelain crowns, and bridges.  Technicians use specialized hand instruments and equipment and also work with various dental materials.

Course work includes in-depth studies of fabrication techniques for both fixed and removable dental prostheses.  The dental laboratory technology student will be exposed to classroom, laboratory, and clinical rotation training.

Graduates may qualify to take the Recognized Graduate Examination administered by the National Board for Certification and may be employed by commercial laboratories, dental office laboratories, or dental manufacturers, or as the owner of a dental laboratory.

The following college is approved to offer this program:

Durham Technical Community College

Pamlico Community College

**Dialysis Technology (Diploma) (D45300)**

*Career Cluster: Health Science*

The Dialysis Technology curriculum provides individuals with the theoretical/clinical skills to care for patients/clients being treated for acute/chronic renal diseases.

Students will care for patients/clients undergoing dialysis and will maintain dialysis equipment.

Graduates of this program may be eligible to take the Certification Examination for Nephrology Technicians following one year of work experience.  Employment opportunities include hospitals, renal dialysis facilities, and clinics.

The following colleges are approved to offer this program:

McDowell Technical Community College
Richmond Community College


***Electroneurodiagnostic Technology (A45320)**

*Career Cluster: Health Science*

The Electroneurodiagnostic Technology curriculum is designed to provide students with the knowledge and skills to obtain recordings of patients' nervous system function through the use of electroencephalographic equipment and other electrophysiological devices.

Course work includes communication skills with patients and healthcare personnel, taking appropriate patient histories, electrode application, documentation of patients' clinical status, electrical waveform recognition, management of medical emergencies, and preparation of descriptive reports for the physician.

Graduates should qualify for the ABRET (American Board of Registration of EEG and EP Technologists) Exam and, working under the supervision of a qualified physician, may be employed by hospitals or private offices of neurologists and neurosurgeons.

The following colleges are approved to offer this program:

Catawba Valley Community College
Pamlico Community College

**\*Emergency Medical Science (A45340)**

*Career Cluster: Health Science*

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. The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Bladen Community College
Blue Ridge Community College
Cape Fear Community College
Carteret Community College
Catawba Valley Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Davidson County Community College
Durham Technical Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
*awards the credential in collaboration with:*
    Davidson County Community College
Isothermal Community College
Johnston Community College

Lenoir Community College
Mitchell Community College
Nash Community College
Pitt Community College
*awards the credential in collaboration with:*
    Beaufort County Community College
Roanoke-Chowan Community College
Robeson Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southwestern Community College
 *awards the credential in collaboration with:*
    Haywood Community College
Stanly Community College
Tri-County Community College
Wake Technical Community College
Wilkes Community College

**\*Health and Fitness Science  (A45630)**

*Career Cluster: Human Services*

The Health and Fitness Science program is designed to provide students with the knowledge and skills necessary for employment in the fitness and exercise industry.

Students will be trained in exercise science and be able to administer basic fitness tests and health risk appraisals, teach specific exercise and fitness classes and provide instruction in the proper use of exercise equipment and facilities.

Graduates should qualify for employment opportunities in commercial fitness clubs, YMCA's/YWCA's, wellness programs in business and industry, Parks & Recreation Departments and other organizations implementing exercise & fitness programs.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Brunswick Community College
Catawba Valley Community College
Central Carolina Community College
Coastal Carolina Community College
College of The Albemarle
Fayetteville Technical Community College

Gaston College
 awards the credential in collaboration with
    Central Piedmont Community College
Nash Community College
Sandhills Community College
Wake Technical Community College

**Health Care Technology (Certificate) (C45350)**

*Career Cluster: Health Science*

The Health Care Technology curriculum prepares multi-skilled health care personnel to perform a variety of assistive skills which cross several traditional health care disciplines. *Individuals entering this curriculum must be listed on the Nursing Assistant I Registry and have documentation of successful completion of a Nursing Assistant I program.*

Course work includes communication, dietary, and clerical skills, as well as those required for listing as a Nursing Assistant II. Based upon local needs, instruction may also include phlebotomy, basic electrocardiography, environmental maintenance, restorative care, and basic respiratory skills.

Graduates of this program will be eligible for listing as a Nursing Assistant II in the State of North Carolina. Employment opportunity sites include hospitals, nursing homes, extended care facilities, and home health agencies.

The following colleges are approved to offer this program:

College of The Albemarle                                       Piedmont Community College

**\*Health Information Technology (A45360)**

*Career Cluster: Health Science*

The Health Information Technology curriculum provides individuals with the knowledge and skills to process, analyze, abstract, compile, maintain, manage, and report health information.

Students will supervise departmental functions; classify, code, and index diagnoses and procedures; coordinate information for cost control, quality management, statistics, marketing, and planning; monitor governmental and non-governmental standards; facilitate research; and design system controls to monitor patient information security.

Graduates of this program may be eligible to write the national certification examination to become an Registered Health Information Technician (RHIT). Employment opportunities include hospitals, rehabilitation facilities, nursing homes, health insurance organizations, outpatient clinics, physicians' offices, hospice, and mental health facilities.

The following colleges are approved to offer this program:

Brunswick Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Craven Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Forsyth Technical Community College
Guilford Technical Community College

McDowell Technical Community College
Pitt Community College
  *awards the credential in collaboration with:*
  Mitchell Community College
  Richmond Community College
  Sandhills Community College
Richmond Community College
Southwestern Community College
Surry Community College

**\*Healthcare Interpreting  (A45430)**

*Career Cluster: Human Services*

The Healthcare Interpreting curriculum prepares individuals proficient in English and a target language to work in a healthcare environment as entry-level bilingual professionals, providing communication access to care and services to those whose language of preference is other than English.

Course work includes an overview of the American healthcare system, roles and responsibilities of the healthcare interpreter, ethical issues, basic human anatomy and physiology, and medical terminology.  Students will acquire skills associated with interpretation between English and a target language.

Graduates should qualify for entry-level jobs as professional bilingual interpreters in a variety of healthcare settings.  The healthcare settings may include hospitals, physician offices, clinics, health departments or apply language skills to other human service related areas.

The following college is approved to offer this program:

Davidson County Community College


**\*Healthcare Simulation Technology  (A45980)**

This curriculum is designed to prepare individuals to teach, remediate, and evaluate healthcare providers using different forms of healthcare simulation.

Course work includes the day-to-day operations of a multidisciplinary healthcare simulation lab.  Students will learn how to operate low, mid, and high-fidelity simulation mannequins, various task trainers, audiovisual tools used in simulation, and managing standardized patient programs.

Graduates of the Healthcare Simulation Technology program will be eligible for employment opportunities at hospitals, public and private educational institutions, emergency medical services agencies, and simulation centers.  Qualifying graduates may be eligible for the national Certified Healthcare Simulation Educator exam.

The following college is approved to offer this program:

Wake Technical Community College


**\*Histotechnology (A45370)**

*Career Cluster: Health Science*

This curriculum provides individuals with the knowledge and skills necessary to prepare tissue specimens for microscopic examination using various stains and dyes to identify tissue and cell structures.

Course work emphasizes scientific concepts related to laboratory testing, quality assurance, histology, microscopy, and other related topics.

Graduates may be eligible to apply to take the national examination given by the Board of Registry of the American Society for Clinical Pathology.  Employment opportunities include pathology laboratories in hospitals and clinics and medical or research laboratories.

The following colleges are approved to offer this program:

Alamance Community College
Davidson County Community College
Vance-Granville Community College

## *Human Services Technology (A45380)

*Career Cluster: Health Science*

The Human Services Technology curriculum prepares students for entry-level positions in institutions and agencies which provide social, community, and educational services. Along with core courses, students take courses which prepare them for specialization in specific human service areas.

Students will take courses from a variety of disciplines. Emphasis in core courses is placed on development of relevant knowledge, skills, and attitudes in human services. Fieldwork experience will provide opportunities for application of knowledge and skills learned in the classroom.

Graduates should qualify for positions in mental health, child care, family services, social services, rehabilitation, correction, and educational agencies. Graduates choosing to continue their education may select from a variety of transfer programs at senior public and private institutions.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Beaufort County Community College
Carteret Community College
Central Carolina Community College
Central Piedmont Community College
College of The Albemarle
Davidson County Community College
Edgecombe Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Halifax Community College
Lenoir Community College
Mayland Community College
Mitchell Community College
Montgomery Community College
Nash Community College

Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Roanoke-Chowan Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southwestern Community College
Stanly Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilkes Community College

## *Human Services Technology/Animal Assisted Interactions (A4538F)

*Career Cluster: Health Science*

The Human Services Technology/Animal Assisted Interactions concentration prepares individuals for entry-level positions in service organizations providing animal interactions. The curriculum prepares students to incorporate specially selected animals in goal-directed interactions to improve human physical, social, emotional, and/or cognitive functioning.

Course work includes a history of the field of animal interventions, relevant scientific evidence regarding the benefits of interactions, theoretical models, application of animal interventions and current trends. Students gain skills in measurement methodology and in animal handling and management.

Graduates should qualify for employment in mental health, youth services, social services, rehabilitation, correction, elder, and educational agencies. Upon completion of the degree, students may be eligible for certification through national or international organizations.

The following college is approved to offer this program:

Tri-County Community College

**\*Human Services Technology/Developmental Disabilities (A4538A)**

*Career Cluster: Health Science*

The Human Services Technology/Developmental Disabilities concentration is designed to train technicians to work with children and adults with physical, mental, and emotional disabilities.  Students will specialize in the study of developmental and intellectual disabilities.

Students will gain an understanding of the handicapping effects of developmental disabilities in medical, psychological, social, educational, vocational, and economic terms.  Fieldwork and clinical experience in community agencies providing comprehensive services to disabled persons and their families will be provided.

Graduates should qualify for employment in group homes, foster care homes, respite services, vocational rehabilitation agencies, sheltered workshops, adult developmental activities programs, early childhood intervention programs, and other programs for individuals with developmental and intellectual disabilities and their families.

The following colleges are approved to offer this program:

Central Piedmont Community College
Gaston College
Montgomery Community College
Stanly Community College


**\*Human Services Technology/Gerontology (A4538B)**

*Career Cluster: Health Science*

The Human Services Technology/Gerontology concentration prepares students to specialize in direct service delivery work to older adults and their families.  The curriculum provides both theoretical and applied models for understanding issues of aging.

Course work includes physical, psychological, and social aspects of the aging process, as well as health, wellness, nutrition, diet, exercise, and well-being.  Fieldwork experiences provide opportunities to work in a variety of public and private agencies.

Graduates should qualify for employment in nursing and rest homes, specialized adult care services, respite services, and other programs servicing older adults and their families.  Graduates choosing to continue their education may select a variety of programs at senior institutions.

The following colleges are approved to offer this program:

Forsyth Technical Community College
Nash Community College
Piedmont Community College
Pitt Community College
Vance-Granville Community College

**\*Human Services Technology/Mental Health (A4538C)**

*Career Cluster: Health Science*

The Human Services Technology/Mental Health concentration prepares students for job opportunities in the mental health field. The curriculum enables students to understand culturally and emotionally handicapped, developmentally disabled, or addicted clients through a variety of models and diagnoses.

Course work includes a history of the mental health movement, current developments and future trends, and theoretical models affecting individual development and behavior in a diverse client population. Fieldwork experiences provide opportunities for application of knowledge in agency and institutional settings.

Graduates should qualify for employment in mental health treatment centers serving a diverse multicultural client population in public and private settings. Graduates will work with individuals, families, groups, organizations, and communities in providing a therapeutic arena of care.

The following colleges are approved to offer this program:

Guilford Technical Community College
Lenoir Community College
Roanoke-Chowan Community College

Vance-Granville Community College
Wake Technical Community College

**\*Human Services Technology/Social Services (A4538D)**

*Career Cluster: Health Science*

The Human Services Technology/Social Services concentration prepares students for direct service delivery work in social service agencies. The curriculum enables students to link theory and practice through interactive classroom activities developing a skill-based academic foundation.

Course work includes the history of the social service movement, ethical issues, case management, diversity issues, law in the practice of social work, and community resources. Students also gain skills in interviewing and counseling techniques.

Graduates should qualify for employment with local, county, state, and federal government social service agencies. Employment includes family and child assistance, rehabilitation health services, medical assistance, youth services, aging, and developmentally disabled programs in public and private settings.

The following colleges are approved to offer this program:

Halifax Community College
Lenoir Community College

Richmond Community College
Tri-County Community College

**\*Human Services Technology/Substance Abuse (A4538E)**

*Career Cluster: Health Science*

The Human Services Technology/Substance Abuse concentration prepares students to assist in drug and alcohol counseling, prevention-oriented educational activities, rehabilitation with recovering clients, managing community-based programs, counseling in residential facilities, and pursuit of four-year degrees.

Course work includes classroom and experiential activities oriented toward an overview of chemical dependency, psychological/sociological process, the twelve Core Functions, intervention techniques with individuals in groups, and follow-up activities with recovering clients.

Graduates should qualify for positions as substance abuse counselors, DUI counselors, halfway house workers, residential facility employees, and substance education specialists. With educational and clinical experiences, graduates can obtain certification by the North Carolina Substance Abuse Board. The following colleges are approved to offer this program:

Cape Fear Community College
Central Piedmont Community College
Gaston College
Guilford Technical Community College
Pamlico Community College
Pitt Community College
Randolph Community College

Richmond Community College
Sandhills Community College
Southwestern Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Western Piedmont Community College

**\*Interventional Cardiac and Vascular Technology (A45410)**

*Career Cluster: Health Science*

The Interventional Cardiac and Vascular Technology curriculum provides individuals with the knowledge and skills necessary to qualify as an entry-level Intervention Cardiac and Vascular Specialist.

Course work will include radiographic physics, radiation protection, patient care, ECG, pharmacology, anatomy, and pathology. Clinical rotations will provide experiences with advanced radiographic imaging equipment and medications used to visualize human vasculature and organs.

Graduates should qualify for eligibility to apply for and take the Registered Cardiovascular Intervention Technology (RCIS) exams given by the Cardiovascular Credentialing International (CCI).

The following college is approved to offer this program:

Forsyth Technical Community College

**Licensed Practical Nurse Refresher (Certificate) (C45390)**

*Career Cluster: Health Science*

The Licensed Practical Nurse Refresher curriculum provides a refresher course for individuals previously licensed as Practical Nurses and who are ineligible for reentry into nursing practice due to a lapse in licensure for five or more years. *Individuals entering this curriculum must have been previously licensed as a Practical Nurse.*

Course work includes common medical-surgical conditions and nursing approaches to their management, including mental health principles, pharmacological concepts, and safe clinical nursing practice.

Graduates will be eligible to apply for reinstatement of licensure by the North Carolina Board of Nursing. Employment opportunities include hospitals, long term care facilities, clinics, physicians' offices, industry, and community health agencies. The following colleges are approved to offer this program:

Isothermal Community College
Lenoir Community College

South Piedmont Community College

**\*Magnetic Resonance Imaging  (A45800)**

*Career Cluster: Health Science*

The Magnetic Resonance Imaging (MRI) curriculum prepares students to become MRI technologist and skilled health care professionals that are trained to use magnetic energy fields to produce images of the human body.

Course work includes clinical rotations, imaging fundamentals, MRI physics, procedures, anatomy, pathology, patient care, and imaging ethics and law, in a medical environment. Students should be able to demonstrate all functional areas related to the magnetic resonance imaging field.

Graduates of accredited programs may be eligible to take the American Registry of Radiologic Technologists' (ARRT) national examination for certification and registration as MRI technologists.  Graduates may be employed in hospitals, outpatient clinics, physicians' offices, government agencies, and research.

The following colleges are approved to offer this program:

Edgecombe Community College
  *awards the credential in collaboration with:*
      Johnston Community College
      Vance Granville Community College

Forsyth Technical Community College
Wake Technical Community College


**Mammography (Certificate) (C45830)**

*Career Cluster: Health Science*

The Mammography curriculum provides registered radiologic technologists the didactic and clinical experience necessary to become registered mammographers.

Course work includes clinical rotations to mammography facilities, breast anatomy/physiology, patient preparation/education, mammographic procedures, interventional procedures, image analysis, mammographic instrumentation, physics, quality control, and quality assurance.

Graduates will meet the Mammography Quality Standards Act initial training requirements for mammography and may be eligible to apply to take the American Registry of Radiologic Technologists (ARRT) post primary certification in Mammography.

The following colleges are approved to offer this program:

Fayetteville Technical Community College
Johnston Community College
Pitt Community College

**\*Medical Assisting (A45400)**
*Career Cluster: Health Science*

The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures.

Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care.

Graduates of CAAHEP-accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants.  Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Brunswick Community College
Caldwell Community College & Technical Institute
Cape Fear Community College
Carteret Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
College of The Albemarle
Craven Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Haywood Community College
Johnston Community College
Lenoir Community College
Martin Community College

Mayland Community College
Mitchell Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Sampson Community College
South Piedmont Community College
Southwestern Community College
Stanly Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilkes Community College

**Medical Dosimetry (Diploma) (D45450)**

*Career Cluster: Health Science*

The curriculum is designed to prepare ARRT certified radiation therapists to work in the care of cancer patients as medical dosimetrist.  The curriculum provides instruction to enable the participant to become a member of the radiation oncology team.

The curriculum content includes specific coursework to provide classroom and direct clinical experience to train the student in the fundamentals of medical dosimetry practice using current technology, tools and techniques.  Students will participate in studies related to the role of the medical dosimetrist and professional ethics, radiation oncology anatomy, treatment planning, dose calculations, clinical oncology, brachytherapy, dosimetry physics, radiation protection, quality assurance and computer applications.

Graduates of the program will be able to obtain employment as a medical dosimetrist and apply to the Medical Dosimetrist Certification Board (MDCB) to sit for a national certification.  *Admission criteria include the completion of a bachelors degree.*The following college is approved to offer this program:

Pitt Community College

**\*Medical Laboratory Technology (A45420)**

*Career Cluster: Health Science*

The Medical Laboratory Technology curriculum prepares individuals to perform clinical laboratory procedures in chemistry, hematology, microbiology, and immunohematology that may be used in the maintenance of health and diagnosis/treatment of disease.

Course work emphasizes mathematical and scientific concepts related to specimen collection, laboratory testing and procedures, quality assurance and reporting/recording and interpreting findings involving tissues, blood, and body fluids.

Graduates may be eligible to take the examination given by the Board of Certification of the American Society for Clinical Pathology.  Employment opportunities include laboratories in hospitals, medical offices, industry, and research facilities.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Central Piedmont Community College
Coastal Carolina Community College
College of The Albemarle
Davidson County Community College
Halifax Community College
Sandhills Community College

Southeastern Community College
Southwestern Community College
   a*wards the credential in collaboration with:*
     Mitchell Community College
Stanly Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College

**\*Medical Product Safety and Pharmacovigilance (A45810)**

*Career Cluster: Health Science*

The Medical Product Safety and Pharmacovigilance curriculum prepares individuals to work with pharmaceutical, biologic, and medical device companies to monitor, track, and report product safety data during ongoing clinical trials, as well as after a product has been approved and marketed.

Course work includes in-depth study of federal regulations, components of a safety monitoring program, and procedures for reporting safety data. Supervised fieldwork focuses on reviewing adverse reports, writing safety case narratives, and creating safety reports in accordance with U.S. and international regulations.

Graduates of this program may be eligible to sit for national certification examinations. Employment opportunities may include medical centers, hospitals, pharmaceutical, medical device, biotechnology companies, and contract research organizations.

The following college is approved to offer this program:

Durham Technical Community College

**\*Medical Sonography (A45440)**

*Career Cluster: Health Science*

The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures.

Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills.

Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Pitt Community College |
| Caldwell Community College and Technical Institute | *awards the credential in collaboration with:* |
| Cape Fear Community College | Nash Community College |
| Central Carolina Community College | South Piedmont Community College |
| Forsyth Technical Community College | Southwestern Community College |
| Johnston Community College | *awards the credential in collaboration with:* |
| | Mitchell Community College |

**\*Musculoskeletal Sonography (C45850)**

*Career Cluster: Health Science*

The Musculoskeletal Sonography curriculum provides sonographers the didactic and clinical experience necessary to perform entry level musculoskeletal (MSK) sonography.

Course work includes introduction to normal and abnormal anatomy and physiology of the upper and lower extremities, sonographic physical principles, and the production of sonographic images of the musculoskeletal system using state of the art equipment.

Graduates may be eligible to apply to the American Registry of Diagnostic Medical Sonography (ARDMS) for national registry in Musculoskeletal Sonography.  Graduates may find employment in clinics, hospitals, physicians' offices, mobile services, and educational institutions.

*Individuals entering this curriculum must be registered or registry-eligible for the American Registry of Diagnostic Medical Sonography (ARDMS) or American Registry for Radiologic Technology (ARRT) exam for sonography.*  The following college is approved to offer this program:

South Piedmont Community College

**\*Nuclear Medicine Technology (A45460)**

*Career Cluster: Health Science*

The Nuclear Medicine Technology curriculum provides the clinical and didactic experience necessary to prepare students to qualify as entry-level Nuclear Medicine Technologists.

Students will acquire the knowledge and skills necessary to properly perform clinical procedures.  These skills include patient care, use of radioactive materials, operation of imaging and counting instrumentation, and laboratory procedures.

Graduates may be eligible to apply for certification/registration examinations given by the Nuclear Medicine Technology Certification Board and the American Registry of Radiologic Technologists.

The following colleges are approved to offer this program:

Caldwell Community College and Technical Institute
Forsyth Technical Community College

Johnston Community College
Pitt Community College
  *awards the credential in collaboration with:*
    Nash Community College

## Nurse Aide (Certificate) (C45840)
*Career Cluster: Health Science*

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.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Blue Ridge Community College
Caldwell Community College
Cape Fear Community College
Carteret Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
College of The Albemarle
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Gaston College
Halifax Community College
Johnston Community College
Mayland Community College
McDowell Technical Community College

Mitchell Community College
Montgomery Community College
Nash Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southeastern Community College
Southwestern Community College
Stanly Community College
Surry Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Wilkes Community College

## *Nutrition and Dietetics Technician (A45860)

The Nutrition and Dietetics Technician program prepares individuals to promote optimal health through proper nutrition by providing personalized services to meet client's needs, and ensure balanced diets. Nutrition and Dietetics Technicians work under the supervision of a registered, licensed dietitian.

Course work includes content related to food, nutrition, communication, and management. The physical, biological, behavioral, and social sciences support these areas.

Employment opportunities include childcare centers, hospitals, correctional centers, public health agencies, retirement centers, rehabilitation centers, hospices, clinics, nursing homes, home care programs, or medical offices.

The following college is approved to offer this program:

Gaston College
  *awards the credential in collaboration with:*
        Catawba Valley Community College
        Lenoir Community College
        Mitchell Community College

**\*Occupational Therapy Assistant (A45500)**

*Career Cluster: Health Science*

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 may be eligible to take the national certification examination for practice as a certified occupational therapy assistant.  Employment opportunities include hospitals, rehabilitation facilities, long-term/extended care facilities, sheltered workshops, schools, home health programs, and community programs.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Pitt Community College |
| Cape Fear Community College | Rowan-Cabarrus Community College |
| Central Piedmont Community College | Southwestern Community College |
| Durham Technical Community College | |

**\*Ophthalmic Medical Personnel (A45210)**

*Career Cluster: Health Science*

The Ophthalmic Medical Personnel Program prepares individuals to perform ophthalmic procedures under the supervision of a licensed physician specializing in Ophthalmology.  Course work includes lecture, laboratory, and clinical training in ocular measurements; ocular testing; lensometry; administering topical and oral medications; eye care; and caring for instruments.

Graduates are employed in medical institutions, clinics, or physician practices.

Graduates may qualify as candidates to take the Joint Commission on Allied Health Personnel, Ophthalmology National Certification Exam.  Diploma graduates may be eligible for Certified Ophthalmic Medical Assistant certification and associate degree graduates may be eligible for Certified Ophthalmic Medical Technician certification. The following colleges are approved to offer this program:

Caldwell Community College and Technical Institute
Central Piedmont Community College
Edgecombe Community College
Sandhills Community College

**\*Ophthalmic Surgical Assistant (Certificate) (C45580)**

This curriculum is designed to prepare qualified Ophthalmic Personnel with the educational preparation necessary to assume the role of the Ophthalmic Surgical Assistant.

Students will apply theoretical knowledge to the care of ophthalmic surgical patients and develop the skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for ophthalmic surgery; and assist Ophthalmologists during surgery,

Graduates may be eligible to apply for the Ophthalmic Surgical Assistant national certification exam.  Employment opportunities include hospitals, clinics, and educational institutions.

Individuals entering the certificate curriculum must currently be employed as a Certified Ophthalmic Assistant (COA).  The following colleges are approved to offer this program:

Fayetteville Technical Community College

### Optical Apprentice (Certificate) (C45520)

*Career Cluster: Health Science*

The Optical Apprentice curriculum is designed to meet the educational requirements of the North Carolina Board of Opticians for opticianry apprentices.

Course work includes the competencies necessary to analyze and interpret prescriptions and to accurately fit and dispense eyewear and contact lenses.

Graduates should qualify for the academic requirements of the apprenticeship program.  Upon completion of all requirements of the apprenticeship program, graduates should be eligible to sit for the North Carolina State Board of Opticians licensing examination.

The following college is approved to offer this program:

Durham Technical Community College

### *Opticianry (A45560)

*Career Cluster: Health Science*

The Opticianry curriculum is designed to prepare graduates to adapt and fit corrective eyewear or ophthalmic devices as prescribed by the ophthalmologist or optometrist.

Students will acquire competencies in all phases of opticianry, including analysis and interpretation of prescriptions; surfacing, benchwork, dispensing, and fitting of eyewear and ophthalmic devices; maintenance of consumer records; effective communication with consumers; and business management skills.

Graduates qualify to take certification examinations given by the American Board of Opticianry, the National Contact Lens Examiners, and the North Carolina State Board of Opticians, as well as other state licensing boards.

The following college is approved to offer this program:

Durham Technical Community College

### Pharmacy Technology  (A45580)

*Career Cluster: Health Science*

The Pharmacy Technology Program prepares individuals to assist the pharmacist in duties that a technician can legally perform and to function within the boundaries prescribed by the pharmacist and the employment agency.

Students will prepare prescription medications, mix intravenous solutions and other specialized medications, update patient profiles, maintain inventories, package medications in unit-dose or med-card form, and gather data used by pharmacists to monitor drug therapy.

Employment opportunities include retail, hospitals, nursing homes, research laboratories, wholesale drug companies, and pharmaceutical manufacturing facilities.  Graduates from the program may be eligible to take the National Certification Examination to become a certified pharmacy technician.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Guilford Technical Community College |
| Cape Fear Community College | Johnston Community College |
| Central Piedmont Community College | Stanly Community College |
| Davidson County Community College | Vance-Granville Community College |
| Durham Technical Community College | Wake Technical Community College |
| Fayetteville Technical Community College | Wayne Community College |
| Forsyth Technical Community College | |

## Phlebotomy (Certificate) (C45600)

*Career Cluster: Health Science*

The Phlebotomy curriculum prepares individuals to obtain blood and other specimens for the purpose of laboratory analysis.

Course work includes proper specimen collection and handling, communication skills, and maintaining patient data.

Graduates may qualify for employment in hospitals, clinics, physicians' offices, and other health care settings and may be eligible for national certification as phlebotomy technicians.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Brunswick Community College
Cape Fear Community College
Cleveland Community College
College of The Albemarle
Davidson County Community College
Gaston College
Halifax Community College
Johnston Community College
Mitchell Community College

Montgomery Community College
Nash Community College
Piedmont Community College
Pitt Community College
Rockingham Community College
Southeastern Community College
Southwestern Community College
Wake Technical Community College
Wayne Community College

## *Physical Therapist Assistant (1+1) (A45640)

*Career Cluster: Health Science*

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.
The following colleges are approved to offer this program:

Caldwell Community College and Technical Institute
Central Piedmont Community College

Guilford Technical Community College
   *awards the credential in collaboration with:*
         Randolph Community College
   Nash Community College

## *Physical Therapist Assistant (2-year program) (A45620)

*Career Cluster: Health Science*

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.

The following colleges are approved to offer this program:

Central Carolina Community College
Craven Community College
Fayetteville Technical Community College
   *awards the credential in collaboration with*
         Bladen Community College:
         James Sprunt Community College
Martin Community College
Rowan-Cabarrus Community College
Southwestern Community College
Surry Community College

## *Polysomnography  (A45670)

*Career Cluster: Health Science*

The Polysomnography curriculum prepares individuals, working in conjunction with a physician, to perform and interpret sleep studies and to provide comprehensive clinical evaluations that are required for the diagnosis of sleep related disorders.

Students should acquire the knowledge and skills necessary to perform sleep studies, including recording and interpreting events observed during sleep.  Treatment of sleep related disorders and patient education focused on healthy sleep habits will also be discussed.

Graduates of accredited programs may be eligible to apply to take the examination offered by the Board of Registered Polysomnographic Technologists.  Employment opportunities may be found in hospitals and freestanding sleep centers.

The following colleges are approved to offer this program:

Catawba Valley Community College
   *awards the credential in collaboration with:*
         Surry Community College
Lenoir Community College
Pitt Community College
Sandhills Community College

## Polysomnography (Certificate)  (C45650)

*Career Cluster: Health Science*

The Polysomnography curriculum prepares individuals, working in conjunction with a physician, to perform and interpret sleep studies and to provide comprehensive clinical evaluations that are required for the diagnosis of sleep related disorders. *Individuals entering the certificate curriculum must possess a minimum of an associate degree.*

Students will acquire the knowledge and skills necessary to perform sleep studies, including recording and interpreting events observed during sleep.  Treatment of sleep related disorders and patient education focused on healthy sleep habits will also be discussed.

Graduates of accredited programs may be eligible to take the registry examination given by the Board of Registered Polysomnographic Technologists. Employment opportunities may be found in hospitals and freestanding sleep centers.

The following colleges are approved to offer this program:

Catawba Valley Community College
Pitt Community College

## Positron Emission Tomography (Diploma)  (D45820)

*Career Cluster: Health Science*

The Positron Emission Tomography curriculum prepares individuals, working in conjunction with PET Technologist, to perform related PET radiopharmacy, procedures, and safety.

Students will acquire the knowledge and skills necessary to perform PET studies, including the use of PET/CT and PET/CT fusion.  Past, present and future PET issues and studies will also be discussed.

Graduates may be eligible to take the registry examination given by the Nuclear Medicine Technology Certification Board. Employment opportunities can be found in hospitals, freestanding PET centers and mobile PET companies.

*Admission criteria include the completion of a diploma in Nuclear Medicine, Radiology or Radiation Therapy.*

The following college is approved to offer this program:

Pitt Community College

**Practical Nursing (Diploma)  (D45660)**

*Career Cluster: Health Science*

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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | James Sprunt Community College |
| Beaufort County Community College | Lenoir Community College |
| Bladen Community College | Martin Community College |
| Brunswick Community College | Mayland Community College |
| Cape Fear Community College | McDowell Technical Community College |
| Central Carolina Community College | Montgomery Community College |
| Cleveland Community College | Nash Community College |
| Coastal Carolina Community College | Richmond Community College |
| College of The Albemarle | Robeson Community College |
| Craven Community College | Rockingham Community College |
| Davidson County Community College | Rowan-Cabarrus Community College |
| Durham Technical Community College | Sampson Community College |
| Edgecombe Community College | South Piedmont Community College |
| Fayetteville Technical Community College | Southeastern Community College |
| Forsyth Technical Community College | Surry Community College |
| Gaston College | Vance-Granville Community College |
| Guilford Technical Community College | Wayne Community College |
| Halifax Community College | Wilson Community College |
| Isothermal Community College | |

**\*Radiation Therapy Technology (A45680)**

*Career Cluster: Health Science*

The Radiation Therapy Technology curriculum is designed to train students to work in conjunction with nurses, physicists, and physicians in the application of prescribed doses of ionizing radiation for the treatment of disease, primarily cancer.

Course work includes physics, anatomy and physiology, dosimetry, and clinical oncology.  The student will be skilled in treatment management, administration of prescribed radiation treatment, and provision of patient support.

Graduates may be eligible to sit for the National Radiation Therapy Exam, given by the American Registry of Radiologic Technologists.  Employment opportunities can be found in hospitals and freestanding cancer centers.

The following colleges are approved to offer this program:

| | |
|---|---|
| Forsyth Technical Community College | Pitt Community College |

## *Radiography (A45700)

*Career Cluster: Health Science*

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.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Carteret Community College
Catawba Valley Community College
Cleveland Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Guilford Technical Community College
Johnston Community College

Lenoir Community College
Pitt Community College
Randolph Community College
Robeson Community College
Rowan-Cabarrus Community College
Sandhills Community College
Southwestern Community College
Stanly Community College
Vance-Granville Community College
Wake Technical Community College
Wilkes Community College

## *Recreational Therapy Assistant (A45150)

*Career Cluster: Health Science*

The recreational therapy assistant curriculum prepares individuals to plan, implement, and document therapeutic recreation interventions, according to national standards of practice. The curriculum emphasizes the use of recreation as treatment designed to (re)habilitate a client's level of functioning and independence.

Course work includes facilitating adaptive, inclusive and universal activities (ropes courses, creative arts, water sports, etc) and leading or co-leading recreational therapy sessions (social skills, team building, problem solving, leisure education etc.) for people with disabilities and their families.

Graduates should qualify for a LRTA license from the North Carolina Board for Recreational Therapy Licensure. Employment opportunities include group homes, retirement facilities, agencies serving people with developmental disabilities, psychiatric or mental health agencies, and other rehabilitation facilities.

The following colleges are approved to offer this program:

Pitt Community College
Western Piedmont Community College

**\*Respiratory Therapy (A45720)**

*Career Cluster: Health Science*

The Respiratory Therapy curriculum prepares individuals to function as respiratory therapists through demonstrated competence in the cognitive, psychomotor, and affective learning domains of respiratory care practice. Graduates perform diagnostic and therapeutic procedures with exposure to current and emerging practice settings.

The curriculum prepares graduates to operate within inter-professional teams and effectively communicate with clients/patients of various ages, ethnicities, and cultures. Application of problem solving strategies, applying ethical decision making, and understanding professional responsibilities are emphasized.

Graduates are eligible to complete the credentialing process through the National Board for Respiratory Care, which will qualify them for a license to practice in a variety of healthcare settings with responsibilities for assessment, treatment, management and education of patients with cardiopulmonary diseases.
The following colleges are approved to offer this program:

| | |
|---|---|
| Carteret Community College | Pitt Community College |
| Catawba Valley Community College | Robeson Community College |
| Central Piedmont Community College | Rockingham Community College |
| Durham Technical Community College | Sandhills Community College |
| Edgecombe Community College | Southwestern Community College |
| Fayetteville Technical Community College | Stanly Community College |
| Forsyth Technical Community College | Wilkes Community College |

**\*Speech-Language Pathology Assistant (A45730)**

*Career Cluster: Health Science*

The Speech-Language Pathology Assistant curriculum prepares graduates to work under the supervision of a licensed Speech-Language Pathologist, who evaluates, diagnoses, and treats individuals with various communication disorders.

Courses provide instruction in methods of screening for speech, language, and hearing disorders and in following written protocols designed to remediate individual communication problems.  Supervised field experiences include working with patients of various ages and with various disorders.

Graduates may be eligible for registration with the North Carolina Board of Examiners for Speech-Language Pathologists and Audiologists and must be supervised by a licensed Speech-Language Pathologist.  They may be employed in healthcare or education settings.

The following colleges are approved to offer this program:

| | |
|---|---|
| Caldwell Community College and Technical Institute | Fayetteville Technical Community College |
| *awards the credential in collaboration with:* | *awards the credential in collaboration with:* |
| Central Piedmont Community College | Central Carolina Community College |
| Mitchell Community College | |

### *Surgical First Assistant (Certificate) (C45870)

*Career Cluster: Health Science*

The Surgical First Assistant curriculum is designed to prepare qualified Surgical Technologists and other surgical professionals with the educational preparation necessary to assume the role of the Surgical First Assistant during operative and other invasive procedures.

Students will learn to apply didactic knowledge to the care of the surgical patient and provide assistance in exposure, hemostasis, and other technical functions that will assist the surgeon in performing a safe operation with optimal results for the patient.

Graduates of an accredited Commission on Accreditation of Allied Health Education Program (CAAHEP) program may be eligible to test with one of the following organizations: National Board of Surgical Technology and Surgical Assisting (NBSTSA), National Surgical Assistant Association (NSAA) and the American Board of Surgical Assisting (ABSA). Employment opportunities include hospitals, clinics, educational institutions, and self-employment.

Individuals entering this curriculum must possess a minimum of an associate degree.

The following college is approved to offer this program:

Fayetteville Technical Community College

### *Surgical Technology (A45740)

*Career Cluster: Health Science*

The Surgical Technology curriculum prepares individuals to assist in the care of the surgical patient in the operating room and to function as a member of the surgical team.

Students will apply theoretical knowledge to the care of patients undergoing surgery and develop skills necessary to prepare supplies, equipment, and instruments; maintain aseptic conditions; prepare patients for surgery; and assist surgeons during operations.

Employment opportunities include labor/delivery/emergency departments, inpatient/outpatient surgery centers, dialysis units/facilities, physicians' offices, and central supply processing units.

*Students of Commission on Accreditation of Allied Health Education Programs (CAAHEP) accredited programs are required to take the national certification exam administered by the National Board on Certification in Surgical Technology and Surgical Assisting (NBSTSA) within a four week period prior to or after graduation.* The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Fayetteville Technical Community College |
| Blue Ridge Community College | Guilford Technical Community College |
| Cape Fear Community College | Isothermal Community College (Diploma) |
| Catawba Valley Community College | Lenoir Community College |
| Central Piedmont Community College | McDowell Technical Community College (Diploma) |
| Cleveland Community College | Robeson Community College (Diploma) |
| Coastal Carolina Community College | Rockingham Community College |
| College of The Albemarle | Sandhills Community College |
| Davidson County Community College | Wake Technical Community College |
| Durham Technical Community College | Wilson Community College |
| Edgecombe Community College | |

**\*Therapeutic Massage (A45750)**

*Career Cluster: Health Science*

The Therapeutic Massage curriculum prepares graduates to work in direct client care settings to provide manipulation, methodical pressure, friction and kneading of the body for maintaining wellness or treating alterations in wellness throughout the lifespan.

Courses will include content in normal human anatomy and physiology, therapeutic massage, ethical/legal issues, business practices, nutrition and psychology.

Employment opportunities include hospitals/rehabilitation centers, health departments, home health, medical offices, nursing homes, spas/health/sports clubs, and private practice. Graduates may be eligible to take the Massage and Bodywork Licensing Exam.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College         Lenoir Community College
Carteret Community College                             Pitt Community College
Central Carolina Community College                     Sandhills Community College
Davidson County Community College                      Southwestern Community College
Forsyth Technical Community College                    Tri-County Community College
Gaston College                                         Wake Technical Community College
Johnston Community College


**\*Veterinary Medical Technology (A45780)**

*Career Cluster: Health Science*

This curriculum is designed to prepare individuals to assist veterinarians in preparing animals, equipment, and medications for examination and surgery; collecting specimens; performing laboratory, radiographic, anesthetic, dental procedures; assisting in surgery; and providing proper husbandry of animals and their environment.

Course work includes instruction in veterinary anatomy, nutrition, parasitology, pathology, physiology, radiology, terminology, zoology, office practices, laboratory techniques, dentistry, and small and large animal clinical practices.

Graduates of accredited programs may be eligible to take state and national examinations administered by the North Carolina Veterinary Medical Board. Graduates may be employed in veterinary clinics; diagnostic, research, or pharmaceutical laboratories; zoos; academic institutions; or other areas associated with animal care.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Cape Fear Community College
Central Carolina Community College
Gaston College
Nash Community College

## *Industrial Technologies*

The Industrial Technologies programs are designed to prepare individuals to work in occupations related to the maintenance, repair, production, and use of equipment used in electronic, mechanical, or manufacturing fields. These occupations require skills that range from the use of hand tools in maintaining or repairing equipment and machinery through the development and production of new products, tools and machines. This program area consists of the following curriculums:

Aerostructure Manufacturing and Repair (A50450)
Biomedical Equipment Technology (A50100)
Bioprocess Technology (A50440)
Computer-Aided Drafting Technology (A50150)
Computer-Integrated Machining (A50210)
Electric Utility Substation and Relay Technology (A50510)
Electrical Power Production Technology (A50130)
Environment, Health, and Safety Technology (A50160)
Facility Maintenance Technology (A50190)
Facility Maintenance Worker (Diploma) (D50170)

Furniture Upholstery (Diploma) (D50220)
Industrial Management Technology (A50260)
Industrial Systems Technology (A50240)
Manufacturing Technology (A50320)
Mechanical Drafting Technology (A50340)
Nondestructive Examination Technology (A50350)
Nuclear Technology (A50460)
Telecommunications Installation and Maintenance
    (Diploma) (D50380)
Welding Technology (A50420)

## *Aerostructure Manufacturing and Repair  (A50450)

*Career Cluster: Manufacturing*

The Aerostructure Manufacturing and Repair Technology curriculum prepares individuals to assemble, fabricate, inspect, manufacture, repair, test and manage the construction of aerostructures in an industrial setting.

Coursework includes materials, production procedures, planning, costing, plant layout, software, quality control, aviation standards and aerostructure assemblies. Emphasis will be placed on aerostructure construction techniques, manufacturing processes, composite manufacturing and repair, and computer numerical control (CNC) machining processes.

Graduates should qualify for employment in aerostructure manufacturing and other similar industries as project assembly and repair technicians, quality testers and inspectors, tooling technicians, composite specialists, fabricators, CNC machinists, project managers and computer-aided design (CAD) technicians.

The following college is approved to offer this program:

Guilford Technical Community College

**\*Biomedical Equipment Technology (A50100)**

*Engineering and Technology: Electrical Engineering Technology*
*Career Cluster: Science, Technology, Engineering, & Mathematics*

The Biomedical Equipment Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.

Course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study that prepares the students to use basic engineering principles and technical skills to install, operate, troubleshoot, and repair sophisticated devices and instrumentation used in the health care delivery system. Includes instruction in instrument calibration, design and installation testing, system safety and maintenance procedures, procurement and installation procedures, and report preparation. With an AAS degree and two years' experience, an individual should be able to become a certified Biomedical Equipment Technician.

The following colleges are approved to offer this program:

Caldwell Community College and Technical Institute
 *awards the credential in collaboration with:*
        Gaston College
        Forsyth Technical Community College
Central Piedmont Community College
Durham Technical Community College
Stanly Community College

## *Bioprocess Technology (A50440)

*Career Cluster: Manufacturing*

The Bioprocess Technology curriculum is designed to prepare individuals to work as Process Operators in biological products manufacturing facilities.  Students will combine basic science and communication skills, manufacturing technologies, and good manufacturing practices in the course of the study.

Students will be expected to develop a strong basic science foundation with a sound understanding of the major technologies employed in the industry.  They will also be expected to develop collaborative and disciplined work ethics while consistently practicing problem-solving skills.

Upon successful completion of the program, individuals should possess the necessary skills to qualify for employment in a variety of Bioprocessing industries.  The following colleges are approved to offer this program:

Johnston Community College
Vance-Granville Community College

## *Computer-Aided Drafting Technology  (A50150)

*Engineering and Technology: Drafting Technology*
*Career Cluster: Science, Technology, Engineering and Mathematics*

The Computer-Aided Drafting Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects.  Course work includes mathematics, natural sciences, engineering sciences and technology. 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.

This course of study that prepares the students to apply technical skills and advanced computer software and hardware to develop plans and related documentation, and manage the hardware and software of a CAD system. Includes instruction in architectural drafting, computer-assisted drafting and design (CADD), creating and managing two and three-dimensional models, linking CAD documents to other software applications, and operating systems.  Graduates should qualify for CAD jobs in architectural and engineering consulting firms and industrial design businesses.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Central Carolina Community College
College of The Albemarle
Craven Community College

## *Computer-Integrated Machining  (A50210)

*Career Cluster: Manufacturing*

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.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Blue Ridge Community College
Cape Fear Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
College of The Albemarle
Craven Community College
Davidson County Community College
Durham Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Haywood Community College

Isothermal Community College
Johnston Community College
Lenoir Community College
McDowell Technical Community College
Mitchell Community College
Nash Community College
Pitt Community College
Randolph Community College
Richmond Community College
Rockingham Community College
Rowan-Cabarrus Community College
Stanly Community College
Surry Community College
Tri-County Community College
Wayne Community College
Western Piedmont Community College


## *Electric Utility Substation and Relay Technology  (A50510)

*Career Cluster: Architecture & Construction*

The Electric Utility Substation and Relay Technology curriculum provides the skills to maintain high voltage equipment and protective systems for the electric utility transmission system.  Training in operation and maintenance of critical infrastructure associated with the transmission grid is included.

Courses are designed to develop student understanding of maintenance and troubleshooting on transmission equipment, including three phase power theory, protective relaying, power transformers, voltage regulators, capacitors, and power circuit breakers common to electric utility and numerous other industries.

Graduates should qualify for entry-level employment in electric utility, renewable energy, and industrial facilities as technicians who diagnose and service equipment and components used for electrical power transmission.

The following college is approved to offer this program:

Richmond Community College

**\*Electrical Power Production Technology (A50130)**
*Career Cluster: Science, Technology, Engineering, & Mathematics*

The Electric Power Production Technology curriculum is designed to provide students with the skills and technical background required for entry-level employment in the operation of modern non-nuclear fueled power facilities.

Students will study major plant systems needed for the reliable operation of power plants, including but not limited to, boilers, combustion equipment, steam/gas turbines, generators, controls logic, fundamentals of operation, equipment maintenance, environmental control equipment, and associated governmental regulations.

Upon successful completion of this program, graduates should qualify for entry-level employment in the electric utility industry, industrial power facilities, and other power-production occupations.

The following college is approved to offer this program:

Piedmont Community College

**\*Environment, Health, and Safety Technology (A50160)**
*Career Cluster: Manufacturing*

The Environment, Health, and Safety Technology curriculum prepares students for employment in the fields of industrial hygiene, occupational safety, and environmental technology.  The program is designed to provide students with a strong education in the practices and applicable regulations relevant to occupational and environmental safety.

Course work includes industrial hygiene, OSHA regulations, EPA regulations, environmental liability, and incident management.

Graduates should qualify for occupational safety or environmental safety technician positions in industrial, research, health care, and institutional facilities.  Students may qualify to take the Associate Safety Professional or Certified Safety Professional examinations.

The following college is approved to offer this program:

Durham Technical Community College

**\*Facility Maintenance Technology (A50190)**
*Career Cluster: Manufacturing*

The Facility Maintenance Technology curriculum prepares individuals to repair and maintain electrical and mechanical systems and physical structures of commercial and industrial institutions.  Emphasis is on multi-disciplined systems maintenance, troubleshooting, and problem resolution.

Course work includes carpentry, interior and exterior finishes, plumbing, electrical, masonry, air conditioning, heating, welding, machining, blueprint reading, building codes, and OSHA regulations, as well as computer applications.

Graduates should qualify for positions as general building mechanics or maintenance technician. The following colleges are approved to offer this program:

Cleveland Community College                                    Wake Technical Community College
Southeastern Community College

**Facility Maintenance Worker (Diploma) (D50170)**

*Career Cluster: Manufacturing*

The Facility Maintenance Worker curriculum is designed to prepare students to maintain and repair physical structures and systems of commercial and industrial establishments such as hotels, hospitals, apartment complexes, and shopping centers.

Students will learn to use hand and power tools; replace defective electrical switches and fixtures; maintain performance of environmental control systems; repair plumbing fixtures, woodwork, plastic, and sheetrock; lay brick; finish small areas of concrete; and paint structures.

Upon completion of this curriculum, the graduate should possess the necessary skills to qualify for employment as a facility maintenance worker.  The following college is approved to offer this program:

Edgecombe Community College

**Furniture Upholstery (Diploma) (D50220)**

*Career Cluster: Manufacturing*

The Furniture Upholstery curriculum prepares the student to become a professional upholsterer.  Students are taught the fundamentals and techniques of furniture upholstery work starting with wooden frames, pattern development, industrial cutting, and sewing skills.  Production quality and speed will be emphasized.

Upon successful completion of the Furniture Upholstery program, the student will be able to develop patterns, lay out and cut cloth, and operate various sewing machines.  Students will also perform spring-up procedures and do the inside and outside of upholstered furniture.

Graduates of the Furniture Upholstery program should qualify for positions as pattern makers, fabric cutters, upholstery sewers, spring-ups, upholsterers, or outsiders.  No colleges are currently approved to offer this program.

**\*Industrial Management Technology (A50260)**

*Manufacturing Production and Process Development: Manufacturing and Industrial Engineering Technology*
*Career Cluster: Manufacturing*

The Industrial Management Technology curriculum is designed to prepare 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.

Course work includes mathematics, systems analysis, leadership and management skills, quality and productivity improvement methods, cost analysis, facilities planning, manufacturing materials and processes, and computerized production methods.

Graduates should qualify as quality improvement technicians, quality assurance and control technicians, front-line supervisors, production planners, inventory supervisors, and manufacturing technicians.

This course of study that prepares the students to use basic engineering principles and management skills to plan and manage operations of industrial and manufacturing processes. Includes instruction in financial management, industrial and human resources management, industrial psychology, management information systems, quality and productivity improvement, quality control, operations research, safety and health issues, and environmental program management.  Graduates should be qualified to enter the workforce as front-line supervisor, engineering assistant, production planner, inventory supervisor, or as a quality control technician.  With additional training and experience, graduates could become plant manager or production managers. The following colleges are approved to offer this program:

Cleveland Community College                                    Pitt Community College
Lenoir Community College

**\*Industrial Systems Technology (A50240)**
*Industrial Systems Technology*
*Career Cluster: Manufacturing*

The Industrial Systems Technology curriculum is designed to prepare or upgrade individuals to safely service, maintain, repair, or install equipment.  Instruction includes theory and skill training needed for inspecting, testing, troubleshooting, and diagnosing industrial systems.

Students will learn multi-craft technical skills in print reading, mechanical systems maintenance, electricity, hydraulics/pneumatics, welding, machining or fabrication, and includes various diagnostic and repair procedures.  Practical application in these industrial systems will be emphasized and additional advanced course work may be offered.

Upon completion of this curriculum, graduates should be able to individually, or with a team, safely install, inspect, diagnose, repair, and maintain industrial process and support equipment. Students will also be encouraged to develop their skills as life-long learners.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Martin Community College |
| Asheville-Buncombe Technical Community College | McDowell Technical Community College |
| Bladen Community College | Montgomery Community College |
| Cape Fear Community College | Nash Community College |
| Catawba Valley Community College | Piedmont Community College |
| Central Carolina Community College | Pitt Community College |
| Cleveland Community College | Randolph Community College |
| Craven Community College | Richmond Community College |
| Davidson County Community College | Roanoke-Chowan Community College |
| Durham Technical Community College | Robeson Community College |
| Edgecombe Community College | Rockingham Community College |
| Fayetteville Technical Community College | Sampson Community College |
| Forsyth Technical Community College | Sandhills Community College |
| Gaston Community College | South Piedmont Community College |
| Guilford Technical Community College | Surry Community College |
| Halifax Community College | Tri-County Community College |
| Haywood Community College | Wayne Community College |
| Isothermal Community College | Western Piedmont Community College |
| Johnston Community College | Wilkes Community College |
| Lenoir Community College | |

### *Manufacturing Technology (A50320)

*Manufacturing Production and Process Development: Manufacturing and Industrial Engineering Technology*
*Career Cluster: Manufacturing*

The Manufacturing Technology curriculum is designed to prepare 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.

Course work includes mathematics, systems analysis, leadership and management skills, quality and productivity improvement methods, cost analysis, facilities planning, manufacturing materials and processes, and computerized production methods.

Graduates should qualify as quality improvement technicians, quality assurance and control technicians, front-line supervisors, production planners, inventory supervisors, and manufacturing technicians.

This course of study that prepares students to use basic engineering principles and technical skills to identify and resolve production problems in the manufacture of products. Includes instruction in machine operations and CNC principles, production line operations, instrumentation, computer-aided manufacturing (CAM) and other computerized production techniques, manufacturing planning, quality control, quality assurance and informational infrastructure. Graduates should qualify for employment as a manufacturing technician, quality assurance technician, CAD/CAM technician, team leader, or research and development technician.

The following colleges are approved to offer this program:

Craven Community College
Davidson County Community College
Edgecombe Community College
Gaston College

Guilford Technical Community College
Isothermal Community College
Nash Community College
Randolph Community College


### *Mechanical Drafting Technology (A50340)

*Engineering and Technology: Drafting Technology*
*Career Cluster: Science, Technology, Engineering and Mathematics*

The Mechanical Drafting Technology curriculum is designed to prepare students through the study and application of principles from mathematics, natural sciences, and technology and applied processes based on these subjects. Course work includes mathematics, natural sciences, engineering sciences and technology. 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.

This course of study that prepares the 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. Includes 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 for employment in mechanical areas such as manufacturing, fabrication, research and development, and service industries.

The following colleges are approved to offer this program:

Cleveland Community College
Isothermal Community College
Rowan-Cabarrus Community College

Surry Community College
Wake Technical Community College

**\*Nondestructive Examination Technology (A50350)**

*Quality Assurance: Nondestructive Examination Technology*
*Career Cluster: Manufacturing*

The Nondestructive Examination Technology curriculum is designed to prepare students to use scientific principles and technical skills to the operation of industrial and research testing equipment.

The course work includes mathematics, natural sciences, engineering sciences and technology.

Graduates should qualify to obtain occupations such as technical service providers, materials and technologies testing services, process improvement technicians, engineering technicians, construction technicians and managers, industrial and technology managers, or research technicians.

This course of study prepares the students to apply technical skills in nondestructive testing of materials and component parts for flaws or defects jeopardizing structural integrity.  Course work includes ultrasonics, radiography, liquid penetrant, magnetic particle eddy current and visual testing methods.  Applied math and physics are an integral part of NDE and the curriculum. The NDE curriculum meets the initial training requirements of ASNT's SNT-TC-1A, permitting graduates to obtain NDE certification after a few months of on-the-job experience.  Career opportunities exist in applied NDE, material sciences, technical sales, and quality control in many industries.

The following college is approved to offer this program:

Central Piedmont Community College
  *awards the credential in collaboration with:*
        Gaston College

**\*Nuclear Technology (A50460)**

*Career Cluster: Manufacturing*

The Nuclear Technology curriculum prepares individuals to become qualified reactor field technicians who are employed by licensed nuclear reactor facilities.

Course work includes theory and application related to industrial and engineering technology disciplines including nuclear reactor theory, reactor systems, industrial and nuclear safety, instrumentation, electrical generation, automation and robotics, and may include quality control, welding, and various metallurgical inspection procedures.

Upon completion, graduates should qualify as entry-level nuclear reactor technicians and have academic preparations to advance into other industrial or engineering technician positions within the commercial nuclear power industry.

The following college is approved to offer this program:

Cape Fear Community College

**Telecommunications Installation and Maintenance (Diploma)  (D50380)**

*Career Cluster: Arts, A/V Technology & Communications*

The Telecommunications Installation and Maintenance curriculum prepares individuals for jobs in the telecommunication industry.  It provides fundamental training for new students and provides upgrade training for current employees of telecommunications companies.

Course work includes basic electricity, cable splicing, fiber optics, LAN-copper, cable fault location and repair, central office administration and other related topics.  Emphasis is placed on hands-on installation and maintenance training.

A graduate will be prepared to work in the telecommunication industry in outside plant operations, on central office equipment, and business communications equipment.  The following college is approved to offer this program:

Central Carolina Community College

**\*Welding Technology (A50420)**

*Production: Welding Technology*
*Career Cluster: Manufacturing*

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 the student 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.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Cape Fear Community College
Carteret Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Craven Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Halifax Community College
Haywood Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College
Lenoir Community College

Mayland Community College
McDowell Technical Community College
Mitchell Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
South Piedmont Community College
Southeastern Community College
Southwestern Community College
Stanly Community College (Diploma)
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilkes Community College
Wilson Community College

## Public Service Technologies

The Public Service Technologies programs are designed to train people for employment in the public and private sector in service-related careers. Some of these programs train persons for careers in local, state and federal governments, while other programs provide individuals with careers in providing services to individuals and groups to meet their personal interests, needs and welfare. This program area includes the following curriculums:

Animal Care and Management Technology (A55100)
Baking and Pastry Arts (A55130)
Barbering (D55110)
Basic Law Enforcement Training (Certificate) (C55120)
Community Spanish Interpreter (A55370)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Criminal Justice Technology/Financial Crime /Computer Fraud (A5518B)
Criminal Justice Technology/Forensic Science (A5518C)
Culinary Arts (A55150)
Cyber Crime Technology (A55210)
Early Childhood Administration (Certificate) (C55850)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Emergency Management (A55460)
Esthetics Instructor (Certificate) (C55270)

Esthetics Technology (C55230)
Fire Protection Technology (A55240)
Food Service Technology (Diploma) (D55250)
Funeral Service Education (A55260)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)
Interpreter Education (A55300)
Lateral Entry (Certificate) (C55430)
Library and Information Technology (A55310)
Manicuring Instructor (Certificate) (C55380)
Manicuring/Nail Technology (Certificate) (C55400)
Occupational Education Associate (A55320)
Outdoor Leadership (A55330)
Recreation and Leisure Studies (A55360)
School-Age Care (Certificate) (C55450)
School-Age Education (A55440)

## *Animal Care and Management Technology (A55100)

*Animal Systems: Animal Care Management Technology*
*Career Cluster: Agriculture, Food, and Natural Resources*

The Animal Care and Management Technology curriculum is designed to provide students with the opportunity to acquire the skills, knowledge, and attitudes necessary for employment in the animal care industry.

Course work includes instruction designed to educate students in the basic sciences pertinent to animal work including legal aspects, basic management skills needed to work with both people and animals, and hands-on skills necessary for safety and health.

Graduates should qualify for opportunities with humane organizations, kennels, city and county animal control agencies, animal shelters, zoos, residency facilities, and veterinarians.

The following college is approved to offer this program:

Alamance Community College

## *Baking and Pastry Arts (A55130)

*Career Cluster: Hospitality & Tourism*

This curriculum is designed to provide students with the skills and knowledge required for employment in the baking/pastry industry, including restaurants, hotels, independent bakeries/pastry shops, wholesale/retail markets, and high-volume bakeries, and/or further academic studies.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism.   Course work includes specialty/artisanal breads, desserts/pastries, decorative work, high-volume production and food marketing.

Graduates should qualify for entry-level positions, such as pastry/bakery assistant, area pastry chef and assistant pastry chef. American Culinary Federation certification may be available to graduates.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Robeson Community College |
| Cape Fear Community College | Sandhills Community College |
| Carteret Community College | Wake Technical Community College |
| Central Piedmont Community College | Wilkes Community College |
| Edgecombe Community College | |

## Barbering (A55110)

*Career Cluster: Human Services*

The Barbering Curriculum is designed to provide competency-based knowledge, scientific/artistic principles and hands-on fundamentals associated with the barber industry.  The curriculum also provides a simulated environment that enables students to develop manipulative skills.

Course work includes instruction in all phases of professional barbering, hair design, chemical processes, skin care, nail care, multi-cultural practices, business/computer principles, product knowledge and other selected topics.

Graduates should qualify to sit for the State Board of Examiners.  Upon successfully passing the State Board exam, graduates will be issued a license.  Employment is available in barbershops and related businesses.

The following colleges are approved to offer this program:

Central Carolina Community College
Edgecombe Community College
Roanoke-Chowan Community College

**Basic Law Enforcement Training (Certificate) (C55120)**

*Career Cluster: Law, Public Safety, Corrections & Security*

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 alcoholic 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 which include the certification examination 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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Johnston Community College |
| Beaufort County Community College | Lenoir Community College |
| Bladen Community College | Mayland Community College |
| Brunswick Community College | McDowell Technical Community College |
| Caldwell Community College and Technical Institute | Mitchell Community College |
| Cape Fear Community College | Montgomery Community College |
| Carteret Community College | Nash Community College |
| Catawba Valley Community College | Pitt Community College |
| Central Carolina Community College | Randolph Community College |
| Central Piedmont Community College | Robeson Community College |
| Cleveland Community College | Rockingham Community College |
| Coastal Carolina Community College | Rowan-Cabarrus Community College |
| College of The Albemarle | Sampson Community College |
| Craven Community College | Sandhills Community College |
| Davidson County Community College | South Piedmont Community College |
| Durham Technical Community College | Southeastern Community College |
| Fayetteville Technical Community College | Stanly Community College |
| Forsyth Technical Community College | Vance-Granville Community College |
| Gaston College | Wayne Community College |
| Guilford Technical Community College | Western Piedmont Community College |
| Halifax Community College | Wilkes Community College |
| Isothermal Community College | Wilson Community College |
| James Sprunt Community College | |

**\*Community Spanish Interpreter (A55370)**

*Career Cluster: Education & Training*

The Community Spanish Interpreter curriculum prepares individuals to work as entry-level bilingual professionals who will provide communication access in interview and interactive settings.  In addition, this curriculum provides educational training for working professionals who want to acquire Spanish language skills.

Course work includes the acquisition of Spanish: grammar, structure, and sociolinguistic properties, cognitive processes associated with interpretation between Spanish and English; the structure and character of the Hispanic community; and acquisition of communication skills.

Graduates should qualify for entry-level jobs as para-professional bilingual employees in educational systems or a variety of community settings.  Individuals may choose from part-time, full-time, or self-employment/free-lance positions, or apply language skills to other human service related areas.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Durham Technical Community College |
| Beaufort County Community College | Johnston Community College |
| Blue Ridge Community College | Sampson Community College |
| Cape Fear Community College | Surry Community College |
| Cleveland Community College | Wilson Community College |

**\*Cosmetology (A55140)**
*Career Cluster: Human Services*

The Cosmetology curriculum is designed to provide competency-based knowledge, scientific/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, multi-cultural practices, business/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.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Carteret Community College
Catawba Valley Community College *(contract)*
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Craven Community College
Davidson County Community College
Edgecombe Community College
Fayetteville Technical Community College *(contract)*
Gaston College
Guilford Technical Community College
Halifax Community College
Haywood Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College

Lenoir Community College
Martin Community College
Mayland Community College
McDowell Technical Community College
Mitchell Community College *(Diploma)*
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College *(contract)*
Randolph Community College
Roanoke Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
Southeastern Community College
Southwestern Community College
Stanly Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wilkes Community College
Wilson Community College *(contract)*

**Cosmetology Instructor  (Certificate) (C55160)**

*Career Cluster: Human Services*

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.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Carteret Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of the Albemarle
Edgecombe Community College
Fayetteville Technical Community College
Gaston College

Haywood Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College
Martin Community College
McDowell Technical Community College
Mitchell Community College
Piedmont Community College
Randolph Community College
Rowan-Cabarrus Community College
Sampson Community College
Southeastern Community College
Stanly Community College
Tri-County Community College
Vance-Granville Community College
Western Piedmont Community College

**\*Criminal Justice Technology (A55180)**

*Career Cluster: Law, Public Safety, Corrections & Security*

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.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Beaufort County Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Cape Fear Community College
Carteret Community College
Catawba Valley Community College
    *awards the credential in collaboration with:*
        Caldwell Community College and Technical Institute
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Coastal Carolina Community College
College of The Albemarle
Craven Community College
Davidson County Community College
Durham Technical Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Halifax Community College
Haywood Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College
Lenoir Community College

Martin Community College
Mayland Community College
Mitchell Community College
Montgomery Community College
Nash Community College
Pamlico Community College
Piedmont Community College
Pitt Community College
Randolph Community College
Richmond Community College
Roanoke-Chowan Community College
Robeson Community College
Rockingham Community College
Rowan-Cabarrus Community College
Sampson Community College
Sandhills Community College
South Piedmont Community College
Southeastern Community College
Southwestern Community College
Stanly Community College
Surry Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
    *awards the credential in collaboration with:*
        McDowell Technical Community College
Wilkes Community College
Wilson Community College

**\*Criminal Justice Technology/Financial Crime/Computer Fraud (A5518B)**

*Career Cluster: Law, Public Safety, Corrections & Security*

Financial Crime/Computer Fraud is a concentration under the curriculum of Criminal Justice Technology. The curriculum is designed to prepare students for positions in the public or private sector in financial crime or computer fraud investigation.

Students will study financial criminal activity and computer investigative security procedures from a law enforcement perspective through forensic accounting and investigative computer courses.

Graduates should qualify for positions in either the public or private sector investigating fraud within financial institutions and/or computer crimes, including fraud, hacking, and identity theft.

The following colleges are approved to offer this program:

Pitt Community College

## *Criminal Justice Technology/Forensic Science (A5518C)

*Career Cluster: Law, Public Safety, Corrections & Security*

Forensic Science is a concentration under the curriculum of Criminal Justice Technology, which focuses on the application of the physical, biomedical, and social sciences to the analysis and evaluation of physical evidence, human testimony and criminal suspects. Study will focus on local, state, and federal law enforcement, evidence processing and procedures.

Students will learn both theory and hands-on analysis of latent evidence. They will learn fingerprint classification, identification, and chemical development. Students will record, cast, and recognize footwear and tire-tracks; and process crime scenes. Issues and concepts of communications and the use of computers and computer assisted design programs in crime scene technology will be discussed.

Graduates should qualify for employment in a variety of criminal justice organizations especially in local, state, and federal law enforcement, and correctional agencies.
The following colleges are approved to offer this program:

Alamance Community College
Blue Ridge Community College
Catawba Valley Community College
 *awards the credential in collaboration with:*
        Caldwell Community College
Central Carolina Community College
Coastal Carolina Community College
Fayetteville Technical Community College

Forsyth Technical Community College
Gaston College
Johnston Community College
Nash Community College
Southeastern Community College
Surry Community College
Wake Technical Community College
Wayne Community College

## *Culinary Arts (A55150)

*Career Cluster: Hospitality & Tourism*

This curriculum provides specific training required to prepare students to assume positions as trained culinary professionals in a variety of foodservice settings including full service restaurants, hotels, resorts, clubs, catering operations, contract foodservice and health care facilities.

Students will be provided theoretical knowledge/practical applications that provide critical competencies to meet industry demands, including environmental stewardship, operational efficiencies and professionalism. Courses include sanitation/safety, baking, garde manger, culinary fundamentals/production skills, nutrition, customer service, purchasing/cost control, and human resource management.

Graduates should qualify for entry-level opportunities including prep cook, line cook, and station chef. American Culinary Federation certification may be available to graduates. With experience, graduates may advance to positions including sous chef, pastry chef, executive chef, or foodservice manager.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Caldwell Community College and Technical Institute
Cape Fear Community College
Carteret Community College
Central Carolina Community College
Central Piedmont Community College
Coastal Carolina Community College
College of The Albemarle
Fayetteville Technical Community College
Guilford Technical Community College
Lenoir Community College

Mitchell Community College
Nash Community College
Robeson Community College
Sandhills Community College
South Piedmont Community College
Southwestern Community College
Stanly Community College
Tri-County Community College
Vance-Granville Community College
Wake Technical Community College
Wilkes Community College
Wilson Community College

**\*Cyber Crime Technology (A55210)**

*Career Cluster: Information Technology*

This curriculum will prepare students to enter the field of computer crime investigations and private security. Students completing this curriculum will be capable of investigating computer crimes, properly seize and recover computer evidence and aid in the prosecution of cyber criminals.

Course work in this curriculum will include a division of work in the disciplines of criminal justice and computer information systems. Additionally, students will be required to take specific cyber crime classes.

Graduates should qualify to become computer crime investigators for local or state criminal justice agencies. Also these graduates should be competent to serve as computer security specialists or consultants with private business.

The following colleges are approved to offer this program:

Forsyth Technical Community College

Guilford Technical Community College

South Piedmont Community College

Southwestern Community College

Stanly Community College


**\*Early Childhood Administration (Certificate) (C55850)**

*Career Cluster: Education & Training*

This curriculum prepares individuals pursuing administrating roles in diverse child care settings to effectively work with children, families and teachers. The certificate is composed of learning opportunities in developmental theories, competency and evidence-based professional knowledge, administrative skills and leadership qualities.

Course work includes foundations in early childhood education, physical/nutritional needs of young children, safety issues in the care of young children; communication and leadership skills with teachers, families and children; programming and staffing, budgeting/financial management and marketing, and rules and regulations of early childhood programs.

Employment opportunities include entrepreneurship and/or management of child development and child care programs, preschools, public and private schools, recreational centers, Early Head Start and Head Start programs, and other programs.

The following college is approved to offer this program:

Alamance Community College

Blue Ridge Community College

Central Carolina Community College

Central Piedmont Community College

Davidson County Community College

Fayetteville Technical Community College

Haywood Technical Community College

Isothermal Community College

Johnston Community College

McDowell Technical Community College

Richmond Community College

Robeson Community College

Southwestern Community College

Stanly Community College

Surry Community College

**\*Early Childhood Education (A55220)**

*Career Cluster: Education & Training*

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.

This program prepares individuals to promote child development and learning, work with diverse families and children, observe, document and assess to support young children and families, use content knowledge to build meaningful curriculum, and use developmentally effective approaches in collaboration with other early childhood professionals. Potential course work includes instruction in all areas of child development such as emotional/social/health/physical/language/communication, approaches to play and learning, working with diverse families, and related observations/student teaching experiences.

This curriculum is approved for offering at all of the 58 community colleges.


**\*Early Childhood Preschool (Certificate) (C55860)**

*Career Cluster: Education & Training*

This curriculum prepares individuals to work with preschool aged children (3-5) in diverse learning environments. Students will combine learned theories, competency-based knowledge, and practice in actual settings with preschool children.

Course work includes child growth and development, physical/nutritional needs of preschool children, safety issues in the care of preschool children; care and guidance; communication skills with families and children; design and implementation of appropriate curriculum; and other related topics.

Graduates should be prepared to plan and implement developmentally appropriate preschool 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 other preschool programs.

The following college is approved to offer this program:

| | |
|---|---|
| Alamance Community College | Isothermal Community College |
| Blue Ridge Community College | Johnston Community College |
| Central Carolina Community College | Lenoir Community College |
| Central Piedmont Community College | Richmond Community College |
| Cleveland Community College | Robeson Community College |
| Davidson County Community College | Southwestern Community College |
| Fayetteville Technical Community College | Stanly Community College |
| Haywood Community College | Western Piedmont Community College |

**\*Emergency Management (A55460)**

*Career Cluster: Human Services*

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.

The following colleges are approved to offer this program:

Blue Ridge Community College
Caldwell Community College and Technical Institute
   *awards the credential in collaboration with:*
       Catawba Valley Community College
Cape Fear Community College
Catawba Valley Community College
Coastal Carolina Community College
Durham Technical Community College
Fayetteville Technical Community College

Forsyth Technical Community College
Gaston College
Guilford Technical Community College
Lenoir Community College
McDowell Technical Community College
Nash Community College
Rowan-Cabarrus Community College
Sampson Community College
Wayne Community College


**Esthetics Instructor (Certificate) (C55270)**

*Career Cluster: Human Services*

The Esthetics Instructor curriculum provides a course of study covering the skills needed to teach the theory and practices of esthetics as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of esthetics theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Esthetics Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or esthetics school.

The following colleges are approved to offer this program:

Blue Ridge Community College
Central Carolina Community College
Cleveland Community College
Fayetteville Technical Community College
Gaston College

Isothermal Community College
Martin Community College
McDowell Technical Community College
Pamlico Community College

**Esthetics Technology (Certificate) (C55230)**

*Career Cluster: Human Services*

The Esthetics Technology curriculum provides competency-based knowledge, scientific/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/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 may be licensed and qualify for employment in beauty and cosmetic/skin care salons, as a platform artist, and in related businesses.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Fayetteville Technical Community College |
| Asheville-Buncombe Technical Community College | Gaston College |
| Blue Ridge Community College | Isothermal Community College |
| Cape Fear Community College | Martin Community College |
| Carteret Community College | McDowell Technical Community College |
| Central Carolina Community College | Mitchell Community College |
| Cleveland Community College | Pamlico Community College |
| Craven Community College | Rowan-Cabarrus Community College |
| Davidson County Community College | Tri-County Community College |
| Edgecombe Community College | Wake Technical Community College |

**\*Fire Protection Technology (A55240)**

*Career Cluster: Law, Public Safety, Corrections & Security*

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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Davidson County Community College |
| Asheville-Buncombe Technical Community College | Durham Technical Community College |
| Blue Ridge Community College | Fayetteville Technical Community College |
| Cape Fear Community College | Forsyth Technical Community College |
| Catawba Valley Community College | Gaston College |
| *awards the credential in collaboration with:* | Guilford Technical Community College |
| Rockingham Community College | Johnston Community College |
| Central Piedmont Community College | Mitchell Community College |
| *awards the credential in collaboration with:* | Nash Community College |
| South Piedmont Community College | Rockingham Community College |
| Stanly Community College | Rowan-Cabarrus Community College |
| Cleveland Community College | Sandhills Community College |
| Coastal Carolina Community College | Wake Technical Community College |

**Food Service Technology (Diploma) (D55250)**

*Career Cluster: Hospitality & Tourism*

This curriculum is designed to introduce students to the foodservice industry and prepare them for entry-level positions in industrial, institutional or commercial production foodservice operations.

Courses include sanitation, basic and intermediate foodservice production skills, baking, menus, purchasing and basic cost control.

Graduates should qualify for employment as line cooks, prep cooks, or bakers in production foodservice settings or entry-level kitchen management in an institutional foodservice setting.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Nash Community College |
| Carteret Community College | |

**\*Funeral Service Education (A55260)**

*Career Cluster: Human Services*

The Funeral Service Education curriculum provides students with the opportunity to become proficient in basic funeral service skills.

In addition to the general education courses required in the curriculum, students will complete technical courses such as human anatomy, microbiology, embalming theory and practice, embalming chemistry, restorative arts, funeral law, and funeral home operations.

Graduates of the curriculum, upon passing the state and national exams, completing an internship in a funeral home, and satisfying all state board of funeral service requirements, will be qualified for employment as embalmers and/or funeral directors.

he following college is approved to offer this program:

Fayetteville Technical Community College

**\*General Occupational Technology (A55280)**

The General Occupational Technology curriculum provides individuals with an opportunity to upgrade skills and to earn an associate degree, diploma, and/or certificate by taking courses suited for individual occupational interests and/or needs.

The curriculum content will be customized for students according to occupational interests and needs. A program of study for each student will be selected from any non-developmental level courses offered by the College.

Graduates will become more effective workers, better qualified for advancements within their field of employment, and become qualified for a wide range of entry-level employment opportunities.

The following colleges are approved to offer this program:

| | |
|---|---|
| Asheville-Buncombe Technical Community College | Lenoir Community College |
| Beaufort County Community College | Martin Community College |
| Bladen Community College | Mayland Community College |
| Blue Ridge Community College | McDowell Technical Community College |
| Carteret Community College | Mitchell Community College |
| Catawba Valley Community College | Nash Community College |
| Central Carolina Community College | Piedmont Community College |
| Central Piedmont Community College | Pitt Community College |
| Cleveland Community College | Randolph Community College |
| College of the Albemarle | Robeson Community College |
| Davidson County Community College | Rockingham Community College |
| Edgecombe Community College | South Piedmont Community College |
| Forsyth Technical Community College | Stanly Community College |
| Gaston College | Surry Community College |
| Guilford Technical Community College | Tri-County Community College |
| Isothermal Community College | Wake Technical Community College |
| James Sprunt Community College | Western Piedmont Community College |
| Johnston Community College | |

## Infant/Toddler Care (Certificate) (C55290)

*Career Cluster: Education & Training*

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/toddler growth and development: physical/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/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/toddler programs.

The following colleges are approved to offer this program:

Alamance Community College
Asheville-Buncombe Technical Community College
Bladen Community College
Blue Ridge Community College
Brunswick Community College
Catawba Valley Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
College of the Albemarle
Craven Community College
Davidson County Community College
Durham Technical Community College
Fayetteville Community College
Gaston College
Haywood Community College
Isothermal Community College
James Sprunt Community College

Johnston Community College
Lenoir Community College
McDowell Technical Community College
Mitchell Community College
Piedmont Community College
Randolph Community College
Richmond Community College
Robeson Community College
Rowan-Cabarrus Community College
South Piedmont Community College
Southwestern Community College
Stanly Community College
Surry Community College
Vance-Granville Community College
Wake Technical Community College
Wayne Community College
Western Piedmont Community College
Wilson Community College

## *Interpreter Education (A55300)

*Career Cluster: Education & Training*

The Interpreter Education curriculum prepares individuals to work as entry-level Sign Language Interpreters who will provide communication access in interview and interactive settings. In addition, this curriculum provides in-service training for working interpreters who want to upgrade their skills.

Course work includes the acquisition of American Sign Language (ASL); grammar, structure, and sociolinguistic properties; cognitive processes associated with interpretation between ASL and English; the structure and character of the deaf community; and acquisition of consecutive and simultaneous intrepreting skills.

Entry-level jobs for para-professional interpreters are available in educational systems or a variety of community settings. Individuals may choose from part-time, full-time, or self-employment/free lance positions or apply language skills to other human service related areas.

The following colleges are approved to offer this program:

Blue Ridge Community College
 *awards the credential in collaboration with:*
      Fayetteville Technical Community College
Cape Fear Community College

Central Piedmont Community College
Western Piedmont Community College
Wilson Community College

**Lateral Entry (Certificate) (C55430)**

*Career Cluster: Education & Training*

The Lateral Entry curriculum provides a course of study leading to the development of the general pedagogy competencies needed to become certified to teach by the North Carolina Department of Public Instruction.

Course work includes human growth and development, learning theory, instructional technology, school policies and procedures, home, school, and community collaborations, and classroom organization and management to enhance learning. Courses offered by partnering senior institutions include instructional methods, literacy, and diversity.

Graduates should meet the general pedagogy competencies within the first three years of teaching, including a minimum of six semester hours per school year. Additional requirements, such as pre-service training and passing the PRAXIS, are required for licensure.

The following colleges are approved to offer this program:

Central Piedmont Community College
Cleveland Community College
Edgecombe Community College
Forsyth Technical Community College

Gaston College
Sampson Community College
Vance-Granville Community College
Wake Technical Community College

**\*Library and Information Technology (A55310)**

*Career Cluster: Education & Training*

This curriculum is designed to prepare graduates for employment with organizations that use technology to process, manage, and communicate information.  The objective is the development of generalists and specialist in the management of electronic library resources.

Students will complete courses designed to develop proficiency in the use of electronic resources for information retrieval, inventory control, information cataloging and classification, program promotion, circulation systems, audiovisual operations, hardware/software maintenance, problem solving and telecommunications.

Graduates should qualify for employment in a variety of positions in a library, media, learning resources, information, or instructional materials center or in any organization engaged in library-related activities.

The following college is approved to offer this program:

Central Carolina Community College

## Manicuring Instructor (Certificate)  (C55380)

*Career Cluster: Human Services*

The Manicuring Instructor curriculum provides a course of study covering the skills needed to teach the theory and practices of manicuring as required by the North Carolina State Board of Cosmetology.

Course work includes all phases of manicuring theory laboratory instruction.

Graduates should be prepared to take the North Carolina Cosmetology State Board Manicuring Instructor Licensing Exam and upon passing be qualified for employment in a cosmetology or manicuring school.

The following colleges are approved to offer this program:

| | |
|---|---|
| Isothermal Community College | Stanly Community College |
| Martin Community College | Western Piedmont Community College |


## Manicuring/Nail Technology (Certificate)  (C55400)

*Career Cluster: Human Services*

The Manicuring/Nail Technology curriculum provides competency-based knowledge, scientific/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/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.

The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Mayland Community College |
| Asheville-Buncombe Technical Community College | McDowell Technical Community College |
| Beaufort County Community College | Mitchell Community College |
| Carteret Community College | Randolph Community College |
| Central Carolina Community College | Rowan-Cabarrus Community College |
| Cleveland Community College | Sampson Community College |
| Coastal Carolina Community College | Southeastern Community College |
| Fayetteville Technical Community College | Stanly Community College |
| Haywood Community College | Western Piedmont Community College |
| Isothermal Community College | Wilkes Community College |
| Martin Community College | |

**\*Occupational Education Associate (A55320)**

*Career Cluster: Human Services*

The Occupational Education Associate curriculum is designed for individuals skilled and experienced in a trade or technical specialty who would like to receive an associate degree in preparation for teaching or other purposes.

Course work is designed to supplement previous education, training, and/or experience the individual has already attained.

Graduates of the program may find employment as instructors in the field of occupational education. The following colleges are approved to offer this program:

Isothermal Community College                                           Southwestern Community College
Lenoir Community College

**\*Outdoor Leadership (A55330)**

*Education/Training: Outdoor Leadership*
*Career Cluster: Education and Training*

The Outdoor Leadership curriculum is designed to prepare individuals to be successful professionals in outdoor adventure, education and leadership.

Course work includes technical training in the areas such as backpacking, canoeing, kayaking, and rock-climbing. These skills are taught through facilitation and experiential learning methodologies. This course of study includes interpersonal skills and leadership skills such as group process, conflict resolution, program planning, and management issues.

Graduates from this program will have a sound background in outdoor leadership blended with a solid foundation of general education, business, and computer skills. Graduates are prepared for employment in the adventure tourism industry, therapeutic wilderness programs, specialized adventure/leadership programs, adventure programs for youth, challenge course industry, city, county, and state outdoor programs, public and private outdoor education centers, and private and public school outdoor programs.

The following college is approved to offer this program:

Southwestern Community College

**\*Recreation and Leisure Studies (A55360)**

*Career Cluster: Hospitality & Tourism*

The Recreation and Leisure Studies curriculum prepares individuals to plan, direct, and implement recreation activities in diverse environments for all age groups. The program is designed to meet the needs of students interested in the private, public, commercial, or therapeutic environment.

Course work includes introductory courses concerning history, terminology, programming, and general information concerning the recreation profession. Students learn recreation programs and activities in the following areas: cultural arts, team sports, outdoor education, wellness, individual activities, and adapted activities.

Upon completion, graduates should qualify for a variety of assistant-level positions at recreation centers, schools, hospitals, nursing facilities, parks, and commercial recreation establishments. They will be an asset in designing and implementing recreation programs and activities.

The following colleges are approved to offer this program:

Davidson County Community College

## School-Age Care (Certificate)  (C55450)

*Career Cluster: Education & Training*

The School-Age Care curriculum prepares individuals to work with school-age children in diverse learning environments. The curriculum is specifically designed for students planning to work in public or private school-age care environments.

Course work includes child growth/development; physical/nutritional needs of school-age children; care and guidance of school-age children; and communication skills with parents and children.   Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of school-age populations.

Graduates are prepared to plan and implement developmentally appropriate activities in school-age environments. Employment opportunities include school-age teaching or school-age administration positions in child care/development programs, group leaders, before and after school programs, recreational centers and other programs that work with school-age populations.

The following colleges are approved to offer this program:

Blue Ridge Community College
Central Carolina Community College
Central Piedmont Community College
Cleveland Community College
Gaston College

Johnston Community College
Richmond Community College
Robeson Community College
Stanly Community College
Vance-Granville Community College

## School-Age Education  (A55440)

*Career Cluster: Education & Training*

The School-Age Education curriculum prepares individuals to work with children in elementary through middle grades in diverse learning environments. Students will combine learned theories with practice in actual settings with school-age children under the supervision of qualified teachers.

Course work includes child growth/development; computer technology in education; physical/nutritional needs of school-age children; care and guidance of school-age children; and communication skills with families and children.  Students will foster the cognitive/language, physical/motor, social/emotional, and creative development of school-age populations.

Graduates are prepared to plan and implement developmentally appropriate programs in school-aged environments. Employment opportunities include school-age teachers in child care programs, before/after-school programs, paraprofessional positions in public/ private schools, recreational centers, and other programs that work with school-age populations.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Beaufort County Community College
Blue Ridge Community College
Central Carolina Community College
Cleveland Community College
Edgecombe Community College
Fayetteville Technical Community College
Forsyth Technical Community College
Isothermal Community College
James Sprunt Community College
Johnston Community College

Martin Community College
McDowell Technical Community College
Mitchell Community College
Rowan-Cabarrus Community College
Sampson Community College
South Piedmont Community College
Southwestern Community College
Stanly Community College
Tri-County Community College
Wilson Community College

## *Transport Systems Technologies*

The Transport Systems Technologies programs prepare individuals for job opportunities as technicians in a variety of automotive, aviation and marine fields.  The curriculums will include the fundamentals of oral and written communications, mathematics, physics, and computer skills.  In some curriculums, graduates will acquire the skills to service brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/transaxles, engine repair, climate control, and manual drive trains; to perform hands-on repairs in the areas of non-structural and structural repairs, MIG welding, plastics and adhesives, and refinishing; and to service, troubleshoot, and repair medium and heavy duty vehicles.  In one curriculum, graduates will acquire the skills to drive tractor trailer rigs.

In some curriculums, graduates will acquire the skills needed to understand the fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, and instrument and commercial ground training; and the troubleshooting and repair procedures of airframe and power plant systems.  In some curriculums, graduates acquire the skills to service, troubleshoot, and repair motorcycles, marine engines, and small engine-powered equipment. The curriculums in this program area include:

| | |
|---|---|
| Agricultural Systems Technology (A60410) | Boat Manufacture and Service (Diploma) (D60330) |
| Alternative Transportation Technology (Diploma) (D60420) | Collision Repair and Refinishing Technology (A60130) |
| Automotive Customizing Technology (A60190) | Construction Equipment Systems Technology (A60450) |
| Automotive Light-Duty Diesel Technology (Diploma) (D60430) | Diesel and Heavy Equipment Technology (A60460) |
| Automotive Restoration Technology (Diploma) (D60140) | Marine Propulsion Systems (Diploma) (D60220) |
| Automotive Systems Technology (A60160) | Motorcycle Mechanics (A60260) |
| Aviation Electronics (Avionics) Technology (A60150) | Motorsports Management Technology (A60270) |
| Aviation Management and Career Pilot Technology (A60180) | Race Car Technology (A60400) |
| Aviation Systems Technology (A60200) | Truck Driver Training (Certificate) (C60300) |

## *Agricultural Systems Technology (A60410)

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Agricultural Systems Technology* program prepares individuals to maintain and repair specialized farm, ranch, and agribusiness power equipment and vehicles. Includes instruction in the principles of diesel, combustion, electrical, steam, hydraulic, and mechanical systems and their application to the maintenance of terrestrial and airborne crop-spraying equipment; tractors and hauling equipment; planting and harvesting equipment; cutting equipment; power sources and systems for silos; irrigation and pumping equipment; dairy, feeding, and shearing operations; and processing systems.

The following college is approved to offer this program:

Wake Technical Community College

### *Alternative Transportation Technology (D60420)

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Alternative Transportation Technology* program prepares individuals to apply technical knowledge and skills to the maintenance of alternative fuel vehicles (AFV), hybrid electric vehicles and the conversion of standard vehicles to AFV status. Includes instruction in electrical vehicles, hybrid electric vehicles, liquefied petroleum gas (LPG) vehicles, compressed natural gas (CNG) vehicles, hybrid fuel technology, electrical and electronic systems, engine performance, diagnosis and repair, and conversion/installation.

The following colleges are approved to offer this program:

Blue Ridge Community College

### *Automotive Customizing Technology (A60190)

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Automotive Customizing Technology* program prepares individuals to modify existing automotive vehicle components, fabrication techniques to create custom vehicle components, non-structural damage repair, custom painting and refinishing techniques, custom upholstery and glass removal/replacement/custom modifications, and other automotive technology related systems.

The following colleges are approved to offer this program:

Cape Fear Community College
Lenoir Community College

**\*Automotive Light-Duty Diesel Technology (D60430)**

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Automotive Light-Duty Diesel Technology* program prepares individuals to apply technical knowledge and skills to diagnose, adjust, repair, or overhaul light duty diesel vehicles under one ton classification. 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. Includes technicians working primarily with automobile diesel engines.

The following colleges are approved to offer this program:

Blue Ridge Community College                                   Randolph Community College
Pitt Community College                                         Rowan-Cabarrus Community College


**Automotive Restoration Technology (Diploma)  (D60140)**

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Automotive Restoration Technology* program prepares individuals to apply technical knowledge and skills to repair, reconstruct, finish and restore automobile bodies, fenders, and external features of a wide range of classic vehicles typically from year models 1900 - 1970. Includes instruction in internal combustion engines, transmissions, brakes, restoring original sheet metal, upholstery, and wood components, rebuilding starters, generators, and painting and refinishing techniques.

The following college is approved to offer this program:

Central Carolina Community College

### *Automotive Systems Technology (A60160)

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Automotive Systems Technology* program that prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles. Includes instruction in brake systems, electrical systems, engine performance, engine repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems.   The following colleges are approved to offer this program:

| | |
|---|---|
| Alamance Community College | Halifax Community College |
| Asheville-Buncombe Technical Community College | Haywood Community College |
| Beaufort County Community College | Lenoir Community College |
| Blue Ridge Community College | Martin Community College |
| Caldwell Community College and Technical Institute | McDowell Technical Community College |
| Cape Fear Community College | Nash Community College |
| Carteret Community College | Pitt Community College |
| Catawba Valley Community College | Randolph Community College |
| Central Carolina Community College | Rowan-Cabarrus Community College |
| Central Piedmont Community College | Sandhills Community College |
| Coastal Carolina Community College | South Piedmont Community College |
| Craven Community College | Southwestern Community College |
| Davidson County Community College | Surry Community College |
| Durham Technical Community College | Tri-County Community College |
| Edgecombe Community College | Vance-Granville Community College |
| Fayetteville Technical Community College | Wake Technical Community College |
| Forsyth Technical Community College | Wayne Community College |
| Gaston College | Wilkes Community College |
| Guilford Technical Community College | Wilson Community College |

### *Aviation Electronics (Avionics) Technology  (A60150)

*Career Cluster: Transportation, Distribution and Logistics*

This curriculum provides individuals with the basic knowledge and skills required to enter the avionics career field as a technician and prepares students for the current avionics licensing agency examination.

Course work includes general aviation maintenance, sheet metal, airframe systems, electrical and electronic systems, practical wiring, navigation equipment, flight management and flight control systems, flight line testing and troubleshooting, and Federal Aviation Administration (FAA) regulations.

Graduates should be prepared for the current avionics licensing agency examination and for
entry-level employment as an avionics technician in an avionics repair station, an airfield fixed base operator's avionics facility, or an independent repair facility.

The following college is approved to offer this program:

Guilford Technical Community College

**\*Aviation Management and Career Pilot Technology (A60180)**

*Career Cluster: Transportation, Distribution and Logistics*

The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including the commercial airlines, general aviation, the aerospace industry, the military, unmanned aircraft systems industries, and state and federal aviation organizations.

Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, unmanned aircraft systems, and instrument and commercial ground training, flight and simulator training, and entrepreneurship or business management training.

Graduates may earn a commercial pilot certificate with an instrument rating, specialize in aviation management or in unmanned air systems, and may find employment as commercial, corporate, and military pilots, fixed base operators and airport managers, as pilots or technicians in the unmanned aircraft systems industry, or as flight instructors, and flight dispatchers.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Caldwell Community College and Technical Institute
Craven Community College
Guilford Technical Community College
*awards the credential in collaboration with*
      Fayetteville Technical Community College
Lenoir Community College
Sandhills Community College

**\*Aviation Systems Technology (A60200)**

*Career Cluster: Transportation, Distribution and Logistics*

The Aviation Systems Technology provides individuals with the knowledge and skills to qualify for an aircraft mechanic's certificate with airframe and/or powerplant ratings. The curriculum is approved by the Federal Aviation Administration (FAA) under 14 CFR Part 147, which governs aviation maintenance schools.

Course work includes aviation mathematics, FAA regulations, basic electricity, aircraft drawings; aircraft structures, systems, and components; aircraft engines, theory, systems, and components; and engine inspections and maintenance.

Employment opportunities exist as entry-level mechanics with air carriers, manufacturers, repair stations, fixed base operators, flight schools, and government aviation operations.

The following colleges are approved to offer this program:

College of The Albemarle
Craven Community College

Guilford Technical Community College
Wayne Community College

**Boat Manufacture and Service (Diploma) (D60330)**

*Career Cluster: Transportation, Distribution and Logistics*

The Boat Manufacture and Service Technology program prepares students for employment in the manufacture and service of boats. Students learn the basics of boat design and the implementation of those designs in various components and/or complete boats or yachts.

Course work includes reading and interpreting marine blueprints, manuals, and other documents common to the industry; lofting; constructing forms and mold-making; application of concepts and techniques in composite, fiberglass, and wood; interior finishing; and marine mechanical, electrical, and plumbing systems.

Graduates may find employment with boat/yacht manufacturers, service yards, dealerships doing commissioning work, and companies doing custom boat building.

The following colleges are approved to offer this program:

Cape Fear Community College
Carteret Community College

**\*Collision Repair and Refinishing Technology (A60130)**

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Collision Repair and Refinishing Technology* program prepares individuals to apply technical knowledge and skills to repair, reconstruct and finish automobile bodies, fenders, and external features. Includes instruction in structure analysis, damage repair, non-structural analysis, mechanical and electrical components, plastics and adhesives, painting and refinishing techniques, and damage analysis and estimating.

The following colleges are approved to offer this program:

| | |
|---|---|
| Blue Ridge Community College | Haywood Community College |
| Caldwell Community College and Technical Institute | Isothermal Community College |
| Cape Fear Community College | McDowell Technical Community College |
| Central Carolina Community College | Randolph Community College |
| Central Piedmont Community College | Sandhills Community College |
| Cleveland Community College | Stanly Community College |
| Coastal Carolina Community College | Surry Community College |
| Edgecombe Community College | Wake Technical Community College |
| Fayetteville Technical Community College | Wayne Community College |
| Forsyth Technical Community College | Wilkes Community College |
| Guilford Technical Community College | |

## *Construction Equipment Systems Technology (A60450)

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Construction Equipment Systems Technology* program prepares individuals to apply technical knowledge and skills in the field maintenance and repair of construction equipment, and in the general maintenance and overhaul of such equipment. Includes instruction in inspection, maintenance, and repair of tracks, wheels, brakes, operating controls, pneumatic and hydraulic systems, electrical circuitry, engines and in techniques of welding and brazing. The following colleges are approved to offer this program:

Wake Technical Community College

## *Diesel and Heavy Equipment Technology (A60460)

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Diesel and Heavy Equipment Technology* program prepares individuals to apply technical knowledge and skills to repair, service, and maintain diesel engines in vehicles such as Heavy Duty Trucks over one ton classification, buses, ships, railroad locomotives, and equipment; as well as stationary diesel engines in electrical generators and related equipment.

The following colleges are approved to offer this program:

Asheville-Buncombe Technical Community College
Cape Fear Community College
Central Piedmont Community College
Coastal Carolina Community College
Davidson County Community College
Forsyth Technical Community College

Guilford Technical Community College
James Sprunt Community College
Johnston Community College
Wake Technical Community College
Wilkes Community College

**Marine Propulsion Systems (Diploma) (D60220)**

*Career Cluster: Transportation, Distribution and Logistics*

The Marine Propulsion Systems curriculum is designed to provide training for mechanics through classroom instruction, laboratory experiments, and shop practices in the repair and maintenance of outboard motors, inboard engines, stern drives, and jet propulsion systems.

The course work includes the areas of outboards (introduction, midsection, and rigging), inboards (introduction, engine rebuilds, lower unit systems, transom assembly, and rigging), jet propulsion systems, and high-performance custom systems.

Graduates of the curriculum should qualify for employment opportunities as motorboat mechanics, motorboat mechanic helpers, motor board mechanics (inboard/outboard), and jet ski mechanics. Other employment can be found at marine boat sales and service firms, or they may establish their own service facility.

The following college is approved to offer this program:

Carteret Community College

**Motorcycle Mechanics (A60260)**

*Mobile Equipment Maintenance and Repair*
*Career Cluster: Transportation, Distribution and Logistics*

Curriculums in the Mobile Equipment Maintenance and Repair pathway prepare individuals for employment as entry-level transportation service technicians. The program provides an introduction to transportation industry careers and increases student awareness of the diverse technologies associated with this dynamic and challenging field.

Course work 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, depending on the program major area chosen.

Graduates of this pathway should be prepared to take professional licensure exams, which correspond to certain programs of study, and to enter careers as entry-level technicians in the transportation industry.

The *Motorcycle Mechanics* program prepares individuals to apply technical knowledge and skills to repair, service, and maintain motorcycles and other similar powered vehicles. Includes instruction in lubrication and cooling systems, electrical and ignition systems, carburetion, fuel systems and adjustments of moving parts. The following colleges are approved to offer this program:

Central Carolina Community College (Diploma)          Forsyth Technical Community College
Davidson County Community College (Diploma)

**\*Motorsports Management Technology (A60270)**

*Career Cluster: Transportation, Distribution and Logistics*

The Motorsports Management Technology 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/advancement in jobs related to management of motorsports teams/events/activities, as well as production and distribution of motorsports products and services.

The following college is approved to offer this program:

Rowan-Cabarrus Community College

## Race Car Technology  (A60400)

*Career Cluster: Transportation, Distribution and Logistics*

The Race Car Technology curriculum is designed to educate students in the art of building and maintaining all aspects of a racing car or truck.  Students will also be able to demonstrate blueprint reading and perform basic welding skills.

Course work includes racing engine assembly, racing engine preparation, chassis fabrication, sheet metal fabrication, blueprint reading, welding, race car set-up, record keeping of race car technology, and other related topics.  Students will develop skills through classroom and shop/lab activities.

Graduates should qualify for employment as an entry-level engine preparation specialist, engine assembly specialist, chassis fabricator and welder, chassis set-up technician, interior sheet metal fabricator, and general race car preparation technician.

The following college is approved to offer this program:

Forsyth Technical Community College


## Truck Driver Training (Certificate)  (C60300)

*Career Cluster: Transportation, Distribution and Logistics*

The Truck Driver Training curriculum prepares individuals to drive tractor trailers rigs.  This program teaches proper driving procedures, safe driver responsibility, commercial motor vehicle laws and regulations, and the basic principles and practices for operating commercial vehicles.

The course work includes motor vehicle laws and regulations, map reading, vehicle maintenance, safety procedures, daily logs, defensive driving, freight handling, security, and fire protection.  Highway driving, training range exercises, and classroom lectures are used to develop the student's knowledge and skills.

Graduates of the curriculum are qualified to take the Commercial Driver's License exam and are employable by commercial trucking firms.  They may also become owners/operators and work as private contract haulers.

The following colleges are approved to offer this program:

| | |
|---|---|
| Caldwell Community College and Technical Institute | Davidson County Community College |
| Cape Fear Community College | Johnston Community College |
| Central Piedmont Community College | |

# *SECTION 4*
# CURRICULUM APPROVALS BY COLLEGE
*As of August 16, 2012*

This section of this publication is devoted to the curriculum offerings of each college. These programs are those currently approved for offering. ***This list is not a guarantee of an offering and is subject to change as the needs change.*** If further information is desired concerning a particular program or college, please contact the college directly. The addresses and telephone numbers of each college are included at the end of this section of the *Education Guide Catalog*. Also, please visit the World Wide Web site of the North Carolina Community College System at http://www.ncccs.cc.nc.us. This site provides a site link to each community college and provides additional information about the entire North Carolina Community College System.

## *Collaborative Programs*

Collaborative programs typically involve two or more colleges that have an agreement to share resources in order to offer a curriculum. This agreement may affect where some courses are taught or where the credential is awarded. Please contact the college for details.

## *Accreditation*

All of the 58 colleges in the North Carolina Community College System are accredited by the Southern Association of Colleges and Schools (SACS). In addition, specific programs may be accredited or approved by the following associational, state and federal institutions:

| | | | |
|---|---|---|---|
| AAMA | American Association of Medical Assistants | JRC-CVT | Joint Review Committee on Education in Cardiovascular Technology |
| AARC | American Association for Respiratory Care | JRC-NMT | Joint Review Committee on Educational Programs in Nuclear Medicine |
| AART | American Association of Radiologic Technology | JRC-DMS | Joint Review Committee on Education in Diagnostic Medical Sonography |
| ABA | American Bar Association | JRCRTE | Joint Review Committee for Respiratory Therapy Education |
| ABFSE | American Board of Funeral Service Education | NAACLS | National Accrediting Agency for Clinical Laboratory Sciences |
| ABRET | American Board of Registration of EEG and EP Technologists | NATEF | National Automotive Technicians Education Foundation |
| ADA | American Dental Association | NAWTA | North American Wildlife Technology Association |
| AHIMA | American Health Information Management Association | | |
| AIB | American Institute of Banking | NCBE | North Carolina State Board of Embalmers |
| AMA | American Medical Association | NCBOESLPA | North Carolina Board of Examiners for Speech-Language Pathologists and Audiologists |
| AOTA | American Occupational Therapy Association | | |
| APTA | American Physical Therapy Association | NCBON | North Carolina Board of Nursing |
| ARC-ST | Accreditation Review Committee on Education for Surgical Technology | NCDOJ | North Carolina Department of Justice, Criminal Justice Standards Division |
| ASC | American Society of Cytology | | North Carolina Substance Abuse Certification Board |
| ASE | Automotive Service Excellence | | |
| ASHP | American Society of Hospital Pharmacies | NCOEMS | North Carolina Office of Emergency Medical Services |
| AST | Association of Surgical Technologists | | |
| BONET | Board of Nephrology Examiners, Nurses and Technologists | NCREC | North Carolina Real Estate Commission |
| | | NCRELB | North Carolina Real Estate Licensing Board |
| CAAHEP | Commission on Accreditation of Allied Health Education Programs | NCSBCA | North Carolina State Board of Cosmetic Arts |
| COA | Commission on Opticianry Accreditation | NCSBMS | North Carolina State Board of Mortuary Science |
| CVTEA | Committee on Veterinary Technician Education and Activities | NLN | National League for Nursing |
| FAA | Federal Aviation Administration | SACS | Southern Association of Colleges and Schools |
| JRC-EMT-P | Joint Review Committee on Educational Programs for the EMT-Paramedic | SOHSE | Southern Organization of Human Service Educators |
| JRCERT | Joint Review Committee on Education in Radiologic Technology | SAF | Society of American Foresters |

TAC/ABET     Technology Accreditation Commission/
                Accreditation Board for Engineering and
                Technology

# Alamance Community College

**http://www.alamancecc.edu/**
**P.O. Box 8000, Graham, North Carolina 27253-8000**
**Telephone Number: (336) 578-2002**
**Fax Number: (336) 578-1987**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Horticulture Technology (A15240)

**Biological and Chemical Technologies**
    Biotechnology (A20100)

**Business Technologies**
    Accounting and Finance (A25100)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)

**Commercial and Artistic Production Technologies**
    Advertising and Graphic Design (A30100)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Carpentry (Diploma)(D35180)

**Engineering Technologies**
    Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Dental Assisting (Diploma) (D45240)
    Histotechnology (A45370)
    Medical Assisting (A45400)
    Medical Laboratory Technology (A45420)
    Nurse Aide (Certificate)(C45840)

**Industrial Technologies**
    Computer-Aided Drafting (A50150)
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Animal Care and Management Technology
      (A55100)
    Community Spanish Interpreter (A55370)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Criminal Justice Technology/Forensic Science
      (A5518C)
    Culinary Arts (A55150)
    Early Childhood Administration (Certificate)
      (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    Esthetics Technology (Certificate) (C55230)
    Fire Protection Technology (A55240)
    Infant/Toddler Care (Certificate) (C55290)
    Manicuring/Nail Technology (Certificate) (C55400)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Asheville-Buncombe Technical Community College

**http://www.abtech.edu/**
**340 Victoria Road, Asheville, NC 28801**
**Telephone Number: (828) 254-1921**
**Fax Number: (828) 251-6355**

*General Education:*
  Associate in General Education-Nursing (A1030N)
*College Transfer:*
  Associate in Arts (A10100)
  Associate in Engineering (A10500)
  Associate in Fine Arts in Visual Arts (A10600)
  Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
  **Agricultural and Natural Resources Technologies**
    Brewing, Distillation and Fermentation (A15250)
  **Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Digital Media Technology (A25210)
    Entrepreneurship (A25490)
    Hospitality Management (A25110)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
  **Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Construction Management Technology (A35190)
    Electrical Systems Technology (A35130)
  **Engineering Technologies**
    Civil Engineering Technology (A40140)
    Computer Engineering Technology (A40160)
    Electronics Engineering Technology (A40200)
    Environmental Engineering Technology (A40150)
    Geomatics Technology (A40420)
    Mechanical Engineering Technology (A40320)
    Sustainability Technologies (A40370)

**Health Sciences**
  Associate Degree Nursing (A45110)
  Cardiovascular Sonography (A45160)
  Central Sterile Processing (Certificate) (C45180)
  Dental Assisting (Diploma) (D45240)
  Dental Hygiene (A45260)
  Emergency Medical Science (A45340)
  Health and Fitness Science (A45630)
  Human Services Technology (A45380)
  Medical Assisting (A45400)
  Medical Laboratory Technology (A45420)
  Medical Sonography (A45440)
  Nurse Aide (Certificate) (C45840)
  Occupational Therapy Assistant (A45500)
  Pharmacy Technology (A45580)
  Phlebotomy (Certificate)(C45600)
  Practical Nursing (Diploma)(D45660)
  Radiography (A45700)
  Surgical Technology (A45740)
  Therapeutic Massage (A45750)
  Veterinary Medical Technology (A45780)
**Industrial Technologies**
  Computer Aided Drafting Technology (A50150)
  Computer-Integrated Machining (A50210)
  Industrial Systems Technology (A50240)
  Welding Technology (A50420)
**Public Service Technologies**
  Baking and Pastry Arts (A55130)
  Basic Law Enforcement Training (Certificate)
    (C55120)
  Cosmetology (A55140)
  Cosmetology Instructor (Certificate) (C55160)
  Criminal Justice Technology (A55180)
  Culinary Arts (A55150)
  Early Childhood Education (A55220)
  Esthetics Technology (Certificate) (C55230)
  Fire Protection Technology (A55240)
  Food Service Technology (Diploma) (D55250)
  General Occupational Technology (A55280)
  Infant/Toddler Care (Certificate) (C55290)
  Manicuring/Nail Technology (Certificate) (C55400)
  School-Age Education (A55440)
**Transport Systems Technologies**
  Automotive Systems Technology (A60160)
  Aviation Management and Career Pilot Technology
    (A60180)
  Diesel and Heavy Equipment Technology (A60460)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
- Associate in General Education (A10300)
- Associate in General Education-Nursing (A1030N)

*College Transfer:*
- Associate in Arts (A10100)
- Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
- Agribusiness Technology (A15100)

**Business Technologies**
- Business Administration (A25120)
- *Healthcare Management Technology (A25200)*
- Information Technology (A25590)
- Medical Office Administration (A25310)
- Office Administration (A25370)

**Engineering Technologies**
- Electrical Engineering Technology (A40180)
- Electronics Engineering Technology (A40200)
- Mechanical Engineering Technology (A40320)

**Health Sciences**
- Associate Degree Nursing (A45110)
- *Dental Assisting (Diploma) (D45240)*
- *Emergency Medical Science (A45340)*
- Human Services Technology (A45380)
- Medical Laboratory Technology (A45420)
- Nurse Aide (Certificate) (C45840)
- Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
- Welding Technology (A50420)

**Public Service Technologies**
- Basic Law Enforcement Training (Certificate) (C55120)
- Community Spanish Interpreter Certificate) (C55370)
- Cosmetology (A55140)
- Cosmetology Instructor (Certificate) (C55160)
- Criminal Justice Technology (A55180)
- Early Childhood Education (A55220)
- General Occupational Technology (A55280)
- Manicuring/Nail Technology (Certificate) (C55400)
- School-Age Education (A55440)

**Transport Systems Technologies**
- Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Agribusiness Technology (A15100)
    **Business Technologies**
        *Accounting and Finance (A25800)*
        Business Administration (A25120)
        *Hospitality Management (A25110)*
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
    **Construction Technologies**
        Carpentry (Diploma)(D35180)
        Electrical Systems Technology (A35130)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Emergency Medical Science (A45340)
        Nurse Aide (Certificate) (C45840)
        *Physical Therapy Assistant (2-year program) (A45620)*
        Practical Nursing (Diploma)(D45660)
    **Industrial Technologies**
        Industrial Systems Technology (A50240)
        Welding Technology (A50420)
    **Public Service Technologies**
        Basic Law Enforcement Training (Certificate) (C55120)
        Cosmetology (A55140)
        Cosmetology Instructor (Certificate)(C55160)
        Criminal Justice Technology (A55180)
        Early Childhood Education (A55220)
        General Occupational Technology (A55280)
        Infant/Toddler Care (Certificate) (C55290)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

**Blue Ridge Community College**
**http://www.blueridge.edu/**
**180 West Campus Drive, Flat Rock, NC 28731**
**Telephone Number: (828) 694-1700**
**Fax Number: (828) 694-1690**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Theatre (A10800)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Brewing, Distillation and Fermentation (A15250)
    Horticulture Technology (A15240)

**Biological and Chemical Technologies**
    Environmental Science Technology (A20140)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Office Administration (A25370)
    Stimulation and Game Development (A25450)

**Commercial and Artistic Production Technologies**
    Film and Video Production Technology (A30140)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration Technology (A35100)

**Engineering Technologies**
    Electronics Engineering Technology (A40200)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Emergency Medical Science (A45340)
    Nurse Aide (Certificate) (C45840)
    Surgical Technology (A45740)

**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Welding Technology (A50420)

**Public Service Technologies**
    Community Spanish Interpreter (A55370)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Criminal Justice Technology/Forensic Science (A5518C)
    Early Childhood Administration (Certificate) (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    Emergency Management (A55460)
    Esthetics Instructor (Certificate) (C55270)
    Esthetics Technology (C55230)
    Fire Protection Technology (A55240)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Interpreter Education (A55300)
    School-Age Care (Certificate) (C55450)
    School-Age Education (A55440)

**Transport Systems Technologies**
    Alternative Transportation Technology (Diploma) (D60420)
    Automotive Light-Duty Diesel Technology (Diploma) (D60430)
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Brunswick Community College

**http://www.brunswickcc.edu/**
**Post Office Box 30, Supply, NC 28462**
**Telephone Number: (910) 755-7300**
**Fax Number: (910) 754-7805**

*General Education:*
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Aquaculture Technology (A15120)
Horticulture Technology (A15240)
Turfgrass Management Technology (A15420)

**Biological and Chemical Technologies**
Biotechnology (A20100)
Marine Biotechnology (A20170)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Healthcare Business Informatics (A25510)
Information Technology (A25590)
*Medical Office Administration (A25310)*
Office Administration (A25370)

**Engineering Technologies**
Electronics Engineering Technology (A40200)
Geomatics Technology (A40420)

**Health Sciences**
Associate Degree Nursing (A45110)
Health and Fitness Science (A45630)
Health Information Technology (A45360)
Medical Assisting (A45400)
Phlebotomy (Certificate)(C45600)
Practical Nursing (Diploma)(D45660)

**Industrial Technologies**
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Early Childhood Education (A55220)
Infant/Toddler Care (Certificate) (C55290)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        *Horticulture Technology (A15240)*
        Landscape Gardening (A15260)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Hospitality Management (A25110)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Paralegal Technology (A25380)
        Supply Chain Management (A25620)
    **Construction Technologies**
        Electrical Systems Technology (A35130)
    **Engineering Technologies**
        Electronics Engineering Technology (A40200)
        Mechanical Engineering Technology (A40320)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Cardiovascular Sonography (A45160)
        Medical Assisting (A45400)
        Medical Sonography (A45440)
        Nuclear Medicine Technology (A45460)
        Nurse Aide (Certificate) (C45840)
        Ophthalmic Medical Personnel (A45210)
        Physical Therapist Assistant (1+1) (A45640)
        Radiography (A45700)
        Speech-Language Pathology Assistant (A45730)

**Industrial Technologies**
    Biomedical Equipment Technology (A50100)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate)(C55160)
    *Criminal Justice Technology (A55180)*
    *Criminal Justice Technology/Forensic Science*
      *(A5518C)*
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Aviation Management and Career Pilot Technology
      (A60180)
    Collision Repair and Refinishing Technology
      (A60130)
    Truck Driver Training (Certificate) (C60300)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Cape Fear Community College

**http://www.cfcc.edu/**
**411 N. Front Street, Wilmington, North Carolina 28401**
**Phone Number: (910) 251-5100**
**Fax Number: (910) 763-2279**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Fine Arts in Music (A10700)
Associate in Fine Arts in Theatre (A10800)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Landscape Gardening (A15260)
Marine Technology (A15320)

**Biological and Chemical Technologies**
Chemical Technology (A20120)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Healthcare Business Informatics (A25510)
Hospitality Management (A25110)
Information Technology (A25590)
Medical Office Administration (A25310)
Paralegal Technology (A25380)
Real Estate (A25400)
Real Estate Licensing (Certificate) (C25480)

**Commercial and Artistic Production Technologies**
Film and Video Production Technology (A30140)
Interior Design (A30220)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration
  Technology (A35100)
Boat Building (Diploma) (D35120)
Carpentry (Diploma) (D35180)
Construction Management Technology (A35190)
Electrical Systems Technology (A35130)
Plumbing (Diploma) (D35300)

**Engineering Technologies**
Architectural Technology (A40100)
Computer Engineering Technology (A40160)
Electronics Engineering Technology (A40200)
Mechanical Engineering Technology (A40320)
Mechatronics Engineering Technology (A40350)
Sustainability Technologies (A40370)

**Health Sciences**
Associate Degree Nursing (A45110)
Cardiovascular Sonography (A45160)
Dental Assisting (Diploma) (D45240)
Dental Hygiene (A45260)
Emergency Medical Science (A45340)
Human Services Technology/Substance Abuse
  (A4538E)
Medical Assisting (A45400)
Medical Sonography (A45440)
Nurse Aide (Certificate) (C45840)
Occupational Therapy Assistant (A45500)
Pharmacy Technology (A45580)
Phlebotomy (Certificate) (C45600)
Practical Nursing (Diploma) (D45660)
Radiography (A45700)
Surgical Technology (A45740)
Veterinary Medical Technology (A45780)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Industrial Systems Technology (A50240)
Nuclear Technology (A50460)
Welding Technology (A50420)

**Public Service Technologies**
Baking and Pastry Arts (A55130)
Basic Law Enforcement Training (Certificate)
  (C55120)
Community Spanish Interpreter (A55370)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Culinary Arts (A55150)
Early Childhood Education (A55220)
Emergency Management (A55460)
Esthetics Technology (Certificate) (C55230)
Fire Protection Technology (A55240)
Interpreter Education (A55300)

**Transport Systems Technologies**
Automotive Customizing Technology (A60190)
Automotive Systems Technology (A60160)
Boat Manufacture and Service (Diploma) (D60330)
Collision Repair and Refinishing Technology
  (A60130)
Diesel and Heavy Equipment Technology (A60460)
Truck Driver Training (Certificate) (C60300)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Aquaculture Technology (A15120)
        Horticulture Technology (A15240)
    **Business Technologies**
        Business Administration (A25120)
        Hospitality Management (A25110)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Paralegal Technology (A25380)
    **Commercial and Artistic Production Technologies**
        Photographic Technology (A30280)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Emergency Medical Science (A45340)
        Human Services Technology (A45380)
        Medical Assisting (A45400)
        Nurse Aide (Certificate) (C45840)
        Radiography (A45700)
        Respiratory Therapy (A45720)
        Therapeutic Massage (A45750)

**Industrial Technologies**
    Welding Technology (A50420)
**Public Service Technologies**
    Baking and Pastry Arts (A55130)
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Esthetics Technology (Certificate) (C55230)
    Foodservice Technology (Diploma) (D55250)
    General Occupational Technology (A55280)
    Manicuring/Nail Technology (Certificate) (C55400)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Boat Manufacture and Service (Diploma) (D60330)
    Marine Propulsion Systems (Diploma) (D60220)
    *Truck Driver Training (Certificate) (C60300)*

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Catawba Valley Community College

**http://www.cvcc.edu/**
**2550 Highway 70 S.E., Hickory, North Carolina 28602**
**Phone Number: (828) 327-7000**
**Fax Number: (828) 327-7276**

*General Education:*
- Associate in General Education (A10300)
- Associate in General Education-Nursing (A1030N)

*College Transfer:*
- Associate in Arts (A10100)
- Associate in Engineering (A10500)
- Associate in Fine Arts in Visual Arts (A10600)
- Associate in Fine Arts in Music (A10700)
- Associate in Fine Arts in Theatre (A10800)
- Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science*

**Agricultural and Natural Resources Technologies**
- Horticulture Technology (A15240)
- Turfgrass Management Technology (A15420)

**Business Technologies**
- Accounting and Finance (A25800)
- Business Administration (A25120)
- Entrepreneurship (A25490)
- Healthcare Management Technology (A25200)
- Information Technology (A25590)
- Medical Office Administration (A25310)
- Office Administration (A25370)

**Commercial and Artistic Production Technologies**
- Advertising and Graphic Design (A30100)
- Photographic Technology (A30280)

**Construction Technologies**
- Air Conditioning, Heating, and Refrigeration Technology (A35100)
- Electrical Systems Technology (A35130)

**Engineering Technologies**
- Computer Engineering Technology (A40160)
- Electronics Engineering Technology (A40200)
- Mechanical Engineering Technology (A40320)
- Mechatronics Engineering Technology (A40350)

**Health Sciences**
- Associate Degree Nursing (A45110)
- Dental Hygiene (A45260)
- Electroneurodiagnostic Technology (A45320)
- Emergency Medical Science (A45340)
- Health and Fitness Science (A45630)
- Health Information Technology (A45360)
- *Nutrition and Dietetics Technician (A45860)*
- Polysomnography (Certificate) (C45650)
- Polysomnography (A45670)
- Radiography (A45700)
- Respiratory Therapy (A45720)
- Surgical Technology (A45740)

**Industrial Technologies**
- Computer-Integrated Machining (A50210)
- Industrial Systems Technology (A50240)
- Welding Technology (A50420)

**Public Service Technologies**
- Basic Law Enforcement Training (Certificate) (C55120)
- Cosmetology (A55140) (Contract)
- Criminal Justice Technology (A55180)
- Criminal Justice Technology/Forensic Science (A5518C)
- Early Childhood Education (A55220)
- Emergency Management (A55460)
- Fire Protection Technology (A55240)
- General Occupational Technology (A55280)
- Infant/Toddler Care (Certificate) (C55290)

**Transport Systems Technologies**
- Automotive Systems Technology (A60160)
- *Truck Driver Training (Certificate) (C60300)*

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education-Nursing (A1030N)
*College Transfer*:
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Sustainable Agriculture (A15410)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Healthcare Management Technology (A25200)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Paralegal Technology (A25380)
    **Commercial and Artistic Production Technology**
        Broadcasting and Production Technology (A30120)
    **Construction Technologies**
        Building Construction Technology (A35140)
        Carpentry (Diploma) (D35180)
        Masonry (Diploma) (D35280)
    **Engineering Technologies**
        Computer Engineering Technology (A40160)
        Electronics Engineering Technology (A40200)
        Laser and Photonics Technology (A40280)
        Sustainability Technologies (A40370)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Dental Assisting (Diploma) (D45240)
        Dental Hygiene (A45260)
        Health and Fitness Science (A45630)
        Health Information Technology (A45360)
        Human Services Technology (A45380)
        Medical Assisting (A45400)
        Medical Sonography (A45440)
        Nurse Aide (Certificate) (C45840)
        Physical Therapist Assistant (2-year program)
          (A45620)
        Practical Nursing (Diploma) (D45660)
        *Speech-Language Pathology Assistant (A45730)*
        Therapeutic Massage (A45750)
        Veterinary Medical Technology (A45780)

**Industrial Technologies**
    Computer-Aided Drafting (A50150)
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Telecommunications Installation and Maintenance
      (Diploma) (D50380)
    Welding Technology (A50420)
**Public Service Technologies**
    Barbering (A55110)
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Criminal Justice Technology/Forensic Science
      (A5518C)
    Culinary Arts (A55150)
    Early Childhood Administration (Certificate)
      (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    Esthetics Instructor (Certificate) (C55270)
    Esthetics Technology (Certificate) (C55230)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Library and Information Technology (A55310)
    Manicuring/Nail Technology (Certificate) (C55400)
    School-Age Care (Certificate) (C55450)
    School-Age Education (A55440)
**Transport Systems Technologies**
    Automotive Restoration Technology (Diploma)
      (D60140)
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology
      (Diploma) (D60130)
    Motorcycle Mechanics (A60260)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Central Piedmont Community College

**http://www.cpcc.edu/**
**Post Office Box 35009, Charlotte, North Carolina 28235**
**Phone Number: (704) 330-2722**
**Fax Number: (704) 330-5045**

*General Education:*
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Theatre (A10800)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Horticulture Technology (A15240)
    Turfgrass Management Technologies (A15420)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Hospitality Management (A25110)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
    Paralegal Technology (A25380)
    Simulation and Game Development (A25450)
    Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
    Advertising and Graphic Design (A30100)
    Broadcasting and Production Technology (A30120)
    Graphic Arts and Imaging Technology (A30180)
    Graphic Arts and Imaging Technology/Flexography (A3018A)
    Interior Design (A30220)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration Technology (A35100)
    Construction Management Technology (A35190)
    Electrical Systems Technology (A35130)

**Engineering Technologies**
    Architectural Technology (A40100)
    Civil Engineering Technology (A40140)
    Computer Engineering Technology (A40160)
    Electrical Engineering Technology (A40180)
    Electronics Engineering Technology (A40200)
    Geomatics Technology (A40420)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)
    Sustainability Technologies (A40370)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Cardiovascular Technology (Invasive and Non-Invasive) (A45170)
    Cytotechnology (Certificate) (C45220)
    Dental Assisting (Diploma) (D45240)
    Dental Hygiene (A45260)
    Emergency Medical Science (A45340)
    *Health and Fitness Science (A45630)*
    Health Information Technology (A45360)
    Human Services Technology (A45380)
    Human Services Technology/Developmental Disabilities (A4538A)
    Human Services Tech/Substance Abuse (A4538E)
    Medical Assisting (A45400)
    Medical Laboratory Technology (A45420)
    Nurse Aide (Certificate) (C45840)
    Occupational Therapy Assistant (A45500)
    Ophthalmic Medical Personnel (A45210)
    Pharmacy Technology (A45580)
    Physical Therapist Assistant (1+1) (A45640)
    Respiratory Therapy (A45720)
    *Speech-Language Pathology Assistant (A45730)*
    Surgical Technology (A45740)

**Industrial Technologies**
    Biomedical Equipment Technology (A50100)
    Computer-Integrated Machining (A50210)
    Nondestructive Examination Technology (A50350)
    Welding Technology (A50420)

**Public Service Technologies**
    Baking and Pastry Arts (A55130)
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Administration (Certificate) (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    Fire Protection Technology (A55240)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Interpreter Education (A55300)
    Lateral Entry (Certificate) (C55430)
    School-Age Care (Certificate) (C55450)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology (A60130)
    Diesel and Heavy Equipment Technology (A60460)
    Truck Driver Training (Certificate) (C60300)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Cleveland Community College

**http://www.clevelandcommunitycollege.edu/**
**137 S. Post Road, Shelby, North Carolina 28152**
**Phone Number: (704) 484-4000**
**Fax Number: (704) 484-4036**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
Biotechnology (A20100)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Entrepreneurship (A25490)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)

**Commercial and Artistic Production Technologies**
Broadcasting and Production Technology (A30120)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration Technology (A35100)
Carpentry (Diploma) (D35180)
Electrical Systems Technology (A35130)
Plumbing (Diploma) (D35300)

**Engineering Technologies**
Automation Engineering Technology (A40120)
Electronics Engineering Technology (A40200)
Mission Critical Operations (A40430)

**Health Sciences**
Associate Degree Nursing (A45110)
Computed Tomography and Magnetic Resonance Imaging (Diploma) (D45200)
Emergency Medical Science (A45340)
Medical Assisting (A45400)
Nurse Aide (Certificate) (C45840)
Phlebotomy (Certificate) (C45600)
Practical Nursing (Diploma) (D45660)
Radiography (A45700)
Surgical Technology (A45740)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Facility Maintenance Technology (A50190)
Industrial Systems Technology (A50240)
Industrial Management Technology (A50260)
Mechanical Drafting Technology (A50340)
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Community Spanish Interpreter (A55370)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Esthetics Instructor (Certificate) (C55270)
Esthetics Technology (Certificate) (C55230)
Fire Protection Technology (A55240)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)
Lateral Entry (Certificate) (C55430)
Manicuring/Nail Technology (Certificate) (C55400)
School-Age Care (Certificate) (C55450)
School-Age Education (A55440)

**Transport Systems Technologies**
Collision Repair and Refinishing Technology (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Theatre (A10800)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Hospitality Management (A25110)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Paralegal Technology (A25380)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Electrical Systems Technology (A35130)
    **Engineering Technologies**
        Architectural Technology (A40100)
        Electronics Engineering Technology (A40200)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Dental Assisting (Diploma) (D45240)
        Dental Hygiene (A45260)
        Emergency Medical Science (A45340)
        Health and Fitness Science (A45630)
        Medical Laboratory Technology (A45420)
        Practical Nursing (Diploma) (D45660)
        Surgical Technology (A45740)

**Industrial Technologies**
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Criminal Justice Technology/Forensic Science
      (A5518C)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Fire Protection Technology (A55240)
    Manicuring/Nail Technology (Certificate) (C55400)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology
      (A60130)
    Diesel and Heavy Equipment Technology (A60460)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# College of The Albemarle

**http://www.albemarle.edu/**
**Post Office Box 2327, Elizabeth City, North Carolina 27906-2327**
**Telephone Number: (252) 335-0821**
**Fax Number: (252) 335-2011**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Fine Arts in Theatre (A10800)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Agribusiness Technology (A15100)
Sustainable Agriculture (A15410)

**Business Technologies**
Business Administration (A25120)
Healthcare Business Informatics (A25510)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
Professional Crafts: Jewelry (A30340)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration
  Technology (A35100)
Electrical Systems Technology (A35130)

**Engineering Technologies**
Architectural Technology (A40100)
Computer Engineering Technology (A40160)
Sustainability Technologies (A40370)

**Health Sciences**
Associate Degree Nursing (A45110)
*Dental Assisting (Diploma) (D45240)*
Emergency Medical Science (A45340)
Health and Fitness Science (A45630)
Health Care Technology (Certificate) (C45350)
Human Services Technology (A45380)
Medical Assisting (A45400)
Medical Laboratory Technology (A45420)
Nurse Aide (Certificate) (C45840)
Phlebotomy (Certificate) (C45600)
Practical Nursing (Diploma) (D45660)
Surgical Technology (A45740)

**Industrial Technologies**
Computer-Aided Drafting Technology (A50150)
Computer-Integrated Machining (A50210)
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate)
  (C55120)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Culinary Arts (A55150)
Early Childhood Education (A55220)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)

**Transport Systems Technologies**
Aviation Systems Technology (A60200)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

## Craven Community College

**http://www.cravencc.edu/**
**800 College Ct., New Bern, NC 28562**
**Telephone Number: (252) 638-4131**
**Fax Number: (252) 638-4232**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Fine Arts in Music (A10700)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
    *Biotechnology (A20100)*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Entrepreneurship (A25490)
    Information Technology (A25590)
    Medical Office Administration (A25310)

**Engineering Technologies**
    Electrical Engineering Technology (A40180)
    Electronics Engineering Technology (A40200)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Heath Information Technology (A45360)
    Medical Assisting (A45400)
    Physical Therapist Assistant (2-year program) (A45620)
    Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
    Computer-Aided Drafting Technology (A50150)
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Manufacturing Technology (A50320)
    Welding Technology (A50420)

**Public Service Technologies**
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    Esthetics Technology (Certificate) (C55230)
    Infant/Toddler Care (Certificate) (C55290)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Aviation Management and Career Pilot Technology (A60180)
    Aviation Systems Technology (A60200)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Davidson County Community College

**http://www.davidsonccc.edu/**
**Post Office Box 1287, Lexington, North Carolina 27293-1287**
**Telephone Number: (336) 249-8186**
**Fax Number: (336) 249-0088**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
Aquarium Science Technology (A20260)
Zoological Science Technology (A20250)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Information Technology (A25590)
Paralegal Technology (A25380)
Supply Chain Management (A25620)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration Technology (A35100)

**Engineering Technologies**
Applied Engineering Technology (A40130)
Electronics Engineering Technology (A40200)

**Health Sciences**
Associate Degree Nursing (A45110)
Cancer Information Management (A45130)
Central Sterile Processing (Certificate) (C45180)
Dental Assisting (Diploma) (D45240)
Emergency Medical Science (A45340)
Health Information Technology (A45360)
Healthcare Interpreting (A45430)
Histotechnology (A45370)
Human Services Technology (A45380)
Medical Assisting (A45400)
Medical Laboratory Technology (A45420)
Nurse Aide (Certificate) (C45840)
Pharmacy Technology (A45580)
Phlebotomy (Certificate) (C45600)
Practical Nursing (Diploma) (D45660)
Surgical Technology (A45740)
Therapeutic Massage (A45750)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Industrial Systems Technology (A50240)
Manufacturing Technology (A50320)
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Cosmetology (A55140)
Criminal Justice Technology (A55180)
Early Childhood Administration (Certificate) (C55850)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Emergency Medical Science (A45340)
Esthetics Technology (Certificate) (C55230)
Fire Protection Technology (A55240)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)
Recreation and Leisure Studies (A55360)

**Transport Systems Technologies**
Automotive Systems Technology (A60160)
Diesel and Heavy Equipment Technology (A60460)
Motorcycle Mechanics (A60260)
Truck Driver Training (Certificate) (C60300)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Durham Technical Community College

**http://www.durhamtech.edu/**
**1637 Lawson St., Durham, NC 27703**
**Telephone Number: (919) 686-3300**
**Fax Number: (919) 686-3601**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Entrepreneurship (A25490)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
    Paralegal Technology (A25380)

**Construction Technologies**
    Electrical Systems Technology (A35130)

**Engineering Technologies**
    Architectural Technology (A40100)
    Electronics Engineering Technology (A40200)

**Health Sciences**
    Anesthesia Technology (A45330)
    Associate Degree Nursing (A45110)
    Clinical Trials Research Associate (A45190)
    Dental Laboratory Technology (A45280)
    Emergency Medical Science (A45340)
    Health Information Technology (A45360)
    Medical Assisting (A45400)
    Medical Product Safety and Pharmacovigilance (A45810)
    Nurse Aide (Certificate) (C45840)
    Occupational Therapy Assistant (A45500)
    Optical Apprentice (Certificate) (C45520)
    Opticianry (A45560)
    Pharmacy Technology (A45580)
    Practical Nursing (Diploma) (D45660)
    Respiratory Therapy (A45720)
    Surgical Technology (A45740)

**Industrial Technologies**
    Biomedical Equipment Technology (A50100)
    Computer-Integrated Machining (A50210)
    Environment Health and Safety Technology (A50160)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Services Technologies**
    Basic Law Enforcement Training (Certificate) (C55120)
    Community Spanish Interpreter (A55370)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Fire Protection Technology (A55240)
    Infant/Toddler Care (Certificate) (C55290)

**Transport Systems Technology**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Biological and Chemical Technologies**
        *Biotechnology (A20100)*
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        *Healthcare Management Technology (A25200)*
        Hunting and Shooting Sports Management (A25600)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Supply Chain Management (A25620)
    **Construction Technologies**
        Electrical Systems Technology (A35130)
        *Electric Line Construction Technology (A35230)*
        Historic Preservation (A35110)
    **Engineering Technologies**
        Geospatial Technology (A40220)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Computed Tomography & Magnetic Resonance
        Imaging Technology (Diploma) (D45200)
    *Dental Assisting (D45240))*
    *Dental Hygiene (A45260)*
    Health Information Technology (A45360)
    Human Services Technology (A45380)
    Magnetic Resonance Imaging (A45800)
    Medical Assisting (A45400)
    Nurse Aide (Certificate) (C45840)
    Ophthalmic Medical Personnel (A45210)
    Practical Nursing (Diploma) (D45660)
    Radiography (A45700)
    Respiratory Therapy (A45720)
    Surgical Technology (A45740)
**Industrial Technologies**
    Facility Maintenance Worker (Diploma) (D50170)
    Industrial Systems Technology (A50240)
    Manufacturing Technology (A50320)
    Welding Technology (A50420)
**Public Service Technologies**
    Baking and Pastry Arts (A55130)
    Barbering (A55110)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    Esthetics Technology (Certificate) (C55230)
    General Occupational Technology (A55280)
    Lateral Entry (Certificate) (C55430)
    School-Age Education (A55440)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology
        (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

## Fayetteville Technical Community College

**http://www.faytechcc.edu/**
**Post Office Box 35236, Fayetteville, North Carolina 28303-0236**
**Telephone Number: (910) 678-8400**
**Fax Number: (910) 484-6600**

*General Education:*
  Associate in General Education (A10300)
  Associate in General Education-Nursing (A1030N)

*College Transfer:*
  Associate in Arts (A10100)
  Associate in Engineering (A10500)
  Associate in Fine Arts in Music (A10700)
  Associate in Fine Arts in Theatre (A10800)
  Associate in Fine Arts in Visual Arts (A10600)
  Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
  Horticulture Technology (A15240)

**Business Technologies**
  Accounting and Finance (A25800)
  Business Administration (A25120)
  Entrepreneurship (A25490)
  Healthcare Management Technology (A25200)
  Hospitality Management (A25110)
  Information Technology (A25590)
  Intelligence Studies (A25700)
  Medical Office Administration (A25310)
  Office Administration (A25370)
  Paralegal Technology (A25380)
  Simulation and Game Development (A25450)
  Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
  Advertising and Graphic Design (A30100)
  Gunsmithing (A30200)

**Construction Technologies**
  Air Conditioning, Heating, and Refrigeration
    Technology (A35100)
  Building Construction Technology (A35140)
  Carpentry (Diploma) (D35180)
  Electrical Systems Technology (A35130)
  Plumbing (Diploma) (D35300)

**Engineering Technologies**
  Architectural Technology (A40100)
  Civil Engineering Technology (A40140)
  Electronics Engineering Technology (A40200)
  Geomatics Technology (A40420)

**Health Sciences**
  Associate Degree Nursing (A45110)
  Central Sterile Processing (Certificate) (C45180)
  Dental Assisting (Diploma) (D45240)
  Dental Hygiene (A45260)
  Emergency Medical Science (A45340)
  Health and Fitness Science (A45630)
  Mammography (C45830)
  Nurse Aide (Certificate) (C45840)
  Ophthalmic Surgical Assistant (Certificate)
    (C45880)
  Pharmacy Technology (A45580)
  Physical Therapist Assistant (2-year program)
    (A45620)
  Practical Nursing (Diploma) (D45660)
  Radiography (A45700)
  Respiratory Therapy (A45720)
  Speech-Language Pathology Assistant (A45730)
  Surgical First Assistant (Certificate) (C45870)
  Surgical Technology (A45740)

**Industrial Technologies**
  Computer-Integrated Machining (A50210)
  Industrial Systems Technology (A50240)
  Welding Technology (A50420)

**Public Service Technologies**
  Basic Law Enforcement Training (Certificate)
    (C55120)
  Cosmetology (A55140) (Contract)
  Cosmetology Instructor (Certificate) (C55160)
  Criminal Justice Technology (A55180)
  Criminal Justice Technology/Forensic Science
    (A5518C)
  Culinary Arts (A55150)
  Early Childhood Administration (Certificate)
    (C55850)
  Early Childhood Education (A55220)
  Early Childhood Preschool (Certificate) (C55850)
  Emergency Management (A55460)
  Esthetics Instructor (Certificate) (C55270)
  Esthetics Technology (Certificate) (C55230)
  Fire Protection Technology (A55240)
  Funeral Service Education (A55260)
  Infant/Toddler Care Certificate (C55290)
  *Interpreter Education (A55300)*
  Manicuring/Nail Technology (C55400)
  School-Age Education (A55440)

**Transport Systems Technologies**
  Automotive Systems Technology (A60160)
  *Aviation Management and Career Pilot Technology
    (A60180)*
  Collision Repair and Refinishing Technology
    (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Theatre (A10800)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science*
**Agricultural and Natural Resources Technologies**
    Horticulture Technology (A15240)
**Biological and Chemical Technologies**
    Biotechnology (A20100)
    Environmental Science Technology (A20140)
    Nanotechnology (A20190)
**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Entrepreneurship (A25490)
    Healthcare Business Informatics (A25510)
    Healthcare Management Technology (A25200)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Nonprofit Leadership and Management (A25410)
    Office Administration (A25370)
    Paralegal Technology (A25380)
    Project Management Technology (A25390)
    Supply Chain Management (A25620)
**Commercial and Artistic Production Technologies**
    Broadcasting and Production Technology (A30120)
    Digital Effects and Animation Technology (A30130)
    Graphic Arts and Imaging Technology (A30180)
    Interior Design (A30220)
**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Carpentry (Diploma) (D35180)
    Electrical Systems Technology (A35130)
    Plumbing (Diploma) (D35300)

**Engineering Technologies**
    Architectural Technology (A40100)
    Computer Engineering Technology (A40160)
    Electronics Engineering Technology (A40200)
    Mechanical Engineering Technology (A40320)
**Health Sciences**
    Associate Degree Nursing (A45110)
    Cardiovascular Sonography (A45160)
    Computed Tomography & Magnetic Resonance
      Imaging Technology (Diploma) (D45200)
    Dental Assisting (Diploma) (D45240)
    Dental Hygiene (A45260)
    Emergency Medical Science (A45340)
    Health Information Technology (A45360)
    Human Services Technology (A45380)
    Human Services Technology /Gerontology (A4538B)
    Interventional Cardiac and Vascular Technology
      (A45410)
    Magnetic Resonance Imaging (A45800)
    Medical Assisting (A45400)
    Medical Sonography (A45440)
    Nuclear Medicine Technology (A45460)
    Pharmacy Technology (A45580)
    Practical Nursing (Diploma) (D45660)
    Radiation Therapy Technology (A45680)
    Radiography (A45700)
    Respiratory Therapy (A45720)
    Therapeutic Massage (A45750)
**Industrial Technologies**
    *Biomedical Equipment Technology (A50100)*
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

**Public Service Technologies**
  Basic Law Enforcement Training (Certificate)
    (C55120)
  Criminal Justice Technology (A55180)
  Criminal Justice Technology/Forensic Science
    (A5518C)
  Cyber Crime Technology (A55210)
  Early Childhood Education (A55220)
  Emergency Management (A55460)
  Fire Protection Technology (A55240)
  General Occupational Technology (A55280)
  Lateral Entry (Certificate) (C55430)
  School-Age Education (A55440)
**Transport Systems Technologies**
  Automotive Systems Technology (A60160)
  Collision Repair and Refinishing Technology
    (A60130)
  Diesel and Heavy Equipment Technology (A60460)
  Motorcycle Mechanics (A60260)
  Race Car Technology (A60400)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Gaston College

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
Biotechnology (A20100)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Healthcare Business Informatics (A25510)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
Paralegal Technology (A25380)
Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
Broadcasting and Production Technology (A30120)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration Technology (A35100)
Electrical Systems Technology (A35130)

**Engineering Technologies**
Architectural Technology (A40100)
Civil Engineering Technology (A40140)
Computer Engineering Technology (A40160)
Electronics Engineering Technology (A40200)
Mechanical Engineering Technology (A40320)
Mechatronics Engineering Technology (A40350)

**Health Sciences**
Associate Degree Nursing (A45110)
Emergency Medical Science (A45340)
Health and Fitness Science (A45630)
Human Services Technology (A45380)
Human Services Technology/Developmental Disabilities (A4538A)
Human Services Technology/Substance Abuse (A4538E)
Medical Assisting (A45400)
Nurse Aide (Certificate) (C45840)
Nutrition and Dietetics Technician (A45860)
Phlebotomy (Certificate) (C45600)
Practical Nursing (Diploma) (D45660)
Therapeutic Massage (A45750)
Veterinary Medical Technology (A45780)

**Industrial Technologies**
*Biomedical Equipment Technology (A50100)*
Computer-Integrated Machining (A50210)
Industrial Systems Technology (A50240)
Manufacturing Technology (A50320)
*Nondestructive Examination Technology (A50350)*
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Criminal Justice Technology/Forensic Science (A5518C)
Early Childhood Education (A55220)
Emergency Management (A55460)
Esthetics Instructor (Certificate) (C55270)
Esthetics Technology (Certificate) (C55230)
Fire Protection Technology (A55240)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)
Lateral Entry (Certificate) (C55430)
School-Age Care (Certificate) (C55450)

**Transport Systems Technologies**
Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Guilford Technical Community College

**http://www.gtcc.edu/**
**Post Office Box 309, Jamestown, North Carolina 27282**
**Telephone Number: (336) 334-4822**
**Fax Number: (336) 454-2510**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Theatre (A10800)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resource Technologies**
    Turfgrass Management Technology (A15420)

**Biological and Chemical Technologies**
    *Biotechnology (A20100)*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Entertainment Technologies (A25190)
    Healthcare Management Technology (A25200)
    Hospitality Management (A25110)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
    Paralegal Technology (A25380)
    Simulation and Game Development (A25450)
    Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
    Advertising and Graphic Design (A30100)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration Technology (A35100)
    Carpentry (Diploma) (D35180)
    Construction Management Technology (A35190)
    Electrical Systems Technology (A35130)
    Plumbing (Diploma) (D35300)

**Engineering Technologies**
    Architectural Technology (A40100)
    Civil Engineering Technology (A40140)
    Electronics Engineering Technology (A40200)
    Geomatics Technology (A40420)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)
    Telecommunications and Network Engineering Technology (A40400)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Dental Assisting (Diploma) (D45240)
    Dental Hygiene (A45260)
    Emergency Medical Science (A45340)
    Health Information Technology (A45360)
    Human Services Technology (A45380)
    Human Services Technology/Mental Health (A4538C)
    Human Services Technology/Substance Abuse (A4538E)
    Medical Assisting (A45400)
    Pharmacy Technology (A45580)
    Physical Therapist Assistant (1+1) (A45640)
    Practical Nursing (Diploma) (D45660)
    Radiography (A45700)
    Surgical Technology (A45740)

**Industrial Technologies**
    Aerostructure Manufacturing and Repair Technology (A50450)
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Manufacturing Technology (A50320)
    Welding Technology (A50420)

**Public Service Technologies**
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Cyber Crime Technology (A55210)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Fire Protection Technology (A55240)
    General Occupational Technology (A55280)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Aviation Electronics (Avionics) Technology (A60150)
    Aviation Management and Career Pilot Technology (A60180)
    Aviation Systems Technology (A60200)
    Collision Repair and Refinishing Technology (A60130)
    Diesel and Heavy Equipment Technology (A60460)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Halifax Community College

**http://www.halifaxcc.edu/**
**Post Office Drawer 809, Weldon, North Carolina 27890**
**Telephone Number: (252) 536-2551**
**Fax Number: (252) 536-4144**

*General Education:*
Associate in General Education (A10300)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Greenhouse and Grounds Maintenance (Certificate) (C15220)

**Business Technologies**
Business Administration (A25120)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)

**Construction Technologies**
*Electric Line Construction Technology (A35230)*

**Health Sciences**

Associate Degree Nursing (A45110)
Dental Hygiene (A45260)
Human Services Technology (A45380)
Human Services Technology/Social Services (A4538D)
Medical Laboratory Technology (A45420)
Nurse Aide (Certificate) (C45840)
Phlebotomy (Certificate) (C45600)
Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
Industrial Systems Technology (A50240)
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Cosmetology (A55140)
Criminal Justice Technology (A55180)
Early Childhood Education (A55220)

**Transport Systems Technologies**
Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Haywood Community College

**http://www.haywood.edu/**
**185 Freelander Drive, Ckyde, NC 28721**
**Telephone Number: (828) 627-2821**
**Fax Number: (828) 627-4513**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Fish and Wildlife Management Technology (A15160)
    Forestry Management Technology (A15200)
    Horticulture Technology (A15240)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)

**Commercial and Artistic Production Technologies**
    Professional Crafts: Clay (A30300)
    Professional Crafts: Fiber (A30320)
    Professional Crafts: Jewelry (A30340)
    Professional Crafts: Wood (A30360)

**Construction Technologies**
    Building Construction Technology (A35140)
    Electrical Systems Technology (A35130)

**Engineering Technologies**
    Electronics Engineering Technology (A40200)

**Health Sciences**
    Associate Degree Nursing (A45110)
    *Emergency Medical Science (A45340)*
    Medical Assisting (A45400)

**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Administration (Certificate) (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    Infant/Toddler Care (Certificate) (C55290)
    Manicuring/Nail Technology (Certificate) (C55400)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

## Isothermal Community College

**http://www.isothermal.edu/**
**P O Box 804, Spindale, NC 28160**
**Telephone Number: (828) 286-3636**
**Fax Number: (828) 286-1120**

*General Education:*
Associate in General Education-Nursing (A1030N)
*College Transfer:*
Associate in Arts (A10100)
Associate in Fine Arts in Music (A10700)
Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
**Agricultural and Natural Resources Technologies**
Agribusiness Technology (A15100)
**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Entrepreneurship (A25490)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
**Commercial and Artistic Production Technologies**
Advertising and Graphics Design (A30100)
Broadcasting and Production Technology (A30120)
**Construction Technologies**
Building Construction Technology (A35140)
Electrical Systems Technology (A35130)
**Engineering Technologies**
Computer Engineering Technology (A40160)
Electronics Engineering Technology (A40200)
Mechanical Engineering Technology (A40320)

**Health Sciences**
Associate Degree Nursing (A45110)
Emergency Medical Science (A45340)
Licensed Practical Nurse Refresher (Certificate) (C45390)
Practical Nursing (Diploma) (D45660)
Surgical Technology (Diploma) (D45740)
**Industrial Technologies**
Computer-Integrated Machining (A50210)
Industrial Systems Technology (A50240)
Manufacturing Technology (A50320)
Mechanical Drafting Technology (A50340)
Welding Technology (A50420)
**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Early Childhood Administration (Certificate) (C55850)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Esthetics Instructor (Certificate) (C55270)
Esthetics Technology (Certificate) (C55230)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)
Manicuring Instructor (Certificate) (C55380)
Manicuring/Nail Technology (Certificate) (C55400)
Occupational Education Associate (A55320)
School-Age Education (A55440)
**Transport Systems Technologies**
Collision Repair and Refinishing Technology (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Agribusiness Technology (A15100)
        Applied Animal Science Technology (A15280)
        Swine Management Technology (A15150)
        Viticulture and Enology Technology (A15430)
    **Biological and Chemical Technologies**
        *Biotechnology (A20100)*
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Office Administration (A25370)
    **Commercial and Artistic Production Technologies**
        Advertising and Graphic Design (A30100)
    **Construction Technologies**
        Electrical Systems Technology (A35130)

**Health Sciences**
    Associate Degree Nursing (A45110)
    *Physical Therapist Assistant (2-year program)*
      *(A45620)*
    Practical Nursing (Diploma) (D45660)
**Industrial Technologies**
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    School-Age Education (A55440)
**Transport Systems Technologies**
    Diesel and Heavy Equipment Technology (A60460)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Johnston Community College

**http://www.johnstoncc.edu/**
**Post Office Box 2350, Smithfield, North Carolina 27577**
**Telephone Number: (919) 934-3051**
**Fax Number: (919) 934-2823**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Horticulture Technology (A15240)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
Paralegal Technology (A25380)

**Commercial and Artistic Production Technologies**
Advertising and Graphic Design (A30100)
Gunsmithing (A30200)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration
Technology (A35100)

**Engineering Technologies**
Applied Engineering Technology (A40130)

**Health Sciences**
Associate Degree Nursing (A45110)
Cardiovascular Sonography (A45160)
*Computed Tomography and Magnetic Resonance
Imaging Technology (D45200)*
Emergency Medical Science (A45340)
*Magnetic Resonance Imaging (D45800)*
Mammography (Certificate) (C45830)
Medical Assisting (A45400)
Medical Sonography (A45440)
Nuclear Medicine Technology (A45460)
Nurse Aide (Certificate) (C45840)
Pharmacy Technology (A45580)
Phlebotomy (Certificate) (C45600)
Radiography (A45700)
Therapeutic Massage (A45750)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Bioprocess Technology (A50440)
Industrial Systems Technology (A50240)
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate)
(C55120)
Community Spanish Interpreter (A55370)
Cosmetology (A55140)
Cosmetology Instructor (Certificate) (C55160)
Criminal Justice Technology (A55180)
Criminal Justice Technology/Forensic Science
(A5518C)
Early Childhood Administration (Certificate)
(C55850)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Fire Protection Technology (A55240)
General Occupational Technology (GOT) (A55280)
Infant/Toddler Care (Certificate) (C55290)
School-Age Care (Certificate) (C55450)
School-Age Education (A55440)

**Transport Systems Technologies**
Diesel and Heavy Equipment Technology (A60460)
Truck Driver Training (Certificate) (C60300)
*awards the credential in collaboration with*
Catawba Valley Community College

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Lenoir Community College

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Fine Arts in Music (A10700)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Agriculture Education (A15330)
Horticulture Technology (A15240)
Sustainable Agriculture (A15410)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
*Healthcare Management Technology (A25200)*
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
Graphic Arts and Imaging Technology (A30180)
Gunsmithing (A30200)

**Engineering Technologies**
Computer Engineering Technology (A40160)
Industrial Engineering Technology (A40240)
Mechanical Engineering Technology (A40320)

**Health Sciences**
Associate Degree Nursing (A45110)
*Dental Assisting (Diploma) (D45240)*
*Dental Hygiene (A45260)*
Emergency Medical Science (A45340)
Human Services Technology (A45380)
Human Services Technology/Mental Health
  (A4538C)
Human Services Technology/Social Services
  (A4538D)
Licensed Practical Nurse Refresher (Certificate)
  (C45390)
Medical Assisting (A45400)
*Nutrition and Dietetics Technician (A45860)*
Polysomnography (A45670)
Practical Nursing (Diploma) (D45660)
Radiography (A45700)
Surgical Technology (A45740)
Therapeutic Massage (A45750)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Industrial Management Technology (A50260)
Industrial Systems Technology (A50240)
Welding Technology (A50420)

**Public Service Technologies**
Basic Law Enforcement Training (Certificate)
  (C55120)
Cosmetology (A55140)
Criminal Justice Technology (A55180)
Culinary Arts (A55150)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Emergency Management (A55460)
General Occupational Technology (A55280)
Infant/Toddler Care (C55290)
Occupational Education Associate (A55320)

**Transport Systems Technologies**
Automotive Customizing Technology (A60190)
Automotive Systems Technology (A60160)
Aviation Management and Career Pilot Technology
  (A60180)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Equine Business Technology (A15170)
        Equine Training Technology (A15190)
    **Biological and Chemical Technologies**
        *Biotechnology (A20100)*
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Commercial Refrigeration Technology (A35200)
        Electrical Systems Technology (A35130)
    **Health Sciences**
        Dental Assisting (Diploma) (D45240)
        Medical Assisting (A45400)
        Physical Therapist Assistant (2-year program)
          (A45620)
        Practical Nursing (Diploma) (D45660)
    **Industrial Technologies**
        Industrial Systems Technology (A50240)
    **Public Service Technologies**
        Cosmetology (A55140)
        Cosmetology Instructor (Certificate) (C55160)
        Criminal Justice Technology (A55180)
        Early Childhood Education (A55220)
        Esthetics Instructor (Certificate) (C55270)
        Esthetics Technology (Certificate) (C55230)
        General Occupational Technology (A55280)
        Manicuring Instructor (Certificate) (C55380)
        Manicuring/Nail Technology (Certificate) (C55400)
        School-Age Education (A55440)
    **Transport Systems Technologies**
        Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Mayland Community College

*General Education:*
Associate in General Education-Nursing (A1030N)
*College Transfer:*
Associate in Arts (A10100)
Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
**Agricultural and Natural Resources Technologies**
Agribusiness Technology (A15100)
Horticulture Technology (A15240)
**Business Technologies**
Business Administration (A25120)
Information Technology (A25590)
**Construction Technologies**
Carpentry (Diploma) (D35180)
Masonry (Diploma) (D35280)
**Engineering Technologies**
Applied Engineering Technology (A40130)
Computer Engineering Technology (A40160)
Electronics Engineering Technology (A40200)

**Health Sciences**
Associate Degree Nursing (A45110)
Human Services Technology (A45380)
Medical Assisting (A45400)
Nurse Aide (Certificate) (C45840)
Practical Nursing (Diploma) (D45660)
**Industrial Technologies**
Welding Technology (A50420)
**Public Service Technologies**
Basic Law Enforcement Training (Certificate)
 (C55120)
Cosmetology (A55140)
Criminal Justice Technology (A55180)
Early Childhood Education (A55220)
General Occupational Technology (A55280)
Manicuring/Nail Technology (Certificate) (C55400)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

## McDowell Technical Community College

**http://www.mcdowelltech.edu/**
**Route 1, Box 170, Marion, North Carolina 28752**
**Telephone Number: (828) 652-6021**
**Fax Number: (828) 652-1014**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Office Administration (A25370)

**Commercial and Artistic Production Technologies**
    Advertising and Graphic Design (A30100)
    Photographic Technology (A30280)

**Construction Technologies**
    Air Conditioning, Heating and Refrigeration Technology (Diploma) (D35100)
    Carpentry (Diploma) (D35180)
    Electrical Systems Technology (A35130)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Dialysis Technology (Diploma) (D45300)
    Health Information Technology (A45360)
    Nurse Aide (Certificate) (C45840)
    Practical Nursing (Diploma) (D45660)
    Surgical Technology (Diploma) (D45740)

**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    *Criminal Justice Technology (A55180)*
    Early Childhood Administration (Certificate) (C55850)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Esthetics Instructor (Certificate) (C55270)
    Esthetics Technology (Certificate) (C55230)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Manicuring/Nail Technology (Certificate) (C55400)
    School-Age Education (A55440)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

**http://www.mitchellcc.edu/**
**500 West Broad Street, Statesville, North Carolina 28677**
**Telephone Number: (704) 878-3200**
**Fax Number: (704) 878-0872**

*General Education:*
  Associate in General Education (A10300)
  Associate in General Education-Nursing (A1030N)
*College Transfer:*
  Associate in Arts (A10100)
  Associate in Engineering (A10500)
  Associate in Fine Arts in Music (A10700)
  Associate in Fine Arts in Visual Arts (A10600)
  Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
  **Agricultural and Natural Resources Technologies**
    Agribusiness Technology (A15100)
    Agriculture Education (A15330)
  **Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Digital Media Technology (A25210)
    Healthcare Management Technology (A25200)
    Information Technology (A25590)
    Office Administration (A25370)
  **Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Electrical Systems Technology (A35130)
  **Engineering Technologies**
    Electronics Engineering Technology (A40200)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)
  **Health Sciences**
    Associate Degree Nursing (A45110)
    Emergency Medical Science (A45340)
    *Health Information Technology (A45360)*
    Human Services Technology (A45380)
    Medical Assisting (A45400)
    *Medical Laboratory Technology (A45420)*
    Nurse Aide (Certificate) (C45840)
    *Nutrition and Dietetics Technician (A45860)*
    Phlebotomy (Certificate) (C45600)
    *Speech Language Pathology Assistant (A45730)*

**Industrial Technologies**
  Computer-Integrated Machining (A50210)
  Welding Technology (A50420)
**Public Service Technologies**
  Basic Law Enforcement Training (Certificate)
    (C55120)
  Cosmetology (A55140)
  Cosmetology Instructor (Certificate) (C55160)
  Criminal Justice Technology (A55180)
  Culinary Arts (A55150)
  Early Childhood Education (A55220)
  Esthetics Technology (Certificate) (C55230)
  Fire Protection Technology (A55240)
  General Occupational Technology (A55280)
  Infant/Toddler Care (Certificate) (C55290)
  Manicuring/Nail Technology (Certificate) (C55400)
  School-Age Education (A55440)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Forestry Management Technology (A15200)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Hunting and Shooting Sports Management (A25600)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
    **Commercial and Artistic Production Technologies**
        Gunsmithing (A30200)
        Metal Engraving (Diploma) (D30240)
        Professional Crafts: Clay (A30300)
        Taxidermy (Diploma) (D30380)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Electrical Systems Technology (A35130)
    **Health Sciences**
        Dental Assisting (Diploma) (D45240)
        Human Services Technology (A45380)
        Human Services Technology/ Developmental
          Disabilities (A4538A)
        Medical Assisting (A45400)
        Nurse Aide (Certificate) (C45840)
        Phlebotomy (Certificate) (C45600)
        Practical Nursing (Diploma) (D45660)
    **Industrial Technologies**
        Industrial Systems Technology (A50240)
        Welding Technology (A50420)
    **Public Service Technologies**
        Basic Law Enforcement Training (Certificate)
          (C55120)
        Criminal Justice Technology (A55180)
        Early Childhood Education (A55220)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Brewing, Distillation and Fermentation (A15250)
    **Biological and Chemical Technologies**
        *Biotechnology (A20100)*
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Healthcare Business Informatics (A25510)
        *Healthcare Management Technology (A25200)*
        Hospitality Management (A25110)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Supply Chain Management (A25620)
    **Commercial and Artistic Production Technologies**
        Advertising and Graphic Design (A30100)
        Broadcasting and Production Technology (A30120)
    **Construction Technologies**
        Electrical Systems Technology (A35130)
        Electric Line Construction Technology (A35230)
    **Engineering Technologies**
        Architectural Technology (A40100)
        Computer Engineering Technology (A40160)
        Electronics Engineering Technology (A40200)

**Health Sciences**
    Associate Degree Nursing (A45110)
    *Dental Assisting (Diploma) (D45240)*
    *Dental Hygiene (A45260)*
    Emergency Medical Science (A45340)
    Health and Fitness Science (A45630)
    Human Services Technology (A45380)
    Human Services Technology/Gerontology
      (A4538B)
    Medical Assisting (A45400)
    *Medical Sonography (A45440)*
    *Nuclear Medicine Technology (A45460)*
    Nurse Aide (Certificate) (C45840)
    Phlebotomy (Certificate) (C45600)
    Physical Therapist Assistant (1+1) (A45640)
    Practical Nursing (Diploma) (D45660)
    Veterinary Medical Technology (A45780)
**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems (A50240)
    Manufacturing Technology (A50320)
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Criminal Justice Technology/Forensic Science
      (A5518C)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Fire Protection Technology (A55240)
    Food Service Technology (Diploma) (D55250)
    General Occupational Technology (A55280)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Horticulture Technology (A15240)
    **Biological and Chemical Technologies**
        *Biotechnology (A20100)*
        Environmental Management Technology (A20230)
        Environmental Science Technology (A20140)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
    **Construction Technologies**
        Electrical Systems Technology (A35130)
        *Electric Line Construction Technology (A35230)*
    **Health Sciences**
        Dental Laboratory Technology (A45280)
        Electroneurodiagnostic Technology (A45320)
        Human Services Technology (A45380)
        Human Services Technology/Substance Abuse
          (A4538E)
        Medical Assisting (A45400)
    **Industrial Technologies**
        Welding Technology (A50420)
    **Public Service Technologies**
        Cosmetology (A55140)
        Criminal Justice Technology (A55180)
        Early Childhood Education (A55220)
        Esthetics Instructor (Certificate) (C55270)
        Esthetics Technology (Certificate) (C55230)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Piedmont Community College

**http://www.piedmontcc.edu/**
**Post Office Box 1197, Roxboro, North Carolina 27573**
**Telephone Number: (336) 599-1181**
**Fax Number: (336) 597-3817**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Agribusiness Technology (A15100)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Healthcare Management Technology (A25200)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)

**Commercial and Artistic Production Technologies**
    Digital Effects and Animation Technology (A30130)
    Film and Video Production Technology (A30140)
    Gunsmithing (Diploma) (D30210)

**Construction Technologies**
    Carpentry (Diploma) (D35180)
    Electrical Systems Technology (A35130)

**Engineering Technologies**
    Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Health Care Technology (Certificate) (C45350)
    Human Services Technology (A45380)
    Human Services Technology/Gerontology
     (A4538B)
    Medical Assisting (A45400)
    Nurse Aide (Certificate) (C45840)
    Phlebotomy (Certificate) (C45600)

**Industrial Technologies**
    Electrical Power Production Technology (A50130)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Services Technology**
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Fine Arts in Music (A10700)
Associate in Fine Arts in Theatre (A10800)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*
**Agricultural and Natural Resources Technologies**
Horticulture Technology (A15240)
**Biological and Chemical Technologies**
Biotechnology (A20100)
**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Entrepreneurship (A25490)
Healthcare Business Informatics (A25510)
Healthcare Management Technology (A25200)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
Paralegal Technology (A25380)
Simulation and Game Development (A25450)
**Commercial and Artistic Production Technologies**
Advertising and Graphic Design (A30100)
**Construction Technologies**
Air Conditioning, Heating, and Refrigeration
Technology (A35100)
Building Construction Technology (A35140)
Electrical Systems Technology (A35130)
**Engineering Technologies**
Architectural Technology (A40100)
Electronics Engineering Technology (A40200)
Mechanical Engineering Technology (A40320)

**Health Sciences**
Advanced Medical Coding (Certificate) (C45530)
Associate Degree Nursing (A45110)
Breast Sonography (Certificate) (C45490)
Cardiovascular Sonography (A45160)
Computed Tomography & Magnetic Resonance
Imaging Technology (Diploma) (D45200)
Emergency Medical Science (A45340)
Health Information Technology (A45360)
Human Services Technology (A45380)
Human Services Technology/Gerontology (A4538B)
Human Services Technology/Substance Abuse
(A4538E)
Mammography (C45830)
Medical Assisting (A45400)
Medical Dosimetry (Diploma) (D45450)
Medical Sonography (A45440)
Nuclear Medicine Technology (A45460)
Nurse Aide (Certificate) (C45840)
Occupational Therapy Assistant (A45500)
Phlebotomy (Certificate) (C45600)
Polysomnography (Certificate) (C45650)
Polysomnography (A45670)
Positron Emission Tomography (Diploma) (D45820)
Radiation Therapy Technology (A45680)
Radiography (A45700)
Recreational Therapy Assistant (A45150)d
Respiratory Therapy (A45720)
Therapeutic Massage (A45750)
**Industrial Technologies**
Computer-Integrated Machining (A50210)
Industrial Systems Technology (A50240)
Industrial Management Technology (A50260)
Welding Technology (A50420)
**Public Service Technologies**
Basic Law Enforcement Training (Certificate) (C55120)
Cosmetology (A55140) (Contract)
Criminal Justice Technology (A55180)
Criminal Justice Technology/Financial
Crime/Computer Fraud (A5518B)
Early Childhood Education (A55220)
General Occupational Technology (A55280)
**Transport Systems Technologies**
Automotive Light-Duty Diesel Technology (Diploma)
(D60430)
Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Randolph Community College

**http://www.randolph.edu/**
**P O Box 1009, Asheboro, NC 27204-1009**
**Telephone Number: (336) 633-0200**
**Fax Number: (336) 629-4695**

*General Education:*
    Associate in General Education (A10300)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Healthcare Management Technology (A25200)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Supply Chain Management (A25620)
    **Commercial and Artistic Production Technologies**
        Advertising and Graphic Design (A30100)
        Interior Design (A30220)
        Photographic Technology (A30280)
    **Construction Technologies**
        *Electric Line Construction Technology (A35230)*
        Electrical Systems Technology (A35130)
    **Engineering Technologies**
        Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Human Services Technology (A45380)
    Human Services Technology/Substance Abuse
      (A4538E)
    Medical Assisting (A45400)
    Nurse Aide (Certificate) (C45840)
    *Physical Therapist Assistant (1+1) (A45640)*
    Radiography (A45700)
**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Manufacturing Technology (A50320)
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Manicuring/Nail Technology (Certificate) (C55400)
**Transport Systems Technologies**
    Automotive Light-Duty Diesel Technology
      (Diploma) (D60430)
    Automotive Systems Technology (A60160)
    Collision Repair and Refinishing Technology
      (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*__College Transfer:__*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*__Certificate, Diploma and/or Associate in Applied Science:__*

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Healthcare Management Technology (A25200)
Information Technology (A25590)
Nonprofit Leadership and Management (A25410)
Office Administration (A25370)

**Construction Technologies**
Air Conditioning, Heating, and Refrigeration
    Technology (A35100)
Electrical Systems Technology (A35130)

**Engineering Technologies**
Computer Engineering Technology (A40160)
Electronics Engineering Technology (A40200)
Mechanical Engineering Technology (A40320)
Mechatronics Engineering Technology (A40350)

**Health Sciences**
Associate Degree Nursing (A45110)
Dialysis Technology (Diploma) (D45300)
Health Information Technology (A45360)
Human Services Technology (A45380)
Human Services Technology/Social Services
    (A4538D)
Human Services Technology/Substance Abuse
    (A4538E)
Medical Assisting (A45400)
Nurse Aide (Certificate) (C45840)
Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Electric Utility Substation and Relay Technology
    (A50510)
Industrial Systems Technology (A50240)
Welding Technology (A50420)

**Public Service Technologies**
Criminal Justice Technology (A55180)
Early Childhood Administration (Certificate) (C55850)
Early Childhood Education (A55220)
Early Childhood Preschool (Certificate) (C55860)
Infant/Toddler Care (Certificate) (C55290)
School-Age Care (Certificate) (C55450)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
    *Biotechnology (A20100)*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)

**Engineering Technologies**
    *Architectural Technology (A40100)*
    Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    *Dental Assisting (Diploma) (D45240)*
    Emergency Medical Science (A45340)
    Human Services Technology (A45380)
    Human Services Technology/Mental Health (A4538C)
    Nurse Aide (Certificate) (C45840)

**Industrial Technologies**
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Barbering (A55110)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Electrical Systems Technology (A35130)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Emergency Medical Science (A45340)
    Nurse Aide (Certificate) (C45840)
    Practical Nursing (Diploma) (D45660)
    Radiography (A45700)
    Respiratory Therapy (A45720)
    Surgical Technology (Diploma) (D45740)

**Industrial Technologies**
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Baking and Pastry Arts (A55130)
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Administration (Certificate) (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    School-Age Care (Certificate) (C55450)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Rockingham Community College

**http://www.rockinghamcc.edu/**
**PO Box 38, Wentworth, NC 27375-0038**
**Telephone Number: (336) 342-4261**
**Fax Number: (336) 349-9986**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science*
    **Agricultural and Natural Resources Technologies**
        Brewing, Distillation and Fermentation (A15250)
        Horticulture Technology (A15240)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Electrical Systems Technology (A35130)

**Engineering Technologies**
    Electronics Engineering Technology (A40200)
**Health Sciences**
    Associate Degree Nursing (A45110)
    Phlebotomy (Certificate) (C45600)
    *Physical Therapist Assistant (1 + 1)*
    Practical Nursing (Diploma) (D45660)
    Respiratory Therapy (A45720)
    Surgical Technology (A45740)
**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    Fire Protection Technology (A55240)
    General Occupational Technology (A55280)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in Engineering (A10500)
    Associate in General Education (A10300)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Biological and Chemical Technologies**
        Biotechnology (A20100)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
    **Commercial and Artistic Production Technologies**
        Advertising and Graphic Design (A30100)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Construction Management Technology (A35190)
        Electrical Systems Technology (A35130)
    **Engineering Technologies**
        Electronics Engineering Technology (A40200)
        Industrial Engineering Technology (A40240)
        Mechanical Engineering Technology (A40320)
        Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Dental Assisting (Diploma) (D45240)
    Emergency Medical Science (A45340)
    Nurse Aide (Certificate) (C45840)
    Occupational Therapist Assistant (A45500)
    Physical Therapist Assistant (2-year Program)
      (A45620)
    Practical Nursing (Diploma) (D45660)
    Radiography (A45700)
**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Mechanical Drafting Technology (A50340)
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Esthetics Technology (Certificate) (C55230)
    Fire Protection Technology (A55240)
    Infant/Toddler Care (Certificate) (C55290)
    Manicuring/Nail Technology (Certificate) (C55400)
    School-Age Education (A55440)
**Transport Systems Technologies**
    Automotive Light-Duty Diesel Technology
      (Diploma) (D60430)
    Automotive Systems Technology (A60160)
    Motorsports Management Technology (A60270)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Applied Animal Science Technology (A15280)
        Horticulture Technology (A15240)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Supply Chain Management (A25620)
    **Construction Technologies**
        Building Construction Technology (A35140)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Emergency Medical Science (A45340)
        Human Services Technology (A45380)
        Medical Assisting (A45400)
        Nurse Aide (Certificate) (C45840)
        Practical Nursing (Diploma) (D45660)
    **Industrial Technologies**
        Industrial Systems Technology (A50240)
        Welding Technology (A50420)
    **Public Service Technologies**
        Basic Law Enforcement Training (Certificate)
          (C55120)
        Community Spanish Interpreter (A55370)
        Cosmetology (A55140)
        Cosmetology Instructor (Certificate) (C55160)
        Criminal Justice Technology (A55180)
        Early Childhood Education (A55220)
        Emergency Management (A55460)
        Lateral Entry (Certificate) (C55430)
        Manicuring/Nail Technology (Certificate) (C55400)
        School-Age Education (A55440)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Music (A10700)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Golf Course Management Technology (A15230)
        Landscape Gardening (A15260)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Digital Media Technology (A25210)
        Hospitality Management (A25110)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Simulation and Game Development (A25450)
    **Engineering Technologies**
        Architectural Technology (A40100)
        Civil Engineering Technology (A40140)
        Computer Engineering Technology (A40160)
        Geomatics Technology (A40420)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Emergency Medical Science (A45340)
    Health and Fitness Science (A45630)
    *Health Information Technology (A45360)*
    Human Services Technology (A45380)
    Human Services Technology/Substance Abuse
      (A4538E)
    Medical Laboratory Technology (A45420)
    Nurse Aide (Certificate) (C45840)
    Ophthalmic Medical Personnel (A45210)
    Polysomnography (A45670)
    Radiography (A45700)
    Respiratory Therapy (A45720)
    Surgical Technology (A45740)
    Therapeutic Massage (A45750)
**Industrial Technologies**
    Industrial Systems Technology (A50240)
**Public Service Technologies**
    Baking and Pastry Arts (A55130)
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Fire Protection Technology (A55240)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Aviation Management and Career Pilot Technology
      (A60180)
    Collision Repair and Refinishing Technology
      (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Agribusiness Technology (A15100)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Entrepreneurship (A25490)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Paralegal Technology (A25380)
        *Simulation and Game Development (A25450)*
    **Commercial and Artistic Production Technologies**
        Advertising and Graphic Design (A30100)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Electrical Systems Technology (A35130)
    **Engineering Technologies**
        Mechanical Engineering Technology (A40320)
        Mechatronics Engineering Technology (A40350)

**Health Science**
    Associate Degree Nursing (A45110)
    Cardiovascular Sonography (A45160)
    Emergency Medical Science (A45340)
    Human Services Technology (A45380)
    Licensed Practical Nurse Refresher (Certificate)
      (C45390)
    Medical Assisting (A45400)
    Medical Sonography (A45440)
    Musculoskeletal Sonography (Certificate) (C45850)
    Nurse Aide (Certificate) (C45840)
    Practical Nursing (Diploma) (D45660)
**Industrial Technologies**
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Cyber Crime Technology (A55210)
    Early Childhood Education (A55220)
    *Fire Protection Technology (A55240)*
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    School-Age Education (A55440)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
 Associate in General Education (A10300)
 Associate in General Education-Nursing (A1030N)

*College Transfer:*
 Associate in Arts (A10100)
 Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Business Technologies**
 Business Administration (A25120)
 Information Technology (A25590)
 Medical Office Administration (A25310)
 Office Administration (A25370)

**Commercial and Artistic Production Technology**
 Broadcasting and Production Technology (A30120)

**Construction Technologies**
 Air Conditioning, Heating, and Refrigeration
  Technology (A35100)
 *Masonry (D35280)*
 *Plumbing (D35300)*

**Engineering Technologies**
 Electrical Engineering Technology (A40180)
 Mechatronics Engineering Technology (A40350)

**Health Sciences**
 Associate Degree Nursing (A45110)
 Medical Laboratory Technology (A45420)
 Nurse Aide (Certificate) (C45840)
 Phlebotomy (Certificate) (C45600)
 Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
 Facility Maintenance Technology (A50190)
 Welding Technology (A50420)

**Public Service Technologies**
 Basic Law Enforcement Training (Certificate)
  (C55120)
 Cosmetology (A55140)
 Cosmetology Instructor (Certificate) (C55160)
 Criminal Justice Technology (A55180)
 Criminal Justice Technology/Forensic Science
  (A5518C)
 Early Childhood Education (A55220)
 Manicuring/Nail Technology (Certificate) (C55400)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

## Southwestern Community College

**http://www.southwesterncc.edu/**
**447 College Drive, Sylva, North Carolina 28779**
**Telephone Number: (828) 586-4091**
**Fax Number: (828) 586-3129**

*General Education:*
- Associate in General Education (A10300)
- Associate in General Education-Nursing (A1030N)

*College Transfer:*
- Associate in Arts (A10100)
- Associate in Fine Arts in Visual Arts (A10600)
- Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
- *Environmental Science Technology (A20140)*

**Business Technologies**
- Accounting and Finance (A25800)
- Business Administration (A25120)
- Information Technology (A25590)
- Medical Office Administration (A25310)
- Office Administration (A25370)
- Paralegal Technology (A25380)

**Commercial and Artistic Production Technologies**
- Advertising and Graphic Design (A30100)

**Construction Technologies**
- Air Conditioning, Heating, and Refrigeration Technology (A35100)
- Carpentry (Diploma) (D35180)
- Electrical Systems Technology (A35130)

**Engineering Technologies**
- Civil Engineering Technology (A40140)
- Computer Engineering Technology (A40160)
- Electronics Engineering Technology (A40200)
- Geomatics Technology (A40420)
- Mechatronics Engineering Technology (A40350)

**Health Sciences**
- Associate Degree Nursing (A45110)
- Emergency Medical Science (A45340)
- Health Information Technology (A45360)
- Human Services Technology (A45380)
- Human Services Technology/Substance Abuse (A4538E)
- Medical Assisting (A45400)
- Medical Laboratory Technology (A45420)
- Medical Sonography (A45440)
- Nurse Aide (Certificate) (C45840)
- Occupational Therapy Assistant (A45500)
- Phlebotomy (Certificate) (C45600)
- Physical Therapist Assistant (2-year program) (A45620)
- Radiography (A45700)
- Respiratory Therapy (A45720)
- Therapeutic Massage (A45750)

**Industrial Technologies**
- Welding Technology (A50420)

**Public Service Technologies**
- Cosmetology (A55140)
- Criminal Justice Technology (A55180)
- Culinary Arts (A55150)
- Cyber Crime Technology (A55210)
- Early Childhood Administration (Certificate) (C55850)
- Early Childhood Education (A55220)
- Early Childhood Preschool (Certificate) (C55860)
- Infant/Toddler Care (Certificate) (C55290)
- Occupational Education Associate (A55320)
- Outdoor Leadership (A55330)
- School-Age Education (A55440)

**Transport Systems Technology**
- Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

## Stanly Community College

**http://www.stanly.edu/**
**141 College Drive, Albemarle, North Carolina 28001**
**Telephone Number: (704) 982-0121**
**Fax Number: (704) 982-0819**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science:*
    **Agricultural and Natural Resources Technologies**
        Agribusiness Technology (A15100)
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Simulation and Game Development (A25450)
    **Commercial and Artistic Production Technologies**
        Advertising and Graphic Design (A30100)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration Technology (Diploma) (D35100)
        Heavy Equipment Operator (Diploma) (D35240)
    **Engineering Technologies**
        Computer Engineering Technology (A40160)
        Electronics Engineering Technology (A40200)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        Emergency Medical Science (A45340)
        Human Services Technology (A45380)
        Human Services Technology/Developmental Disabilities (A4538A)
        Medical Assisting (A45400)
        Medical Laboratory Technology (A45420)
        Nurse Aide (Certificate) (C45840)
        Pharmacy Technology (A45580)
        Radiography (A45700)
        Respiratory Therapy (A45720)

**Industrial Technologies**
    Biomedical Equipment Technology (A50100)
    Computer Integrated Machining (A50210)
    Welding Technology (Diploma) (D50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate) (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Cyber Crime Technology (A55210)
    Early Childhood Administration (Certificate) (C55850)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    *Fire Protection Technology (A55240)*
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Manicuring Instructor (Certificate) (C55380)
    Manicuring/Nail Technology (Certificate) (C55400)
    School-Age Care (Certificate) (C55450)
    School-Age Education (A55440)
**Transport Systems Technologies**
    Collision Repair and Refinishing Technology (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*College Transfer:*
Associate in Arts (A10100)
Associate in Fine Arts in Visual Arts (A10600)
Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
Horticulture Technology (A15240)
Viticulture and Enology Technology (A15430)

**Biological and Chemical Technologies**
*Biotechnology (A20100)*

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Digital Media Technology (A25210)
Information Technology (A25590)
Medical Office Administration (A25310)
Office Administration (A25370)
Paralegal Technology (A25380)
Supply Chain Management (A25620)

**Commercial and Artistic Production Technologies**
Advertising and Graphic Design (A30100)

**Construction Technologies**
Air Conditioning, Heating, & Refrigeration
Technology (A35100)
Carpentry (Diploma) (D35180)
Construction Management Technology (A35190)
Electrical Systems Technology (A35130)

**Engineering Technologies**
Electronics Engineering Technology (A40200)
Mechatronics Engineering Technology (A40350)
Sustainability Technologies (A40370)

**Health Sciences**
Associate Degree Nursing (A45110)
*Dental Assisting (Diploma) (D45240)*
*Dental Hygiene (A45260)*
Health Information Technology (A45360)
Medical Assisting (A45400)
Nurse Aide (Certificate) (C45840)
Physical Therapist Assistant (2-year program)
(A45620)
*Polysomnography (A45670)*
Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
Computer-Integrated Machining (A50210)
Industrial Systems Technology (A50240)
Mechanical Drafting Technology (A50340)
Welding Technology (A50420)

**Public Service Technologies**
Community Spanish Interpreter (A55370)
Cosmetology (A55140)
Criminal Justice Technology (A55180)
Criminal Justice Technology/Forensic Science
(A5518C)
Early Childhood Administration (Certificate)
(C55850)
Early Childhood Education (A55220)
General Occupational Technology (A55280)
Infant/Toddler Care (Certificate) (C55290)

**Transport Systems Technologies**
Automotive Systems Technology (A60160)
Collision Repair and Refinishing Technology
(A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Hunting and Shooting Sports Management (A25600)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Electrical Systems Technology (A35130)

**Engineering Technologies**
    Electrical Engineering Technology (A40180)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Emergency Medical Science (A45340)
    Human Services Technology (A45380)
    Human Services Technology/Animal Assisted
      Interactions (A4538F)
    Human Services Technology/Social Services (A4538D)
    Human Services Technology/Substance Abuse
      (A4538E)
    Medical Assisting (A45400)
    Therapeutic Massage (A45750)

**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Esthetics Technology (Certificate) (C55230)
    General Occupational Technology (A55280)
    School-Age Education (A55440)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

_**General Education:**_
    Associate in General Education (A10300)
_**College Transfer:**_
    Associate in Arts (A10100)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)
_**Certificate, Diploma and/or Associate in Applied Science:**_
    **Business Technologies**
        Accounting and Finance (A25800)
        Business Administration (A25120)
        Information Technology (A25590)
        Medical Office Administration (A25310)
        Office Administration (A25370)
        Paralegal Technology (A25380)
        _Simulation and Game Development (A25450)_
        Supply Chain Management (A25620)
    **Construction Technologies**
        Air Conditioning, Heating, and Refrigeration
          Technology (A35100)
        Carpentry (Diploma) (D35180)
        Electrical Systems Technology (A35130)
    **Engineering Technologies**
        Electronics Engineering Technology (A40200)
        Mechatronics Engineering Technology (A40350)
    **Health Sciences**
        Associate Degree Nursing (A45110)
        _Computed Tomography and Magnetic Resonance_
          _Imaging Technology (D45200)_
        Histotechnology (A45370)
        Human Services Technology (A45380)
        Human Services Technology/Gerontology (A4538B)
        Human Services Technology/Mental Health
          (A4538C)
        Human Services Technology/Substance Abuse
          (A4538E)
        _Magnetic Resonance Imaging (A45800)_
        Medical Assisting (A45400)
        Nurse Aide (Certificate) (C45840)
        Pharmacy Technology (A45580)
        Practical Nursing (Diploma) (D45660)
        Radiography (A45700)

**Industrial Technologies**
    Bioprocess Technology (A50440)
    Welding Technology (A50420)
**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology (A55140)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Infant/Toddler Care (Certificate) (C55290)
    Lateral Entry (Certificate) (C55430)
    School-Age Care (Certificate) (C55450)
**Transport Systems Technologies**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Wake Technical Community College

**http://www.waketech.edu/**
**9101 Fayetteville Road, Raleigh, North Carolina 27603**
**Telephone Number: (919) 662-3400**
**Fax Number: (919) 779-3360**

*General Education:*
   *College Transfer:*
   Associate in Arts (A10100)
   Associate in Engineering (A10500)
   Associate in Fine Arts in Visual Arts (A10600)
   Associate in Science (A10400)
*Certificate, Diploma and/or Associate in Applied Science*
   **Biological and Chemical Technologies**
      Biopharmaceutical Technology (A20180)
      Environmental Science Technology (A20140)
   **Business Technologies**
      Accounting and Finance (A25800)
      Business Administration (A25120)
      Business Analytics (A25350)
      Hospitality Management (A25110)
      Information Technology (A25590)
      Medical Office Administration (A25310)
      Office Administration (A25370)
      Simulation and Game Development (A25450)
      Supply Chain Management (A25620)
   **Commercial and Artistic Production Technologies**
      Advertising and Graphic Design (A30100)
      Interior Design (A30220)
   **Construction Technologies**
      Air Conditioning, Heating, and Refrigeration
         Technology (A35100)
      Construction Management Technology (A35190)
      Electrical Systems Technology (A35130)
      Heavy Equipment Operator (Diploma) (D35240)
      Plumbing (Diploma) (D35300)
   **Engineering Technologies**
      Architectural Technology (A40100)
      Civil Engineering Technology (A40140)
      Computer Engineering Technology (A40160)
      Electronics Engineering Technology (A40200)
      Geomatics Technology (A40420)
      Industrial Engineering Technology (A40240)
      Landscape Architecture Technology (A40260)
      Mechanical Engineering Technology (A40320)
      Mission Critical Operations (A40430)

**Health Sciences**
   Associate Degree Nursing (A45110)
   Computed Tomography/Magnetic Resonance
      Imaging Technology (Diploma) (D45200)
   Dental Assisting (Diploma) (D45240)
   Dental Hygiene (A45260)
   Emergency Medical Science (A45340)
   Health and Fitness Science (A45630)
   Healthcare Simulation Technology (A45980)
   Human Services Technology (A45380)
   Human Services Technology/Mental Health
      (A4538C)
   Human Services Technology/Substance Abuse
      (A4538E)
   Magnetic Resonance Imaging (A45800)
   Medical Assisting (A45400)
   Medical Laboratory Technology (A45420)
   Nurse Aide (Certificate) (C45840)
   Pharmacy Technology (A45580)
   Phlebotomy (Certificate) (C45600)
   Radiography (A45700)
   Surgical Technology (A45740)
   Therapeutic Massage (A45750)
**Industrial Technologies**
   Facility Maintenance Technology (A50190)
   Mechanical Drafting Technology (A50340)
   Welding Technology (A50420)
**Public Service Technologies**
   Baking and Pastry Arts (A55130)
   Cosmetology (A55140)
   Criminal Justice Technology (A55180)
   Criminal Justice Technology/Forensic Science
      (A5518C)
   Culinary Arts (A55150)
   Early Childhood Education (A55220)
   Esthetics Technology (Certificate) (C55230)
   Fire Protection Technology (A55240)
   General Occupational Technology (A55280)
   Infant/Toddler Care (C55290)
   Lateral Entry (Certificate) (C55430)
**Transport Systems Technologies**
   Agricultural Systems Technology (A60410)
   Automotive Systems Technology (A60160)
   Collision Repair and Refinishing Technology
      (A60130)
   Construction Equipment Systems Technology
      (A60450)
   Diesel and Heavy Equipment Technology (A60460)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Wayne Community College

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)
*College Transfer:*
    Associate in Arts (A10100)
    Associate in Engineering (A10500)
    Associate in Science (A10400)
*Certificate, Diploma, and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Agribusiness Technology (A15100)
    Applied Animal Science Technology (A15280)
    Forestry Management Technology (A15200)
    Sustainable Agriculture (A15410)
    Swine Management Technology (A15150)
    Turfgrass Management Technology (A15420)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
    Simulation and Game Development (A25450)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)

**Engineering Technologies**
    Electronics Engineering Technology (A40200)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)
    Sustainability Technologies (A40370)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Dental Assisting (Diploma) (D45240)
    Dental Hygiene (A45260)
    Human Services Technology (A45380)
    Medical Assisting (A45400)
    Medical Laboratory Technology (A45420)
    Nurse Aide (Certificate) (C45840)
    Pharmacy Technology (A45580)
    Phlebotomy (Certificate) (C45600)
    Practical Nursing (Diploma) (D45660)

**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Criminal Justice Technology (A55180)
    Criminal Justice Technology/Forensic Science
      (A5518C)
    Early Childhood Education (A55220)
    Emergency Management (A55460)
    Infant/Toddler Care (Certificate) (C55290)

**Transport Systems Technologies**
    Automotive Systems Technology (A60160)
    Aviation Systems Technology (A60200)
    Collision Repair and Refinishing Technology
      (A60130)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*General Education:*
    Associate in General Education (A10300)
    Associate in General Education-Nursing (A1030N)

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Fine Arts in Theatre (A10800)
    Associate in Fine Arts in Visual Arts (A10600)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Agricultural and Natural Resources Technologies**
    Horticulture Technology (A15240)
    Sustainable Agriculture (A15410)

**Biological and Chemical Technologies**
    Environmental Science Technology (A20140)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
    Paralegal Technology (A25380)
    Simulation and Game Development (A25450)

**Commercial and Artistic Production Technologies**
    Digital Effects and Animation Technology (A30130)
    Professional Arts and Crafts: Sculpture (A30290)
    Professional Crafts: Clay (A30300)
    Professional Crafts: Wood (A30360)

**Construction Technologies**
    Building Construction Technology (A35140)

**Engineering Technologies**
    Civil Engineering Technology (A40140)
    Computer Engineering Technology (A40160)
    Electrical Engineering Technology (A40180)
    Geomatics Technology (A40420)
    Mechanical Engineering Technology (A40320)
    Mechatronics Engineering Technology (A40350)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Dental Assisting (Diploma) (D45240)
    Human Services Technology (A45380)
    Human Services Technology/Substance Abuse
      (A4538E)
    Medical Assisting (A45400)
    Medical Laboratory Technology (A45420)
    Recreational Therapy Assistant (A45150)

**Industrial Technologies**
    Computer-Integrated Machining (A50210)
    Industrial Systems Technology (A50240)
    Welding Technology (A50420)

**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Cosmetology Instructor (Certificate) (C55160)
    Criminal Justice Technology (A55180)
    Early Childhood Education (A55220)
    Early Childhood Preschool (Certificate) (C55860)
    General Occupational Technology (A55280)
    Infant/Toddler Care (Certificate) (C55290)
    Interpreter Education (A55300)
    Manicuring Instructor (Certificate) (C55380)
    Manicuring/Nail Technology (Certificate) (C55400)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

# Wilkes Community College

**http://www.wilkescc.edu/**
**Post Office Box 120, Wilkesboro, North Carolina 28697**
**Telephone Number: (336) 838-6100**
**Fax Number: (336) 838-6277**

*__General Education:__*
Associate in General Education (A10300)
Associate in General Education-Nursing (A1030N)

*__College Transfer:__*
Associate in Arts (A10100)
Associate in Engineering (A10500)
Associate in Science (A10400)

*__Certificate, Diploma and/or Associate in Applied Science:__*

**Agricultural and Natural Resources Technologies**
Applied Animal Science (A15280)
Horticulture Technology (A15240)

**Business Technologies**
Accounting and Finance (A25800)
Business Administration (A25120)
Information Technology (A25590)
Simulation and Gaming Development (A25450)

**Commercial and Artistic Production Technologies**
Advertising and Graphic Design (A30100)

**Construction Technologies**
Building Construction Technology (A35140)

**Engineering Technologies**
Applied Engineering Technology (A40130)
Architectural Technology (A40100)

**Health Sciences**
Associate Degree Nursing (A45110)
Dental Assisting (Diploma) (D45240)
Emergency Medical Science (A45340)
Human Services Technology (A45380)
Medical Assisting (A45400)
Nurse Aide (Certificate) (C45840)
Radiography (A45700)
Respiratory Therapy (A45720)

**Industrial Technologies**
Industrial Systems Technology (A50240)
Welding Technology (A50420)

**Public Service Technologies**
Baking and Pastry Arts (A55130)
Basic Law Enforcement Training (Certificate)
(C55120)
Cosmetology (A55140)
Criminal Justice Technology (A55180)
Culinary Arts (A55150)
Early Childhood Education (A55220)
Manicuring/Nail Technology (Certificate)
(C55400)

**Transport Systems Technologies**
Automotive Systems Technology (A60160)
Collision Repair and Refinishing Technology
(A60130)
Diesel and Heavy Equipment Technology
(A60460)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

*College Transfer:*
    Associate in Arts (A10100)
    Associate in Science (A10400)

*Certificate, Diploma and/or Associate in Applied Science:*

**Biological and Chemical Technologies**
    Biotechnology (A20100)

**Business Technologies**
    Accounting and Finance (A25800)
    Business Administration (A25120)
    Information Technology (A25590)
    Medical Office Administration (A25310)
    Office Administration (A25370)
    Paralegal Technology (A25380)

**Construction Technologies**
    Air Conditioning, Heating, and Refrigeration
      Technology (A35100)
    Electrical Systems Technology (A35130)

**Engineering Technologies**
    Applied Engineering Technology (A40130)
    Electronics Engineering Technology (A40200)

**Health Sciences**
    Associate Degree Nursing (A45110)
    Practical Nursing (Diploma) (D45660)
    Surgical Technology (A45740)

**Industrial Technologies**
    Welding Technology (A50420)

**Public Service Technologies**
    Basic Law Enforcement Training (Certificate)
      (C55120)
    Community Spanish Interpreter (A55370)
    Cosmetology (A55140) (Contract)
    Criminal Justice Technology (A55180)
    Culinary Arts (A55150)
    Early Childhood Education (A55220)
    Infant/Toddler Care (Certificate) (C55290)
    Interpreter Education (A55300)
    School-Age Education (A55440)

**Transport Systems Technology**
    Automotive Systems Technology (A60160)

**Certificate, Diploma and Associate in Applied Science Programs in italics are collaboratively taught. Please contact the college for information.**

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