Caldwell Community College
and Technical Institute

www.ccti.edu

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Volume XXXVIII • Effective August 1, 2011

This catalog is intended for informational purposes only. Though the College has made a
good faith effort to avoid typographical errors and other mistakes, changes in requirements,
rules, fees, procedures, courses, and informational statements may occur after the
publication of this catalog. Efforts will be made to keep changes to a minimum, but the
college reserves the right to revise any part or section as may be required. Students will be
informed of such changes. In any case, erroneous catalog statements do not take precedent
over properly adopted policies.

Academic advisors and staff members are available to assist students in understanding the
requirements and regulations that follow. It is the student’s responsibility, however, to meet
them. Students are encouraged to keep this catalog as a reference.
Nondiscrimination Statement

Caldwell Community College and Technical Institute is dedicated to equality of opportunity for its staff and students. CCC&TI does not discriminate against students, employees, or applicants on the grounds of race, color, religion, age, sex, national origin, or disability.

CCC&TI is committed to this policy. Caldwell Community College and Technical Institute supports the protection of citizens by all applicable Federal Laws including Title VI and Title VII of the Civil Rights Act of 1964, Equal Pay Act of 1963, Title IX of the 1972 Education Amendments, Executive Order 11246 as amended by 11375 Title VII (Section 799A) and Title VIII (Section 845) of the Public Health Service Act, Age Discrimination Act, the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1991.

Sexual harassment shall be deemed a form of discrimination based on sex as prohibited by Section 703 of Title VII of the Civil Rights Act, and North Carolina General Statute 126-16 (in the case of employees), and Title VI of the Education Amendments Act of 1972 (in the case of students). Sexual harassment is defined as deliberate, unsolicited, unwelcome verbal and/or physical conduct of a sexual nature or with sexual implications. Any member of Caldwell Community College and Technical Institute believing he or she has been discriminated against or desiring more information concerning these provisions should contact: Director of Human Resources, and/or Mark Poarch, Vice President of Student Services, Coordinator of Title IX and/or Section 504.
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2011-12 Academic Calendar

Fall Semester 2011
Thursday, August 11 ................................................................. Employee/Kickoff Day
Tuesday, August 16 ...................................................... Final Registration, Caldwell & Watauga Campuses
Thursday, August 18 ............................................................. Curriculum Classes Begin
August 18-19 ................................................................. Schedule Change Period
August 18-31 .......................................................... Charge in bookstore, for Financial Aid Recipients
September 1-2 .......................................................... Charge in bookstore for Financial Aid Recipients
Monday, September 5 ...................................................... Labor Day Holiday/ Institution Closed
Saturday, October 1 .......................................................... FAFSA filing target deadline for Spring 2012
October 10-11 ............................................................... Curriculum Student Fall Break
Wednesday, October 26 .................................................... Last Day for Students to Drop Classes
November 8-10 ............................................................ Curriculum Priority Registration for Currently Enrolled Students Only
Friday, November 11 ....................................................... Veterans Day Holiday/Institution Closed
November 14-18 .......................................................... Spring Semester Registration for New Students and Students Not Currently Enrolled
Tuesday, November 22 .......................................................... Fall and Spring Graduation Application Deadline
Wednesday, November 23 .................................................. Curriculum Student Holiday
November 24-26 ............................................................ Thanksgiving Holiday/Institution Closed
Friday, December 2 .......................................................... Spring Tuition Payment Due by 12 p.m.
December 14-16 ................................................................. Exams
Friday, December 16 .......................................................... End of Fall Semester
Monday, December 19 .......................................................... Grades due by 12 p.m.
Friday, December 23 .......................................................... Annual Leave Day/Institution Closed
December 24-31 .......................................................... Christmas Holiday/Institution Closed

Spring Semester 2012
Sunday, January 1 .......................................................... Institution closed for New Year’s Holiday
Monday, January 2 ............................................................... Professional Development Faculty/Staff
Wednesday, January 4 ...................................................... Final Registration, Caldwell & Watauga Campuses
January 5-20 ................................................................. Charge in Bookstore for Financial Aid Recipients
Monday, January 9 ............................................................. Curriculum Classes Begin
January 9-10 ................................................................. Schedule Change Period
Monday, January 16 .................................................. Martin Luther King Jr. Holiday/ Institution Closed
Thursday, March 1 .......................................................... FAFSA Filing target deadline for Summer 2012
March 14-17 ................................................................. Curriculum Student Spring Break
Thursday, March 22 .......................................................... Last day to Drop Classes
April 2-4 ................................................................. Curriculum Summer 2012 Priority Registration for Currently Enrolled Students Only
April 5-6 ................................................................. Summer Semester Registration for New Students and Students Not Currently Enrolled
Saturday, April 7 .......................................................... Institution Closed
Monday, April 9 ............................................................ Easter Holiday/ Institution Closed
April 10 ................................................................. Curriculum Student Easter Break
April 11-13 ................................................................. Fall 2012 Curriculum Priority Registration for Currently Enrolled Students Only
Friday, April 20 .......................................................... Summer Tuition Payment Due by 6 p.m.
Tuesday, May 1 .......................................................... FAFSA filing target deadline for Fall 2012
May 3-4 & 7 ..............................................................Exams
Wednesday, May 9 ................................End of Spring Semester; Grades due by 12 p.m.
Thursday, May 10 .................................................................AHS/GED Graduation
Friday, May 11 ..............................................................Curriculum Graduation

Summer Semester 2012 (10 weeks)
Tuesday, May 15.............................Final Registration, Caldwell & Watauga Campuses
   Dual Enrollment Registration
May 16-31 ..................................................Charge in Bookstore, for Financial Aid Recipients
Thursday, May 17 .................................................................Curriculum Classes Begin
May 17-18 ..............................................................Schedule Change Period
Monday, May 28 ........................................Memorial Day Holiday/ Institution Closed
Thursday, June 21 ........................................Deadline to Apply for Summer Graduation
Friday, June 29 ...................................................Last day to drop Classes
Wednesday, July 4 ..................................Independence Day Holiday/ Institution Closed
July 5-7 ..........................................................Curriculum Student Holiday for Independence Day
July 9-13 ......................................................Schedule Adjustment for Students Early Registered
   in Priority Registration for Fall Semester
   (Students Enrolled in Fall 2011, Spring 2012, & Summer 2012 only)
Tuesday, July 17 ........................................Advising/Registration Day (New Students)
   No Curriculum Classes
July 18-20 ..........................................................Fall Semester Registration for New Students
   and Students Not Currently Enrolled
Wednesday, August 1 ........................................End of Summer Semester
Friday, August 3 ..........................................................Grades Due by 12 p.m.
   Fall Tuition Payment Due by 12 p.m.
General Information

History of the College

The 1963 North Carolina General Assembly passed the Community College Act creating a system of comprehensive community colleges, technical institutes, and industrial education centers in the state under the State Board of Education. The 1979 General Assembly rewrote the Community College Act and authorized a new board for community colleges, effective January 1, 1981.

The establishment of Caldwell Technical Institute was tentatively approved by the State Board of Education in January, 1964. The people of Caldwell County approved the college on March 28, 1964, through a bond vote of $600,000. The monies funded purchase of a site, construction of facilities, and up to five cents tax authorization for college operations. Final approval by the State Board of Education followed on April 2, 1964. The first president, Dr. H. Edwin Beam, was selected that fall and began work in November, 1964.

Classes in health occupations began at a temporary site in 1965 with the first full year of classes held in 1966-67. A permanent site was selected for the institute in January, 1965, and an architect was selected the following month. New facilities were occupied in September, 1967.

On July 1, 1970, Caldwell Technical Institute was authorized by the North Carolina General Assembly through the State Board of Education to offer college transfer courses. Subsequently, Caldwell Technical Institute changed its name to Caldwell Community College and Technical Institute.

A referendum seeking approval of the issuance of $800,000 in bonds by Caldwell County was proposed and voted upon on December 7, 1971. The local money was to match a federal grant of $799,306 under the Appalachian Region Act. This referendum was passed by more than a 2 to 1 majority.

In 1973, the institution received $500,000 in state construction funds from an appropriation by the North Carolina General Assembly. These funds enabled the trustees to increase the size of the college by about 77,000 square feet. The new buildings were occupied during the 1974-75 school year.

In 1979 the Caldwell County Commissioners authorized an expenditure of $600,000 to match a proposed Appalachian Regional Grant of $400,000 to construct additional facilities. These new facilities were occupied in August, 1982. The additional 19,000 square feet made a total of 154,000 square feet of building space at the institution. In September 1973, the Watauga Division of Caldwell Community College and Technical Institute was established to provide limited credit and more extensive noncredit offerings in various locations throughout the county to the citizens of Watauga County. Appalachian State University permits the Caldwell Community College and Technical Institute Watauga students to use the university’s library facilities.

Dr. H. Edwin Beam retired June 30, 1984, after 20 years of service. Dr. Eric B. McKeithan was appointed July 1, 1984, to begin his term as second president. The General Assembly appropriated $250,000 to the college during the short session of 1984. These funds were combined with $129,000 in local appropriations, and a 6,200-square-foot addition was added to E Building to provide state-of-the-art facilities for the nursing, occupational therapy assistant, and physical therapist assistant training programs.
In the spring of 1987, the Watauga County Commissioners renovated a 6,800-square-foot former child care center and turned the facility over to the Watauga campus of Caldwell Community College and Technical Institute. With seven classrooms, a kitchen, and space for a Small Business Center, a Career Center, a computer lab, and offices, this facility, which was called the Watauga Business Center, provided the college with much needed space for daytime programming, as well as additional space for evening classes.

On June 6, 1986, the voters of Caldwell County approved a bond referendum of $3.4 million for Caldwell Community College and Technical Institute to construct a job training center ($1.9 million) and a civic center ($1.5 million in bonds to be matched by $1.5 million in funds from other sources). In July of 1986, the General Assembly appropriated $100,000 in capital funds to Caldwell Community College and Technical Institute. Another $1.49 million was appropriated by the General Assembly in August 1987.

In July of 1988, the North Carolina General Assembly designated $100,000 for the design of the first permanent building on a Watauga County campus. In November of 1988, the Watauga County Commissioners purchased a 39-acre site for the Watauga campus of Caldwell Community College and Technical Institute. The campus is located west of Boone on the 105/421 bypass.

The Job Training Center on the Caldwell campus was completed in April of 1989 and was named the E. M. Dudley Job Training Center by the Board of Trustees. In June of 1989, the college purchased a former showroom of Fairfield Chair Company, containing 23,250 square feet, and 13.3 acres of land on which the J.E. Broyhill Civic Center was constructed. In August 1989, the North Carolina General Assembly appropriated $100,000 in capital constructions funds for the college to use on the civic center project. In July of 1991, the college purchased a lot adjoining the civic center. The civic center opened in October of 1993.

In July of 1989, the college purchased 20.3 acres of property adjoining the main Caldwell Campus for future development. A 1,600 square foot addition to the gym was completed in October of 1991, and construction of a 12,000 square foot maintenance building for the Caldwell campus was completed in August of 1992. In November of 1993, a $250 million statewide community college bond referendum was approved by North Carolina voters. Of $8,361,539 earmarked for Caldwell Community College and Technical Institute, $2,261,539 was reserved by trustees to construct classrooms and laboratories for the Watauga campus, and $6.1 million was set aside to construct classrooms, laboratories, and instructional support facilities on the Caldwell campus.

After serving as the second president of Caldwell Community College and Technical Institute for ten years, Dr. Eric McKeithan resigned on July 9, 1994 to become president of another community college in North Carolina. Dr. H. Edwin Beam served as interim president until the selection of Dr. Kenneth A. Boham who became the third president of Caldwell Community College and Technical Institute on July 1, 1995.

Design of the college's first permanent site in Watauga County was underway in fall 1995. Construction began in 1996, and the new 23,000 square foot facility was completed two years later. Overlooking mile-high Grandfather Mountain, the CCC&TI Watauga Campus opened its doors to the community in January 1998 with expanded course offerings and consolidated services. Continuing Education, Student Support and Basic Skills centers remain located at other sites throughout Watauga County.

Caldwell County voters approved two important bond referenda in February 1997. A $1.59 million bond resulted in the establishment of a college-wide fiber optic network, additional classrooms, renovations to existing classrooms and buildings, updated instructional equipment, additional parking and a campus alarm system. The Caldwell
Campus facility known as F Building opened in August, 1998. The 45,000-square-foot building currently houses Student Services, Computer Services and health sciences classrooms and laboratories.

In May 1999, CCC&TI acquired the gift of the 58-year-old Broyhill Family home. The 12-acre estate, originally deeded to the late Satie Broyhill, consists of 34 rooms encompassing approximately 8,000 square feet in addition to its extensive grounds and an olympic-size swimming pool.

In fall 1999, a new Career Center was established on the Caldwell campus. A joint venture among the public school system, CCC&TI and local employers, the Career Center benefits the county with focused and cooperative resources for skilled trade and technical occupations. Participants include students from three area high schools during the day while CCC&TI students utilize the facility for evening classes. Currently the first in the state to offer this unique training concept, the Career Center was funded by a separate $2.6 million referendum for the Caldwell County public schools in 1997. The 25,000-square-foot facility was dedicated in March, 2000.

CCC&TI was the recipient of the U.S. Department of Education’s Title III Grant in summer of 2000. Totaling $1,734,110, the funding allowed the college to link to the NC Information Highway, allowing for the installation of three interactive classrooms, an instructional production facility, support personnel and comprehensive technological training for faculty.

Caldwell and Watauga county voters approved the largest state bond referendum in the history of the community college system in November of 2000. CCC&TI’s portion, totaling $7,031,341, included provisions for construction and renovation on both campuses. Major projects include: Caldwell Campus – distance learning classrooms, site preparation for future instructional facility, auto body shop spray booth, institutional climate control system, civic center renovations, additional parking and relocation of the truck driver training range and miscellaneous repairs; Watauga Campus – occupational training building, Continuing Education Center renovations, physical education area, additional classroom space, site preparation for future facility and additions to the existing instructional facility. The projects will be completed over the next 6 years as bond monies are allocated.

Renovations to conference facilities at the college’s J.E. Broyhill Civic Center were completed in June 2004. The expansion included more flexible meeting space and break-out rooms, a hospitality lab, a concession area and updates to the lobby. Following a public grand reopening of the civic center, the college held another celebration in August 2004 as CCC&TI’s “F” Building was named in honor of John A. Forlines, Jr., the first chairman of the board of trustees. The first phase of expansion efforts on CCC&TI’s Watauga Campus was completed in 2005. Four modular units to house student services, basic skills, the bookstore and a maintenance/storage facility along with additional parking.

CCC&TI broke ground for the Faye A. Broyhill Building on its Caldwell Campus in February 2005. Launched with the help of the Broyhill Family Foundation along with federal monies and local support pledged by Caldwell County commissioners, the Appalachian State University Center is located in the building named in honor Faye A. Broyhill along with CCC&TI’s Corporate and Continuing Education Department. The center will have an initial emphasis on teacher education, making bachelor’s degrees more accessible for local residents. The venture positions CCC&TI as a state and national model, providing a seamless education path with two high schools, a community college and university presence all on the same property. Dedication for the building was held July 20, 2006. ASU’s first group of students pursuing a bachelor’s degree in elementary
education began classes in January 2007. The program represents ASU's first off campus full-time, daytime program.

The 2006 Fall Semester was the beginning of an exciting five-year journey for 75 Caldwell County High School students accepted as the first class of the Caldwell Early College High School. Commissioners approved funding to construct a facility to house the Early College on CCC&TI's campus.

The Caldwell County JobLink Center moved to the Forlines Building on the CCC&TI campus in August 2006 to assist with outreach for the unemployed in the community.

In an effort to assist a growing number of dislocated workers, CCC&TI held its sixth “Directions” event in 2007. The events featured comprehensive information on community-wide resources in the areas of education, finances, counseling and more.

CCC&TI partnered with Google in 2007 to launch the first IT Institute. The series of courses, co-developed with Google and the IT industry, equips students with current trends and skills recommended for entry-level positions in information technology.

Large electronic signs were purchased for the Caldwell Campus (2001; sponsored by Bank of Granite), Broyhill Civic Center (2006) and Watauga Campus (2008). The signs improve communication of opportunities and success to the public.

In summer 2006, CCC&TI purchased 13.73 acres of property less than one mile south of the college's campus in Hudson. The property, along with four existing buildings, makes up the college's Transportation and Public Service Center, which will eventually house all such programs. Truck driver training was the first program to occupy the new campus in August 2006. Additional funding from a grant awarded by the Economic Development Administration will help to renovate an existing 15,786-square-foot facility into an Automotive Technology Building. Former area for the trucking program on the Caldwell campus allowed for approximately 350 additional parking spaces. An overflow parking area with 100 new paved spaces was also developed across Gunpowder Creek.

An historic regional partnership was formed in 2006 among three local community colleges, CCC&TI, Catawba Valley Community College and Western Piedmont Community College. The collaboration will enhance communication of needs, economic development, effectiveness and efficiency for higher education in the area.

Construction of a new 46,680-square-foot Early College/Multi-Purpose Building began in May 2007 on the northeast end of the Caldwell campus. The facility, which opened fall 2008, houses the Caldwell Early College High School, as well as college multi-purpose classrooms.

CCC&TI earned its fourth superior rating by the North Carolina State Board of Community Colleges in 2007. Performance standards measure overall accountability, student success and satisfaction.

A new 14,000-square-foot Occupational Training Center at CCC&TI's Watauga campus opened in spring semester 2009. Nursing, construction trades, physical education and art/ceramics classes occupy the space.

In 2010, the college occupied its new Autobody Shop, a 13,125-square foot-building at its Transportation and Public Service Center. The shop includes three bays, a paint booth, classroom, and two offices. Local funding and an EDA Grant funded the $1.1 million project.

CCC&TI also completed its TRANE Energy Efficient contract in 2010, providing all facilities with online temperature control and updating equipment for more cost-efficient savings.
Location

Caldwell Community College and Technical Institute is located on 98.3 acres off Highway 321 in Hudson, North Carolina, accessible to the population centers of Lenoir (5 miles), Granite Falls (5 miles), and Hickory (10 miles). The college’s J. E. Broyhill Civic Center is located on 14.4 acres on U.S. 321, 2.5 miles north of the Caldwell campus. In Watauga County, the college has its main instructional facility, student services and basic skills center off Highway 105 on Community College Drive. The Corporate and Continuing Education Center is located on Bamboo Road in Boone.

Institutional Mission
(Revision Approved by the Board of Trustees November 2008)

Purpose
Caldwell Community College and Technical Institute is a public, comprehensive post-secondary institution whose primary service area is Caldwell and Watauga counties. Operating under the legal framework of the State of North Carolina and in partnership with the North Carolina Community College System, CCC&TI is an open-door institution that values the diversity of its constituencies and offers equal opportunities.

Philosophy
The faculty and staff of Caldwell Community College and Technical Institute are committed to providing an environment conducive to student success through institutional integrity, ethical practices, and an expectation of excellence. The institution provides leadership during social, economic, and cultural transitions through teaching, promoting lifelong learning, improving the quality of life, and fostering academic and civic enrichment. We are dedicated to educating a workforce prepared for a rapidly changing global economy.

Mission
The mission of Caldwell Community College and Technical Institute is to
• provide accessible, quality instruction to enhance student learning,
• support economic development through comprehensive resources to business, industry, and agencies, and
• offer diverse services and opportunities which improve the quality of life.

Institutional Vision
As an institution of the community and for the community, Caldwell Community College and Technical Institute is committed to creating a supportive learning-centered environment that encourages innovation and creativity and acts as a catalyst for growth in the intellectual, cultural, and economic life of the community. CCC&TI is responsive to the educational needs of a diverse population and is dedicated to student success by opening doors to educational potential. As it looks to the future, CCC&TI will continue to build and maintain academic excellence and economic vitality in the region it serves.
Vision Statement
Caldwell Community College and Technical Institute will continue to be a state, national, and global community college model for student-centered higher learning. Towards these ends, the college will
• Provide diverse educational opportunities that broaden knowledge and enhance skills;
• Create progressive and flexible programs and services responsive to student and community needs;
• Promote educational, personal, social, and economic growth and development;
• Provide student-centered lifelong learning experiences;
• Partner with the broader community to enhance the quality of life through education;
• Model exemplary standards of higher education, integrity, and academic and administrative excellence.

Adopted by the CCC&TI Board of Trustees, September 6, 2006
Reaffirmed, September 9, 2009

Core Values for Improvement
Caldwell Community College and Technical Institute’s core values represent our shared beliefs within the institution. These values define the character or essence of the institution, describe expectations, set standards, and drive our organization’s priorities.

As an institution, we value:

Teaching and Learning – Through excellence in teaching, we foster an educational climate that promotes lifelong learning, intellectual growth, and scholarship.

Student Success – We foster environments and opportunities that are conducive to student learning, development, and success.

Academic Excellence – We are committed to providing exemplary educational experiences.

Innovation – We aspire to improve the college environment through critical and creative thinking.

Integrity – We foster an environment of fairness and honesty by upholding the highest ethical standards throughout the college.

Communication – We recognize that effective communication is essential to establishing a culture that fosters collaboration, strengthens relationships with others, and promotes the mission of the college.

Community – We are committed to creating a positive working and learning environment where we honor relationships and take responsibility for fostering trust,
respect, and goodwill. We value active and vital participation in our college community, region, state, and global community.

Performance Measures and Standards

Critical Success Factors
Core Indicators of Student Success

In February 1999, the North Carolina State Board of Community Colleges developed 12 performance measures for accountability that focus primarily on student success. These measures and standards were accepted and approved by the full State Board in May 2000 for implementation in the fiscal year 2000-2001. Amended in 2007 and 2009, the performance measures for accountability were adapted to eight annual measures. All community colleges are required to publish performance on the eight measures annually in their electronic catalog or on the Internet, and in their printed catalog each time the catalog is reprinted. The eight Performance Measures and Standards and the results for CCC&TI are as follows:

1. **Progress of Basic Skills Students** - Progress is defined as 1) progressing within a level of literacy, 2) completing the level entered or a predetermined goal, and 3) completing the level entered and advancing to a higher level. The standard for this measure is 75%.

   CCC&TI met this measure for the year with an 86% composite progress measure.

2. **Passing Rates for Licensure and Certification** - Licensure and Certification is based on first-time test-takers from community colleges passing an examination required for North Carolina licensure or certification prior to practicing the profession. The standard for this measure is an aggregate institutional passing rate of 80% for first-time takers of licensure/certification examinations, plus no passing rate falling below 70% for any single examination.

   CCC&TI posted an aggregate institutional passing rate of 84%, surpassing the standard.

3. **Performance of Students Who Transfer to the University System** - This measure compares the performance of community college students who transfer to public North Carolina universities with students native to the four-year institution. The standard for this measure is that the performance of community college students will be equal to or exceed the performance native UNC sophomores and juniors.

   CCC&TI met this standard with 84% of transfers earning a GPA equal to or greater than 2.0 after two semesters at a UNC or a North Carolina private institution of higher education.

4. **Passing Rates of Students in Developmental Courses** - The passing rates include all developmental English, mathematics, and reading. The standard for this measure is 75%.

   CCC&TI met this standard with 85% students in developmental earning a grade C or better.
5. **Success Rate of Developmental Students in Subsequent College-Level Courses** - The performance of developmental students in subsequent college-level courses will be compared to the performance of non-developmental students in those courses. The standard for this measure is that 80% of the developmental group's performance will equal or succeed non-developmental students. The standard is 80%.

*CCC&TI met this standard with 92% of students who completed a developmental English and/or math course(s) earning a grade D or better in subsequent college-level English and/or math courses.*

6. **Student Satisfaction of Program Completers and Non-Completers** - This indicator reports the proportion of graduates and early-leavers who indicate that the quality of the college programs and services met or exceeded their expectations. The standard for this measure is a 90% satisfaction rate.

*CCC&TI met this standard with a combined rate of 97% of program completers and non-completers responding that they were satisfied with the academic program in which they were enrolled.*

7. **Curriculum Student Retention and Graduation** - This composite measure consists of 1) the number of students completing a curriculum program with a certificate, diploma, or degree and 2) the number of students who have not completed a program but who are continuing their enrollment in either curriculum or occupational extension programs. The standard for this measure is 65% of the defined cohort will graduate or be retained.

*CCC&TI met this standard with 76% of the fall 2008 cohort having graduated, returned to enroll, or transferred by fall 2009.*

8. **Client Satisfaction With Customized Training** - This measure reports the percentage of individuals who have received Small Business Center services from a community college indicating that their expectations have been met. The standard for this measure is 90% of business/industries surveyed will report satisfaction with the services provided by the community college.

*CCC&TI met this standard with 92% of survey respondents reporting that the customized training was excellent or very good.*

**Source:** *2010 Critical Success Factors for the North Carolina Community College System, June 2010*

**Accreditation**

Caldwell Community College and Technical Institute is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools [1866 Southern Lane, Decatur, GA 30033-4097 Telephone: (404) 679-4501] to award associate degrees. Inquiries to the Commission should relate only to the accreditation status of the institution and not to general admission information. Diploma, Associate in Applied Science, Associate in Arts, Associate in Fine Arts and Associate in Science programs have been approved by the North Carolina Department of Community Colleges and the State Board of Community Colleges.
The **automotive systems technology program** meets all eight areas for ASE MASTER certification recognized by the National Institute for Automotive Excellence (ASE). [101 Blue Seal Drive, S.E., Suite 101, Leesburg, VA 20175. Telephone: (703) 669-6600. Fax: (703) 669-6123].

The **basic law enforcement training program** is accredited by the North Carolina Department of Justice, Criminal Justice Education and Training Standards Commission. [P.O. Drawer 149, Raleigh, NC 27603. Telephone: (919) 716-6470. Fax: (919) 716-6752].

The **medical sonography and cardiovascular sonography programs** are accredited by the Joint Review Committee on Education in Diagnostic Medical Sonography (7108C S. Alton Way, Suite 150; Englewood, CO 80112-2106).

The **radiography program** is accredited by the Joint Review Committee on Education in Radiologic Technology [20 N. Wocker Drive, Suite 900, Chicago, IL 60606-2901. Telephone: (312) 704-5300].

The **nuclear medicine program** is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) [#1 2nd Avenue East, Suite C, Polson, MT 59860-2320 Telephone: (406)883-0003] Email: jrcnmt@ptinet.net.

The **nursing program** is approved by the North Carolina Board of Nursing [PO Box 2129, Raleigh, NC 27602-2129. Telephone: (919) 782-3211] and is also seeking accreditation from the National League for Nursing Accrediting Commission [61 Broadway, 33rd floor, New York, NY 10006. Telephone: (212) 363-5555 Ext. 153].

The **physical therapist assistant program** is accredited by the Commission on Accreditation in Physical Therapy Education of the American Physical Therapy Association [1111 N. Fairfax Street, Alexandria, VA 22314 Telephone: (703) 706-3245].

The **ophthalmic medical assistant program** is approved by the Committee on Accreditation for Ophthalmic Medical Personnel (CoA-OMP) [2025 Woodlane Drive, St. Paul, MN 55125-2995. Telephone: (651) 731-2944, fax: (651) 731-0410].

The **speech language pathology assistant program** is regulated by North Carolina Board of Examiners for Speech and Language Pathologists and Audiologists [P.O. Box 16885, Greensboro, NC 27416-0885 Telephone: (336) 272-1828]

### Student Success Rates

Prospective and current students who would like information concerning graduation rates, students’ satisfaction with the college, and students’ goal attainment, may request such information from Student Services.
Admissions

General Admission Requirements

Pursuant to 23 NCAC 02C.0301, Caldwell Community College and Technical Institute maintains an open-door admission policy to all applicants who are legal residents of the United States and who are either high school graduates or who are at least 18 years of age. Legal residents of the United States under 18 years of age may also be admitted if they possess a GED or high school equivalent. High school students may be admitted under concurrent (dual) enrollment, Huskins Bill provisions, Learn and Earn Online, Caldwell Early College High School, Caldwell Career Center Middle College and intellectually gifted and mature student provisions established by the State of North Carolina. Undocumented immigrants shall be admitted if he or she attended and graduated from a United States public high school, private high school, or home school that operates in compliance with state and local law. Undocumented students who possess a GED are not eligible for admission (See “Student Status”).

Admission to the college does not necessarily mean admission to the curriculum or program desired by the applicant. A student must satisfy the admissions requirements for the desired program of study. All technical and college transfer programs require graduation from a regionally accredited high school, a state-recognized home school, or the equivalent. Students must also meet required course prerequisites. Prerequisite documentation must be provided by submitting official transcripts and/or taking the appropriate placement test(s).

Applicants to CCC&TI should:

• Submit an application for admission.
• Request that official transcripts of past high school or equivalent and college work be submitted to the Student Services Office.
• Complete the required placement tests for desired programs.
• Have an interview with a member of the Student Services Office.

Students who are not entering programs need to submit only an application for the admissions process unless they are registering for courses that have prerequisites. If the courses have prerequisites, students must take the appropriate placement tests and/or furnish official transcripts.

Health Sciences Program Policies

Additional departmental policies and procedures, including progression and readmission, are available in the various departments and will be provided for each student following acceptance into the designated program. Clinical laboratory experiences are provided through the utilization of area institutions, clinics, agencies, and physicians’ offices. Each student is responsible for providing transportation to the clinical site. Students also provide their own uniforms consistent with the department uniform guidelines. No student will be considered a nursing student, a cardiovascular sonography student, a radiography student, a medical sonography student, a nuclear medicine student, a
physical therapist assistant student, a speech language pathology assistant student, or an ophthalmic medical assisting student at CCC&TI until official notification of acceptance is granted through the mail by the director of enrollment management services. See specific programs of study for any special admissions requirements.

Student Status

New Students
An orientation course is available to all new students entering Caldwell Community College. The course, ACA 111, College Student Success, assists the students in becoming acquainted with programs, policies, facilities, and personnel on the campus. It is a required course for students in certain programs.

Transfer Students
A transfer student is a student entering Caldwell Community College and Technical Institute who has earned credit at another institution and wishes to apply these credits toward a CCC&TI degree, diploma or certificate. Students desiring to transfer credits must have all official transcripts sent to CCC&TI by the institutions that originally granted the credit. See “Academic Standards, Transfer Credit” for more information.

High School Students
High school students who want to take courses at CCC&TI are encouraged to see their school counselors or Transition Advisors. Tuition and books are often at no cost to the student. The following programs are offered at CCC&TI:

CCC&TI Huskins and Dual Enrollment Students
Grades 9-12 are eligible for Huskins courses; students ages 16 and older are eligible to enroll for select dual enrollment courses. Both programs provide an accelerated opportunity for many high school students who are ready for the challenge of college coursework. For juniors and seniors, in particular, college courses may help students meet their goals earlier. Prospective students must:

• Be enrolled in high school and approved for participation by the high school principal or designee
• Meet any academic requirements of the college
• Provide their own transportation to and from the college
• Be enrolled in at least two classes at their home high school

Undocumented Students
An undocumented immigrant is any immigrant who is not lawfully present in the United States according to federal immigration classifications. Students admitted under this provision are considered out-of-state for tuition purposes and are ineligible to receive federal financial aid. Undocumented students may not enroll in a program of study that has a waiting list or requires state licensure. In addition, these students may not register for classes until after the last published registration period, and they may not enroll in a class that has a waiting list.
Learn and Earn Online (LEO)
North Carolina public high school students can earn college credits through a special initiative called Learn and Earn Online. Qualified students in participating public high schools can take a variety of online college-credit courses at no cost to them or to their families. Students earn both high school and college credit for completed courses. Students should discuss enrollment procedures and course availability with their high school counselor and Transition Advisor.

Caldwell Career Center Middle College
The Caldwell Career Center Middle College offers full-day services to Caldwell County students. Emphasis is placed on the following majors: Biomedical Sciences, Construction Technology, Engineering Technology and Information Technology. Students will spend extensive time in the major of their choice.

Rising freshmen, sophomores and juniors may apply for admission to Caldwell Career Center Middle College. Upon successful completion of four years, students will graduate from high school with both a strong academic foundation as well as advanced college/technical coursework. Upon graduation from this middle college, students may pursue work-based learning opportunities, an associate’s degree from a community college, or a bachelor’s degree from a four-year university.

Rising Freshmen:
Prospective full-day students (rising Freshmen) will be accepted based on their application and interview.

Rising Sophomores and Juniors:
Prospective full-day students are required to complete a CCCMC application and will be accepted (on a space-available basis) based upon their application and interview.

CCCMC Application: Complete the application which includes two teacher recommendations, essay responses to several questions and an interview before a selection committee.

Caldwell Early College High School
Rising ninth graders in Caldwell County are eligible to apply for admissions to Caldwell Early College High School. The program will focus on leadership, entrepreneurial skills and academic achievement that will culminate in a high school diploma and college associate’s degree at the completion of a five-year commitment. The goal of the Caldwell Early College High School (CECHS) admissions process is to select and admit a diverse group of academically capable students who have a genuine interest in the pursuit of this unique and rigorous program. Applications and accompanying documentation of prospective applicants will be reviewed by the Admissions Team. All students will be evaluated based on specific admissions elements outlined and approved by the Department of Public Instruction and the New Schools Project. Considerations for admission include:

CECHS Application: Well-developed and insightful responses written by the student. Student population closely reflects the diversity of the Caldwell County.
**Characteristics:** Leadership potential, intellectual curiosity, need for a non-traditional high school setting, evidence of maturity and self motivation, self-disciplined, ability to work with others, etc.

**Intellectually Gifted and Mature Students Under 16 Years Old**

The 2001 Session of the NC General Assembly enacted House Bill 1246 that amended Chapter 115D of the General Stutes by adding a new section 115D1.1 to allow a student under the age of 16 to enroll in a community college if the president of the college or the president’s designee finds that the student is intellectually gifted and has the maturity to justify admission to the college.

**A. Student Eligibility:**

1. The student must be identified as intellectually gifted and having the maturity to justify the admission to the community college.
2. The student must receive approval of the appropriate person designated in paragraph D (4) below.
3. The student must meet course prerequisites and placement testing requirements.
4. The student and parent must interview with the President’s designee to determine appropriateness of maturity level.

**B. Course Eligibility:**

Major and general education courses numbered 100 and above from the Common Course Library are eligible for the enrollment of intellectually gifted and mature students.

**C. Other Operating Procedures:**

1. Registrations of students under 16 years old are to be reported to the System Office using the regular curriculum student reporting information system.
2. When the student completes the course or withdraws therefrom, that fact plus the grade received are to be reported to the System Office.
3. Any student under the age of 15 shall be accompanied at all times when on the campus of Caldwell Community College and Technical Institute by a parent or another adult consented to and designated by the parent in writing.
4. Students enrolled under this section will pay appropriate tuition and fees.

**D. Required Documentation:**

1. Aptitude test scores from a System Office approved list of tests taken within three years before the date of admission that include composite or subtest scores documenting percentile ranges from 92% through 99%, and
2. Achievement test scores from a System Office approved list of tests taken within three years before the date of admission that include composite or subtest scores documenting percentile ranges from 92% through 99%, and
3. Any costs associated with aptitude and achievement testing are the responsibility of the student.
4. A completed approval form from one of the following:
   a. The local board of education, or the board’s designee, for the public school administrative unit in which the student is enrolled.
   b. The administrator, or administrator’s designee, of the nonpublic school in which the student is enrolled.
c. The person who provides the academic instruction in the home school in which the student is enrolled.
d. The designee of the board of directors of the charter school in which the student is enrolled.

Educational Services to Minors
An applicant not attending high school who is between the ages of sixteen and eighteen years and who has special educational needs may be admitted to appropriate courses or programs provided:

- The applicant has left the public schools no less than six calendar months prior to the last day of regular registration of the semester.
- The application is supported by a notarized petition of the applicant’s parent, legal guardian, or other person or agency having legal custody an control, which petition certifies the place of residence and date of birth of the applicant, the parental or other appropriate legal relationship of the petitioner to the applicant, and the date on which the applicant left the public schools. However, all or any part of the six-month waiting period may be waived by the superintendent of public schools of the administrative unit in which the applicant resides.
- Such admission will not preempt institution facilities and staff to such an extent as to render the institution unable to admit all applicants who graduated from high school or who are eighteen years of age or older.

Special Students
Students who are taking one or more curriculum credit courses but who are not enrolled in a degree, diploma or certificate program are called “Special Studies students.” For admission, Special Studies students need only to complete the application available in Student Services. Special Studies students may register for any course, provided they meet prerequisite requirements for the course(s). Special Studies students will pay the same tuition and fees as students in programs. If a Special Studies student wishes to enter a program at a later date, he/she must complete a “Student Information Change Form” in the Student Services department and complete all admission requirements for that program. Special Studies students are not eligible for any form of financial aid through CCC&TI.

Provisional Students
A student applying too late to complete admission requirements may be permitted to enter the college as a provisional student. Provisional students must complete all requirements prior to registration for a subsequent term.

Visiting Students
A student working toward a degree at another institution may take courses at Caldwell Community College and Technical Institute for transfer. The student must complete the application form and should obtain confirmation from the degree-granting institution stating that the courses at CCC&TI will be acceptable toward degree requirements. It is the responsibility of the student to request IN WRITING that an official transcript from CCC&TI be sent to the degree-granting institution.
International Students
Caldwell Community College and Technical Institute is authorized by the U.S. Citizenship and Immigration Services to admit international students. This permission was granted on July 12, 1966, with authorization number WAS 2141562.

International students must meet admission requirements set forth by CCC&TI as well as requirements specified by the U.S. Citizenship and Immigration Services. In addition to the application, individuals must request that an official high school transcript from an appropriate agency be sent directly to CCC&TI certifying the equivalency of a United States high school credential. All official high school transcripts must show a graduation date.

Transcripts of course work completed at a college or university located outside the United States must be accompanied by a certified English translation and a course-by-course evaluation. Transfer credit from foreign colleges or universities will be reviewed on a case-by-case basis. Course descriptions, a comprehensive course-by-course evaluation and/or a catalog-match evaluation may be required if transfer credit is being requested for certain courses.

Applicants must use one of the following official evaluation organizations to have their transcripts officially evaluated and sent directly to CCC&TI.

Educational Credential Evaluators, 414-289-3400 or www.ece.org
Educational Perspectives, nfp., 312-412-9300 or www.edperspective.org
Global Credential Evaluators, 512-528-0908 or www.gcevaluators.com
WES Organization Evaluators, 1-800-937-3899 or www.wes.org

The Test of English as a Foreign Language (TOEFL), with a minimum acceptable score of 500 (paper) or 173 (computer-based), is required as evidence of adequate proficiency in English. The TOEFL scores must be no more than two years old at the time of application for admission.

Students with Disabilities
See Student Services, Disability Services

Enrollment
In order to guarantee high program standards and student success, it is important that the academic abilities of students be equal to program entrance requirements. The “open door” policy allows all students the opportunity to further their education; however, program entrance requirements must be met. The student advisement program and placement testing assure that students will be enrolled in courses appropriate to their academic abilities. Entrance requirements vary for individual courses and programs. See program and course descriptions in the catalog for prerequisites and entrance requirements.
Advisement

The faculty advisor program is a cooperative effort of the faculty and Student Services. Each curriculum student is assigned a faculty advisor who will assist that student in planning programs and selecting courses. College transfer students working towards Associate in Arts and Associate in Science degrees are assigned to the Academic Advising Center for advisement purposes. Students who are not enrolled in specific programs (Special Studies students) are assigned Student Services counselors as their advisors. Students should make appointments with their advisors prior to registration for the next semester.

All students should refer to the college catalog for information about the courses required for graduation in the various areas of study. By conferring with the advisors when questions arise, students will tend to be more accurate in the proper selection of courses. Advisors and counselors are available to students, but final responsibility for meeting program and graduation requirements remains with the student.

Placement Testing

The Accuplacer computerized tests are given to all students who are entering a program, or who are taking courses with a placement test prerequisite. The tests include reading, sentence skills and math. Students take certain tests, or the whole sequence, depending upon their program or course choices. Students may be exempt from placement testing by meeting one of the following requirements:

1. Transfer credits in English, math and two college-approved reading intensive courses
3. Satisfactory COMPASS or ASSET test scores (tests must have been taken at a regionally accredited higher education institution on or after Feb. 1, 2007)
4. Completion of Accuplacer tests at a regionally accredited higher education institution.
5. Completion of developmental coursework at a regionally accredited higher education institution with a grade of “C” or higher.

Determination of which placement test(s) a student can exempt will occur during the transcript evaluation and advisement process. This practice also applies to a student readmitted to CCC&TI.

Placement Retest Policy

Students are allowed to retest without completing a sequence of developmental courses. However, once enrolled in a developmental course, students may not retest until the end of the semester. Regardless of first test results, students may retest under the following guidelines:

• Evidence of at least ten hours of formal review in the Academic Support Center or documented completion of college-approved Placement Test Review course(s).
• A fee of $2.00 per test other than those that fall within standard error.
• Only one retest per subject allowed in a one-year period
Developmental Courses
If deficiencies are found in any one area, a counselor/advisor will help students select an appropriate course in order to meet necessary program requirements and/or course prerequisites. Developmental studies courses will not count toward graduation. Students are encouraged to complete developmental courses immediately upon enrollment.

Prerequisites/Corequisites
CCC&TI students are required to meet all course prerequisite and/or corequisite requirements at the time of registration for the course. Enrollment in and successful completion of required requisites ensure that the student is academically prepared for higher level courses. Course prerequisites and corequisites can be found in the college catalog and on WebAdvisor.

Students who do not have documentation of required prerequisites/corequisites listed in their CCC&TI academic record may fulfill course requirements by providing evidence of appropriate academic competencies. Prerequisites and corequisites requirements may be met through documented evidence of placement tests scores, coursework completed at another regionally accredited institutions, experimental learning, professional certification or licensure, or other education and training. Competencies based on the above must be approved by the appropriate vice president or designee and documented according to process specified by the vice president of student services.

Attendance Policy
Students are expected to attend all regularly scheduled classes. However, it is recognized that occasional absences may be necessary. A student is responsible for work missed and is expected to be prepared for the next class. Academic departments establish their own class attendance policy. The attendance policy is explained by the instructor at the first class meeting. Students who have not attended at least once by the 10 percent date of the class will be dropped by the instructor as “never attended.” Pursuant to G.S. 115D-5, students may request two excused absences per academic year for religious observances. Students shall be given the opportunity to make up any tests or other work missed as required by this statute.

Restrictions on Class Admissions
No person may attend classes unless the registration procedure has been completed and all tuition and fees have been paid or deferred payment is granted by the Business Office.

Academic Level
Students completing 32 semester hours of course work will be listed as sophomores. Students must complete all course prerequisites. Corequisite courses must be taken in the same semester. Prerequisites and corequisites are listed with the course descriptions.
Course Load

Students enrolled for 12 or more credit hours are classified as full-time students. Those taking fewer hours are classified as part-time. Normal course load will vary from one curriculum to another and should be carefully planned with advisors. Students may enroll for a maximum load depending upon their capabilities as determined by their advisors. A normal course load is outlined by programs in this catalog. NOTE: Nine (9) hours will be considered full-time for summer semester for insurance purposes only and twelve (12) hours for financial aid purposes.

Schedule Changes

Change of a student’s schedule after the designated drop/add period will be made only with permission of the department chair or academic vice president. If enrollment in any class is not deemed sufficient, the college reserves the right to cancel the course.

Withdrawing from Courses and/or School

Students who withdraw from a class or from college should first consult with their academic advisors. A student may withdraw from a course and receive a grade of “W” up until sixty percent of the class contact hours have elapsed. After that point, all drops will be initiated by the instructor who may assign a grade of “W” or “F” at the end of the semester. Students who wish to completely withdraw from school should meet with a member of Student Services.

Veterans should check with the veterans’ coordinator in the Student Services department for specific VA regulations concerning withdrawals and class repeats. Financial aid recipients should be aware that withdrawals will affect their “Satisfactory Academic Progress Requirements” and may require a portion of unearned aid to be repaid. Therefore, financial aid recipients should seek advisement from the Financial Aid Office before making any withdrawals.

Transcripts of Credit

Transcripts of credit must be requested in writing from the Student Services office. All financial obligations to the college must be cleared before any transcript will be released.

It is recommended that at least one week be allowed for the processing and mailing time of transcripts. Written requests for immediate copies of transcripts must be submitted twenty-four hours in advance. Any transcript given directly to a student will carry the notation “Issued to Student” and will require the presentation of a photo I.D.

Confidentiality of Student Records

CCC&TI protects the privacy of students in accordance with the Family Educational Rights and Privacy Act of 1974. FERPA, also known as the Buckley Amendment, is a complicated piece of legislation which basically protects the privacy of students and allows for the accessing of student records by the student.
Student Rights

According to FERPA, students have the right to:
• Inspect and review their educational records.
• Seek amendment to their educational records that they believe to be inaccurate, misleading, or otherwise in violation of their privacy rights.
• Consent to disclosures of personally identifiable information contained in their record, except to the extent that FERPA authorizes disclosures without consent.
• File with the U.S. Department of Education a complaint concerning alleged failures by the College to comply with FERPA.

The following information (non-directory) cannot be disclosed unless written permission is received from the student:
• Date, and place of birth
• Mother’s Maiden Name
• Grades or GPA
• Test scores
• Schedule of courses taken or being taken
• Social security numbers
• Class attendance
• Progress in course
• Number of credit hours completed
• Personal information such as height, weight, disabilities, race, gender, etc.
• Country of citizenship
• Financial Aid information
• Veterans Benefits information

What information (directory) can be given out:
A part of FERPA states that certain information called directory information can be disclosed without the written consent of the student. Directory information includes information contained in the educational record of a student that would not be considered harmful or an invasion of privacy if disclosed. The following information may be disclosed without written consent unless the student notifies Student Services in writing that such information is not to be made available:
• Student’s name
• The phone number
• The address
• The e-mail address
• The major field of study
• Dates of attendance
• Degree/diploma/certificate and awards received
• Full- or part-time enrollment status
• Participation in officially recognized activities
• Most recent previous institution
Academic Standards

Academic Integrity Policy

It is the responsibility of every student, staff member, and instructor at CCC&TI to maintain the highest standards of academic integrity. For this reason, the college will not tolerate any instance of plagiarism or cheating, or any act that violates standards necessary to maintain academic honesty.

Violations of the college’s Academic Integrity Policy include, but are not limited to:

1. Cheating includes taking, possessing, or using any academic material (test information, research papers, notes, etc.) without permission; receiving or giving help during tests; copying or attempting to copy another person’s paper, exam, assignments or similar materials, or other graded work; or allowing another to copy such paper, exam or graded work. In addition, use of any unauthorized electronic devices during a testing situation may be in violation of the policy as well.

2. Plagiarism is defined as representing as one’s own another’s work or ideas, or any part thereof, published or unpublished. It includes copying a phrase, sentence, or passage from another’s work and not identifying or citing that source; failing to cite a source fully, inadequate paraphrasing or summarizing; or attempting to pass off as one’s own a paper written by another.

3. Collaboration is intentionally helping or attempting to help another to commit an act of academic dishonesty. It includes intentionally allowing another to copy from one’s paper during an examination or test; intentionally distributing test questions or substantive information about the material to be tested before the scheduled exercise; collaborating on academic work knowing that the collaboration will not be reported; taking an examination or test for another student, or signing a false name on an academic exercise. THESE BECOME VIOLATIONS WHEN THEY INVOLVE DISHONESTY. Instructors should make expectations about collaborations clear to students. Students should seek clarification when in doubt.

4. Furnishing false information with the intent to deceive members of the college faculty or administration who are acting in the exercise of their official duties.

Violations of this policy will result in failure of the course and academic probation for one semester. Subsequent violations will result in suspension or expulsion from the college. Any student who disagrees with the penalty associated with violations of the academic integrity policy may file an appeal in accordance with the college’s Grade Appeal Procedure as outlined in the college catalog and student handbook.
Grading System

Official grades are issued for each student at the end of each semester. A student who lacks passing averages at mid-semester should schedule a conference with the instructor and/or faculty advisor. Students enrolled in curriculum program courses will be graded by the grade system shown below and will be assigned a grade point equivalent in quality points (QP) for each semester scheduled.

<table>
<thead>
<tr>
<th>Number</th>
<th>Grade</th>
<th>Grade Point Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>93-100</td>
<td>A</td>
<td>Excellent 4 QP each semester hour</td>
</tr>
<tr>
<td>85-92</td>
<td>B</td>
<td>Good 3 QP each semester hour</td>
</tr>
<tr>
<td>77-84</td>
<td>C</td>
<td>Average 2 QP each semester hour</td>
</tr>
<tr>
<td>70-76</td>
<td>D</td>
<td>Below Average 1 QP each semester hour</td>
</tr>
<tr>
<td>&lt;70</td>
<td>F</td>
<td>Unsatisfactory 0 QP each semester hour</td>
</tr>
</tbody>
</table>

Grade Codes
- AC: Articulated Credit - No quality points
- AP: Advanced Placement - No quality points
- AU: Audit - Indicates no grade or credit
- CR: Credit by examination - No quality points; reflects competence of “C” level or better
- CS: Continued study to meet course objectives
- DT: DANTES
- I: Incomplete - Indicates failure to complete certain course requirements because of extenuating circumstances
- NA: Never Attended
- NG: No grade available
- P: Pass - No quality points; reflects competence of “C” level or better
- TR: Transfer Credit
- W: Student withdrew from the course
- CL: CLEP (College Level Examination Program)

Grades of I (Incomplete)
An “I” grade in a course indicates the student is making satisfactory progress at the end of the semester but, because of extenuating circumstances, is unable to complete the course requirements. When an incomplete is given, a form outlining the work to be completed must be signed by the instructor and the appropriate department chair. A copy of the form will be submitted to Student Services with the end-of-semester grades. All work must be completed by the end of the following semester (by the end of the following fall semester for an incomplete received during spring semester). At that time, the incomplete must be changed to a letter grade by the instructor. Veterans should check with the veterans’ coordinator in the Student Services department upon receiving an “I” grade.

Grades of CS (Continued Studies)
Students must have submitted all required coursework and must be enrolled throughout the course to receive a grade of ‘CS’ in the course. A “CS” grade in a course indicates that the student must enroll in the course again in order to receive credit. Students
enrolled in developmental studies courses may receive a grade of “CS” only two times in any one course. If the student registers and fails to satisfactorily complete the course for a third time, he/she will receive a grade of “F.”

Honors

President’s Honor List
At the end of each semester, a President’s Honor List will be published to honor those students who:
- are enrolled in a curriculum program
- have completed a minimum of 12 credit hours during the current semester (9 hours or more for summer semester), including two or more courses (Courses with “CR” or “P” are not applicable.)
- have a grade point average of 4.0
- have no grades of “I.”

Dean’s Honor List
At the end of each semester, a dean’s list will be published of all students who:
- are enrolled in a curriculum program
- have completed a minimum of 12 credit hours during the current semester (9 hours or more for summer semester), including two or more courses (Courses with “CR” or “P” are not applicable)
- have a grade point average of 3.5 or better
- have no grades of “I.”

Honors List
At the end of each semester, an honors list will be published to honor those students who:
- are enrolled in a curriculum program
- have completed 8 to 11 credit hours during the current semester or 6 to 8 hours for summer semester (Courses with “CR” or “P” are not applicable.)
- have a grade point average of 3.5 or better
- have no grades of “I.”

Transfer Credit
To be considered for CCC&TI credit, courses must have been taken at a regionally accredited institution and must show a grade of “C” or better. Certain exceptions may be made. Transfer credit will not be awarded for courses in which a student has received a grade for credit by exam or has been granted credit for proficiency placement exam.

Notification of transfer credit granted will be sent to the student prior to the end of the first semester of enrollment. If applicable credit has been accepted from another institution, transfer students may be exempt from some of the admission placement tests. A grade point average for graduation, honors, and continuing enrollment is computed only for courses taken at CCC&TI. For information on advanced standing by placement, see Credit by Examination.
Credit by Examination

No more than twenty-five percent of the hours required for a degree, diploma or certificate may be earned by examination, including proficiency credit, advanced placement, CLEP, and/or any combination thereof. The student must provide an official copy of the test scores to the admissions office for evaluation.

Proficiency Examination

Students enrolled at CCC&TI who are qualified to accelerate their studies because of their demonstrated abilities may receive proficiency credit by examination for some of their curriculum courses. The proficiency examination process is used for a student desiring credit for prior learning. Students may not use this examination to repeat a course, nor may the student repeat the examination.

The student wishing to receive credit must petition the department chair under whom the course is offered. If the department chair deems the course suitable for proficiency credit, the student may receive permission to take the examination developed by the department chair and appropriate instructors. For those students in their last semester prior to fulfilling the qualifications for graduation, application for proficiency credit must be made at least 20 calendar days prior to the end of the semester. The test must be taken within the next 15 calendar days. Appeals for exception may be made to the executive vice president.

The department chair will decide the appropriate score demonstrating competence in the course and, in all courses, the final score must equal a “C,” or better. If the examination is passed, the student will earn credit hours toward graduation but no quality points. A grade of “CR” (Credit by examination) will be indicated on the student’s transcript. If the examination is not passed, no notation will be made on the transcript.

“CR” credit is not guaranteed to transfer and does not meet Comprehensive Articulation Agreement (CAA) requirements.

Advanced Placement

The college grants credit for the Advanced Placement Examinations conducted by the College Board. An entering student may receive semester credit hours based on Advanced Placement Examinations of the College Board. These examinations may be taken prior to the student’s high school graduation, and the scores must be sent to the admissions office for evaluation. By scoring 3 or higher on the appropriate Advanced Placement Examination, students will be awarded credit for approved courses. The grade of AP will be posted on the transcript, and credit hours will be granted, but no quality points will be given.
CLEP (College Level Examination Program)  
DSST (DANTES)

CCC&TI offers college credit for the subject area examinations included in the College Level Examination Program (CLEP) and DSST (DANTES). The student must provide an official copy of test scores before credit is granted. Credit must be applicable to the student's current degree or diploma requirements. If CLEP (CL) or DSST/DANTES (DT) credit is granted, credit hours will be noted on the student's transcript, but no quality points will be awarded. Information on the acceptance scores is available in Student Services.

Articulated Credit

CCC&TI awards college credit for identified high school courses based on criteria outlined in the North Carolina High School to Community College Articulation Agreement. All criteria below must be met for college credit to be awarded.

- Grade of “B” or higher in the course.
- A raw or converted score of 80 or higher on the standardized VOCATS post-assessment.
- Students must enroll at CCC&TI within two years of high school graduation date.
- Students must provide official high school transcript and VOCATS scores.

Please see Student Services for more information on local articulation opportunities. A grade of AC will be posted on the transcript. Credit hours will be granted, but no quality points will be given.

Military Credits

Effective spring semester 2001, one semester hour of physical education credit will be granted for any armed service personnel who has completed basic training under the following conditions:

- Minimum of four months active duty required. Reserve duty is not applicable.
- Personnel must have been separated under HONORABLE conditions.
- Personnel must provide his/her copy of DD214, with time served and separation conditions.
- Dishonorable discharge does not qualify one for credit.

Effective fall semester 2009, additional educational experiences in the armed services may be submitted for transfer credit evaluations. To request an evaluation of military service schools, the student must complete the following steps:

1. Submit official copies of Military Transcripts which can be obtained from the various service branches at http://www.acenet.edu/higher-education/topics/Pages/Transcript-Services.aspx

2. Attach documentation of successful completion of course. Documentation may include:
   - DD Form 295 Application for the Evaluation of Educational Experiences During Military Service,
DD Form 214 Armed Forces of the United States Report of Transfer or Discharge, and any of the following that may be applicable:
- course completion certificates,
- AARTS (Army/ACE Registry Transcript System) transcripts,
- SMART (Sailor/Marine/ACE Registry Transcript System) or
- MOS (Military Occupational Specialty) Evaluation Score Reports.

3. Submit applicable documents to the Admissions and Records Office.

Military educational experiences are evaluated using the ACE (American Council on Education) Guide to the Evaluation of Educational Experiences in the Armed Services. Credit must be applicable to the student’s current degree or diploma requirements. Only hours earned are awarded.
Policy Approved by Board of Trustees 6.17.09

Course Repeat Policy

When a student repeats a course, the last grade is recorded as the final grade for the course; and only the last hours attempted are counted in determining the student’s grade point average.

Students may take a course a total of three times, including transfer credit, withdrawal and audit. Exceptions to this policy must be approved by the appropriate department chair or academic vice president and the executive vice president. Exceptions to this policy include:
- Special disabling condition
- Change in technology
- Student failure of course or to improve grade
- Additional student improvement and learning Veterans are advised that they cannot receive VA benefits for courses previously passed

Auditing

A student who audits a course pays the regular tuition and activity fees. The audit must be indicated at registration. Students who audit do not take tests or examinations, do not receive grades or credit, and cannot later change an audit to credit. Students who enroll for credit may not change to audit. Audit students are not required to meet attendance requirements. Instructors will drop or withdraw only audit students who never have attended. Students are required to meet prerequisites/corequisites, including placement tests, for all courses being audited. Note: Title IV funding (Federal Pell Grant) cannot include credit hours of an audited class in determining award amounts.

Course Substitutions

Under special circumstances, a course substitution may be made in a program. Any course must have written approval of the department chair and the vice president of the instructional area. Once approved, substitution forms must be submitted to the director of enrollment management services. In the event a course has been deleted from a particular program, a course substitution may be used to meet the requirement.
Cooperative Education

Cooperative education is designed to give students enrolled in most programs an opportunity to work on a curriculum-related job while completing degree requirements. This combination of classroom instruction and related work experience provides numerous benefits to the student, the college, and employers. Co-op students work in part-time or full-time jobs selected and/or approved by the college. Academic credit is granted for successful work experiences. Interested students should contact the evening/weekend administrator for details.

Independent Study

Eligible students may apply to take a course that is listed in the school catalog but that is not being offered during the designated semester. Students should apply through the Student Services department by completing form CCC108. Requirements for independent study courses are as follows: student must have a 3.0 program GPA, student must meet with instructor a minimum of one hour per week, course cannot be a lab course, course cannot be a repeat, and student must have approval of department chair.

Academic Progress

CCC&TT's academic standards policies attempt to maintain academic quality and prevent prolonged failure for all students. Procedures are designed to identify students with academic difficulty and to insure effective and fair corrective action. Maintaining a viable procedure requires the commitment of faculty, staff, and students. The faculty/staff will:

• inform all students of minimum academic standards and grading procedures.
• alert all students of academic difficulty as early in the semester as possible.
• notify all students of their grade point averages immediately following the semester grade report period. Note: Copies of the policies for specific programs in health sciences are distributed to each student enrolled and are available with each program director and in the office of Student Services.

Student Tutorial Assistance

Special assistance is available for students in all areas of study at the college at no cost to the student. To request a tutor, students should contact the course instructor. Instructors are also available for conferences at regularly scheduled office hours or by appointment. It is the responsibility of the student to seek extra help when needed.

Academic Probation

A student whose program grade point average falls below the following standards will be placed on academic probation. (Academic status is based on program grade point averages)

<table>
<thead>
<tr>
<th>Semester Hours Attempted</th>
<th>Associate Degree Grade Point</th>
<th>Diploma Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-8</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td>9-16</td>
<td>1.25</td>
<td>1.25</td>
</tr>
</tbody>
</table>
Students on academic probation will be required to develop (in cooperation with their advisors) a plan of corrective action. This plan may include adjustments thought to be helpful, such as counseling, reduced course load, remedial work, tutoring, or work in the Academic Support Center.

**Academic Suspension**

A student who is on academic probation for two or more successive semesters will be subject to a one semester suspension. A suspension committee composed of the student’s advisor, appropriate department chair, SGA representative, Student Services representative, and a faculty/staff member of the student’s choice will meet immediately following notification of the second semester probation and determine appropriate action, i.e., suspension or other action. If suspension is ruled, refund of tuition will be allowed as outlined in the college catalog. A student’s right to appeal any decision is outlined in the grievance procedure printed in this college catalog. A student may automatically enroll for the semester following suspension but will continue to be on probation until his/her program G.P.A. reflects necessary improvements.

**Readmission of Dismissed Students**

Readmission of dismissed students at a subsequent session will be at the discretion of the college. Students should refer to the student handbook for details on disciplinary procedures and regulations pertaining to suspension and expulsion. Veterans should see the section on academic probation for information concerning the reinstatement of benefits.

**Grade Appeal Policy and Procedures**

I. Statement of Policy

The purpose of the Student Grade Appeal Procedure is to provide an orderly and equitable process for resolving differences between students and faculty relating to final course grades. A course grade assigned in a manner consistent with Caldwell Community College and Technical Institute policy can be changed only by the instructor. College administrators can direct a grade to be changed only when it is determined through the procedure established by this policy that the faculty member assigned the course grade impermissibly or arbitrarily as defined below.

**Faculty Responsibility:**

It is a fundamental principle of higher education that faculty members are expected to exercise their professional judgment in evaluating student performance. At the same time, faculty members have the responsibility to specify in each of their courses at the beginning of the academic term:

a) Course requirements and expectations for academic performance
b) Procedures for evaluating performance (method(s) of evaluation and grading scales).
Faculty members must clearly document to all students in the course any subsequent additions to or changes in these requirements, standards, and procedures. Finally, faculty members have the responsibility to apply the specified grading criteria equitably to the academic performance of all students in the course regardless of their race, color, creed, national origin, sex, age, sexual orientation, disabling condition, or other personal characteristics.

**Student Responsibility:**
Students have the responsibility to know and adhere to college policies and standards pertaining to them. As students willingly accept the benefits of membership in the Caldwell Community College and Technical Institute academic community, they are obligated to uphold and observe the principles and standards articulated in the Caldwell Community College and Technical Institute Catalog and the Caldwell Community College and Technical Institute Student Handbook.

**II. Applications and Definitions**
For purposes of this policy, a course grade is deemed to have been assigned arbitrarily or impermissibly if, by clear and convincing evidence, a student establishes that:

1. The course grade was based upon the student's race, color, creed, national origin, sex, age, sexual orientation, disabling condition, or other personal characteristics, or for some other arbitrary or personal reason unrelated to the instructor's exercise of his or her professional academic judgment in the evaluation of the academic performance of the student; or

2. The course grade was assigned in a manner not consistent with the standards and procedures for evaluation established by the instructor, usually at the beginning of the course in the course syllabus but supplemented on occasion during the semester in other clearly documented communication directed to the class as a whole; or

3. The course grade assigned by the instructor was the result of a clear and material mistake in calculating or recording grades. Individual elements (e.g., assignments, tests, activities, projects) which contribute to a course grade are generally NOT subject to appeal or subsequent review during a grade appeal procedure. However, individual elements may be appealed under these procedures providing all of the following conditions are met:
   
   a. The student presents compelling evidence that one or more individual elements were graded on arbitrary or impermissible grounds (defined in 1 - 3 above in this section);
   
   b. Grounds can be established for determining a professionally sound grade for the appealed element(s); and
   
   c. The ensuing grade for each appealed element would have resulted in a different course grade than that assigned by the faculty member.

**III. Procedure**
A student who believes his/her final grade in a course has been incorrectly assigned may seek corrective action through the following procedure.
Informal Grade Appeal Process: Every reasonable effort should be made to resolve the matter at the informal level.

Step 1 - Consultation with the faculty member:
The student should first request a meeting with the instructor to explain why he/she considers the grade to be incorrect. If the instructor is not available, the student should contact the program coordinator/director or department chairperson to schedule an appointment with the instructor. This meeting must occur within the first two weeks of the next semester. The instructor should document the result of the meeting and maintain this record in the event the appeal proceeds further.

Step 2 - Consultation with the program coordinator/director:
If the student and the instructor fail to reach a mutual agreement, the student may submit a written appeal to the program coordinator/director of the area within five (5) business days. The coordinator/director should document the result of the meeting and maintain this record in the event the appeal proceeds further.

Step 3 - Consultation with the department chair:
If the student and program coordinator/director fail to reach a mutual agreement, the student may submit a written appeal to the department chair within five (5) business days. The department chair should document the result of the meeting and maintain this record in the event the appeal proceeds further.

Formal Grade Appeal Process: If the dispute over the course grade cannot be resolved through the informal process outlined above, the student may submit a Grade Appeal Form, available from Student Services, to the executive vice president within five (5) business days of the consultation with the department chair.

Step 4 - Appeal to the executive vice president:
a. Once the formal grade appeal is received, the executive vice president will appoint a grade appeal committee to hear the appeal within ten (10) business days of the receipt of the appeal.
b. The grade appeal committee will be chaired by the executive vice president, or a designee, who will be a non-voting member except in the case of a tie. Voting members will consist of four (4) faculty members not associated with the appeal, one (1) student representative with a minimum GPA of 2.5 or greater, and the vice president of the instructional area in which the grade appeal has occurred.
c. The grade appeal hearing will be conducted in closed session in accordance with the Open Meetings Law unless otherwise requested in writing by the student. Neither the college nor the student will be permitted to have legal representation during the grade appeal hearing.
d. The committee will be made up of members from the campus of attendance to assure a fair and equitable hearing.
e. The committee will hear all parties involved and render a written decision that is considered to be fair and educationally sound within ten (10) business days. The decision of the committee will be the final binding decision for the institution.
IV. Substitution Provisions
In the event that the faculty member whose grade is being reviewed is also a department chair or program coordinator/director, the vice president of the instructional area shall do those things required by the chair or coordinator/director. In the event that the faculty member whose grade is being reviewed is also the vice president of the instructional area, the executive vice president can name an appropriate substitute to perform the functions of the vice president as required by this policy.

Catalog Requirements
Candidates for a degree, diploma or certificate may meet graduation requirements as outlined in either (1) the catalog for the year they initially entered their program of study provided continuous enrollment is maintained during fall and spring semester and no more than 10 years have elapsed or (2) in the catalog for the year of their graduation. Students who have not enrolled in two consecutive semesters (excluding summer semester) are not considered as continuously enrolled and must reapply for admission to CCC&TI. Requests for exceptions may be filed with the director of enrollment management services.

Graduation Requirements
Graduation exercises will be held in May. All candidates are expected to be in attendance. A student is eligible for graduation when the following requirements have been completed:

• The student must have filed an application for degree/diploma/certificate and pay the fee by the published deadline. In order to participate in the May graduation exercises, students must apply for graduation by the established fall semester deadline and complete all graduation requirements by the end of the spring semester. The graduation fee will be waived for certificate graduates not attending graduation exercises.
• All the requirements for a degree/diploma/certificate in a particular program must be satisfactorily completed with a program grade point average of at least 2.0.
• Students transferring from other colleges and schools are required to complete at least 25 percent of the course hours in their program of study or 10 semester hours, whichever is greater, in residence at CCC&TI. “In residence” denotes credit hours earned at CCC&TI. Cooperative education will not count toward residency requirements for graduation.
• The student must take care of all financial obligations to CCC&TI prior to commencement.

Graduation with Honors
A graduating student who has earned a program grade point average of 3.5 or better during studies at Caldwell Community College and Technical Institute will receive the degree, diploma, or certificate “with honors.”
Tuition and Fees

Policies Regarding Student Expenses
All tuition and required fees are due and payable at the time of the student’s registration. The vice president of finance and administration or a delegated representative shall have the authority to permit deferred payments of tuition and fees in situations where it is determined that a student is undergoing emergency financial conditions. All checks and money orders must be made payable to Caldwell Community College and Technical Institute. No student will be allowed to graduate, to receive transcripts, or to register for a new semester if said student has an unpaid balance due from any previous semester. Exceptions will be made only if such an outstanding balance has been guaranteed in writing by a financially responsible person or organization. The college will not accept checks from any individual who has written a check to the college from an account having insufficient funds.

Tuition
CCC&TI offers an educational opportunity at a minimum cost to the student. Tuition fees are set by the North Carolina General Assembly and are subject to change without notice. Current tuition amounts are as follows:

In-state students
16 credit hours or more $904.00
Part-time students per semester hour $56.50

Out-of-state students
16 credit hours $3976.00
Part-time students per semester hour $248.50

Tuition for High School Students
High school students taking college credit courses under cooperative program agreement (Huskins Bill) or through concurrent enrollment provisions are exempt from applicable tuition for certain classes. Contact Student Services for more information. Activity fees are also charged to students enrolled through dual enrollment, Caldwell Early College High School and Caldwell Career Center Middle College.

Tuition for Students Enrolled in More Than One Institution
If a student desires to enroll for the same semester at two or more institutions of the community college system, the total amount of tuition shall not exceed the maximum tuition. When enrolled at the second institution, the student must produce his/her validated registration receipt in order to waive any payment of tuition. Activity fees will be charged. It is the student’s responsibility to see that transcripts are sent to the “home” institution at the completion of the semester.
Tuition for Older Citizens
North Carolina residents 65 years of age or older shall be exempt from the payment of curriculum tuition (up to 6 credit hours) and activity fees.

Tuition for Students Under the Age of 16
Any student enrolled under the age of 16 (with the exception of Huskins, Caldwell Early College and Middle College students) shall pay standard tuition and any applicable fees for the course.

Tuition for Inmates
Prison or correctional unit inmates will be exempt from the payment of tuition or activity fees.

Summer Tuition/Fees
During summer semester, dual enrollment students, senior citizens and employees of CCC&TI must pay tuition and fees for certain classes. Contact Student Services for a complete list.

Other Charges

Student Activity Fees
Curriculum students will be charged a $7.00 per course activity fee up to a maximum of $28 per semester (fall & spring), and $3 per course up to a maximum of $9 for summer semester. This fee is not refundable unless there is an institutional error. Activity fees will also be charged to students in the Caldwell Early College High School, Caldwell Career Center Middle College and dual enrollment programs.

Accident Insurance
A low cost student accident insurance program is available for purchase in the college’s Business Office. Interested individuals should contact the Business Office at each campus for additional information. All students in health sciences programs must purchase this accident insurance each year. The cost of the policy varies each year.

Malpractice Insurance
Special malpractice insurance is required for biomedical equipment, cardiovascular sonography, CT/MRI, medical sonography, nuclear medicine, nursing, ophthalmic medical assistant, physical therapist assistant, radiography, and speech language pathology assistant students. This fee is not refundable.

Books and Supplies
Students are required to buy the necessary textbooks and supplies prescribed in the curriculum areas that they are entering. Textbooks and supplies vary according to different courses taken by the students. An average expenditure of $600 can be expected for fall and spring semesters. Standard school supplies are sold during the regular bookstore hours.
Campus Services Fees
Curriculum students will be charged a $2.00 per course campus services fee up to a maximum of $10.00. This fee is nonrefundable unless there is an institutional error. Campus Services fees will also be charged to students in the Caldwell Early College High School, Caldwell Career Center Middle College and dual enrollment programs.

Graduation Fees
A graduation fee of $25 (subject to change) for a degree/diploma/certificate is payable by the deadline for graduation applications. This fee is not refundable. The current charge for each additional degree/diploma/certificate is $15 (subject to change).

Curriculum Refund Policy
Students will receive a tuition refund in accordance with the NC Administrative Code (NCAC 2D.0202). A full tuition and activity fee refund will be granted to students who pre-register and completely withdraw prior to the first day of the college's academic semester. For students who pre-register and withdraw from a class, a full refund will be given for that class if the student officially withdraws prior to the first day of the semester and if the withdrawal reduces the credit hours taken by the student to fewer than 16 credit hours. Note: For purpose of the refund policy, “pre-registration” refers to registration that occurs prior to the first day of the semester. A 75 percent refund will be given to students who completely withdraw from the first day of the semester until the official 10 percent point of the semester. A 75 percent refund will be given to students who withdraw from class(es) from the first day of the semester until the official 10 percent point of the class(es). For contact hours classes, 10 calendar days from the first day of classes will be the determination date. No activity fees will be refunded for students receiving 75 percent refunds. Full refunds (tuition and activity fees) will be given automatically if the class(es) never materialized. In the event of the death of a student, a full refund will be granted to the individual's immediate family and/or estate. Fees not refundable (unless institutional error) are (1) insurance payment, (2) special course fees and (3) graduation fees. In order to begin the refund process, a student must:

Caldwell Campus
- Complete the student portion of the Registration Change Form (referred to as Drop/Add Form), including student, instructor and advisor signatures. The last date of attendance must be completed by the instructor. The form will not be accepted in Student Services without all information completed. This form is available in Student Services and in the Faculty office. In certain cases, e.g., institutional error, withdrawals before the first class, the Vice President of Student Services or his designee(s) may sign the official drop form.
- Present the former to a staff member in Student Services in order for the official drop date to be recorded.

Watauga Campus
- Complete the student portion of the Registration Change Form (referred to as Drop/Add Form), including student, instructor and advisor signatures. The last date of attendance must be completed by the instructor. The form will not be
accepted in Student Services without all information completed. This form is available from the Watauga Instructional Facility, Watauga Student Support Center or Watauga High School. In certain cases, e.g., institutional error or withdrawals before the first class, the Student Services staff or the Executive Director of the Watauga Campus may sign the official drop form.

- Present the form to a staff member in Student Services in order for the official drop date to be recorded.

Refunds will not be given if:
- The Registration Change Form is incorrectly or incompletely filled out.
- The date the Registration Change Form is officially received in the Student Services Office of either campus is past the appropriate 10 percent point.
- The drop is done by the instructor rather than the student.

**Account Balances**

If a student owes money to the college, no transcripts, degrees, diplomas, or certificates will be issued nor will the students be permitted to complete registration.

**Residence Status for Tuition Payment**

To qualify for instate tuition, a legal resident must have maintained a domicile (legal residence) in North Carolina for at least the twelve months preceding the date of first enrollment or reenrollment in an institution of higher education in this state. Student status in an institution of higher education in this state shall not constitute eligibility for residence to qualify said student for instate tuition. The burden of establishing facts which justify classification of a student as a resident entitled to instate tuition rates is on the applicant. Regulations concerning the classification of students by residence for purposes of applicable tuition differentials are set forth in detail in A Manual To Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes. Each enrolled student is responsible for knowing the contents of that manual, which is the controlling administrative statement policy on this subject.

Copies of the manual are available on request at the college library or from Student Services on both campuses. Students seeking a change in residency status may be asked to complete the Residientiary Information Form. With information gained from this form, the director of enrollment management services will make the initial residientiary determination on the Caldwell campus. The Coordinator of Admissions and Records Services will make the determination of residency status on the Watauga Campus. Appeals to the initial classification will be made to the admissions committee. If not satisfied with the disposition of the complaint, an appeal may be made to the State Residence Committee. Information on the appeal process may be acquired from Student Services.
Financial Aid for Students

General Information
Caldwell Community College and Technical Institute encourages prospective students who desire to enroll but face financial problems to apply for assistance through the Financial Aid Office. Financial assistance for educational costs may be available in the form of scholarships, grants, loans, and work programs. Within the limited funds available for these purposes, every effort is made by the institution to help students who need monetary assistance. Financial need is determined through analysis of an application prepared by the student and the students’ parents if applicable. Analysis of the family’s financial situation indicates the family’s ability to contribute toward educational expenses. Most financial aid is based on need rather than on scholastic record.

Financial need is the difference between the total education expenses and what the family can afford to contribute (Cost of Attendance minus EFC). There are three types of student financial aid: gift assistance, student loans, and work. Gift assistance includes grants and scholarships: awards that do not have to be repaid. Loans and work are self-help. Loans are usually paid back after enrollment is terminated. Work enables students to pay part of their expenses through their own earnings.

Students are encouraged to keep close contact with the Financial Aid Office or our website for availability of scholarships. Institutional needs-based scholarships are awarded by need. Applications are available in the Financial Aid Office.

Application Procedure
Students who are entering CCC&TI for the first time and are in need of financial aid are requested to follow this application procedure:

1. After application for admission has been initiated (see “Admissions”), the student should file an application for aid. (see #2). It is to the student’s advantage to apply for aid at least three months before the expected enrollment date. If the financial aid application is not submitted by our target date we cannot guarantee the application will be processed in time for aid to be provided at regular registration. Target dates are as follows:
   - Starting Fall Semester – Target Application Date is May 1
   - Starting Spring Semester – Target Application Date is October 1
   - Starting Summer Semester – Target Application Date is March 1
   
   **NOTE:** Students are encouraged to complete FAFSAs in early spring each year.

2. Complete a Free Application for Federal Student Aid (FAFSA). CCC&TI's federal school code is 004835. This will be the initial application necessary to apply for federal and state aid programs at CCC&TI. FAFSA forms are available in Student Services, at the Caldwell and Watauga Campuses or from high school counselors or you may submit your FAFSA online at www.fafsa.gov.
3. After determination of all grant awards an award notification will be sent to the recipient.

Eligibility
Applicants may apply for a scholarship, grant, loan, work-study, or any combination of these. The total combined sum of these must not exceed total need. To receive financial aid from these programs, a student must

1. Be a U.S. citizen or an eligible non-citizen.
2. Be registered with Selective Service, if required.
3. Have financial need.
4. Be older than compulsory age of secondary school attendance.
5. Not already have a baccalaureate degree.
6. Maintain satisfactory academic progress as defined for aid recipients by the U.S. Department of Education. (See Satisfactory Academic Progress Policy)
7. Not owe a refund on a previous grant nor be in default on a previous educational loan.
8. Be enrolled in a program leading to an eligible program of study.
9. Have a high school diploma or equivalent.

Aid Recipient Responsibilities
Students must be aware of the following as it directly has an effect on their awards and continued eligibility to receive federal and state aid.

Calculation of Pell Grant Funds: For financial aid recipients, enrollment status for Federal Pell Grant purposes is determined by enrollment verification by the Financial Aid office just prior to the disbursement of funds. After the initial disbursement is made no adjustments will be made to a student's account for any given term unless, 1) the Financial Aid Office receives notice of a ‘never attended’ or 2) the Financial Aid Office receives notice that the student has received federal funds from another institution for the same semester.

Return to Title IV (R2T4): In the event that a student receiving aid withdraws from the institution prior to the 60% point of the term, the student will be responsible for any return of Title IV funds. Students are given 45 days to repay or make arrangements to repay the overpayment. Should this not occur, the debt will be turned over to the Department of Education, and the student will not be eligible for any Title IV funds anywhere until arrangement have been made to repay the debt.

Satisfactory Academic Progress Policy
Federal regulations require that students receiving Federal financial aid must make satisfactory progress as defined by the college. Caldwell Community College and Technical Institute has elected to apply the standards set forth below to all students who received aid from any of the following programs: Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Stafford Loan, Federal Teach Grant, Federal Work-Study Program, North Carolina Community College Grant,
North Carolina Education Lottery, North Carolina Student Incentive Grant and institutional aid.

Satisfactory academic progress will have three standards of measurement. These are qualitative, quantitative, and maximum time frame.

**GPA Rule**
- The qualitative measurement for financial aid shall be a grade point average minimum of 2.0.

**67% Rule**
- The quantitative measurement will be a completion rate of two-thirds of all (cumulative) attempted credit hours. Better referred to as the 67% rule. Students must successfully complete 67% of the hours attempted (registered for) to meet the minimum requirements. Successful completion is defined as receiving a grad of A, B, C, or D.

**150% Rule**
- The maximum time frame allowable will be 150% of the required credit hours in the recipient's current academic program. For example, if a program of study requires 64 credit hours to complete a degree, the student may attempt a maximum of 96 hours before the student exceeds his or her eligibility for financial aid (i.e. 64 X 1.5 = 96). Up to 30 credit hours of required remedial course work will not be a part of the attempted hour count. Students that reach the maximum time frame will automatically be placed on Financial Aid Suspension.

**Satisfactory Academic Progress Procedures**
- Grade point averages will be checked prior to the beginning of each academic year.
- The completion rate will be checked at the end of each semester.
- The 150% allowance will be checked prior to the beginning of each academic year.
- Should either the GPA or two-thirds requirements not be met, one semester’s probation will be allowed where aid will continue to be made available to regain satisfactory academic standards.
- Should either the GPA or two-thirds requirements fail to be met at the end of the probationary semester; eligibility for aid will be suspended.

**Regaining Eligibility Procedures**
- Recipients who have had their eligibility suspended due to the GPA rule and/or the 67% rule may appeal their suspensions for mitigating circumstances to the Director of Financial Aid. Mitigating circumstances are considered to be (1) the death of a relative of the student, (2) an injury or illness of the student and/or an immediate family member related by marriage or birth, or (3) other special circumstances causing undue hardship to the student and beyond the reasonable control of the student.
- The Director may reinstate after reviewing the appeal documentation by initiating a Reinstatement Contract with the student. This contract will remain in effect for the signer for three academic semesters. If the student has not regained SAP standards
by the end of the third academic semester or does not meet the requirements of the contract for any of the three semesters the student will then be placed on Financial Aid Suspension. The student would have to regain their eligibility by self-support until they met the academic standards.

• Students who exceed the maximum allowable time frame to complete a program of study must appeal by using the standard financial aid appeal process and must provide a graduation plan signed by a college official (i.e. academic advisor). If the plan is considered reasonable, students will receive financial aid on probation for one or more semesters until the degree is complete. Any withdrawals, incompletes, or failures during this probation time will automatically end the agreement and the student will be suspended from financial aid.

• The Director may select to have the Financial Aid Committee review any or all appeals.

What is Included

• All credit hours ever attempted are to be considered in computing Satisfactory Academic Progress Standards, even during periods when the student was not an aid recipient. All hours that were earned as requirements for a previous degree or diploma (as long as the diploma is not part of the currently sought degree) will be ignored in the computation of eligibility.

• Students that are on Financial Aid Probation or Financial Aid Suspension will not be allowed to early register for classes at early registration unless they are covering the charges themselves. Registration using Financial Aid will only be allowed after grades are in for the current term and SAP standards have been met.

• Each aid recipient will be provided with a copy of the Financial Aid Satisfactory Academic Progress Policy with the Financial Aid Award Packet. Financial Aid Satisfactory Academic Progress standards are also posted on the college web site.

Federally Sponsored Programs

When a student submits the Free Application for Federal Student Aid (FAFSA), his or her eligibility for the following programs will automatically be checked. Applications may be obtained from high school counselor offices, from the office of Financial Aid, or do the application on the Internet at www.fafsa.gov. All of these programs are a part of Title IV funding.

Academic Competitiveness Grant (ACG)

For ACG grants, students must apply for financial aid by submitting the FAFSA and have been determined to be eligible for a Federal Pell Grant. They must be a U.S. Citizen, must be enrolled in a two- or four-year degree program; and must be enrolled full-time (12 credit hours or more). In addition – students must be in their first or second academic year of a two- or four-year degree program; have completed a rigorous high school program of study as designated by the state; and for a second year AC Grant, students must have a grade point average from their first year of college at least 3.0.

Application Procedures: Student applies for an ACG by completing the Free Application for Federal Student Aid (FAFSA). A student eligible for a Pell Grant and meeting the requirements listed above may be considered.
Federal Pell Grant
The Federal Pell Grant program is designed to provide financial assistance to those who need it to attend post-high school educational institutions. The amount of the Pell Grant is determined on the basis of the student’s and his/her family’s financial resources. Recipients must be undergraduates enrolled as either part-time or full-time students in an approved postsecondary institution who have not already earned a bachelor’s or professional degree, be citizens or permanent residents of the United States.

This program awards grants directly to students with payment made through the institutions. Federal Pell Grants are the ‘foundation’ of student aid to which aid from other sources may be added. The maximum annual award at this time is $5550; the minimum Pell award is $400.

Application Procedures: Student applies for a Federal Pell Grant by filling out the Free Application for Federal Student Aid (FAFSA). See your high school counselor or college financial aid officer if you have questions about applying for a Federal Pell Grant. Applications are also available online at www.fafsa.gov. Do not PAY to submit your FAFSA. It is a free application process.

Federal PLUS Loans to Parents
These loans are part of the North Carolina’s Federal Family Education Loan Program.

Eligibility:

- The borrower and the benefiting student must be U.S. citizens, Nationals, or permanent eligible noncitizen
- The student must be enrolled at least half-time in a degree or certificate program in an eligible college or vocational school.

Value: A parent of a dependent student may borrow up to the difference in the estimated cost of attendance and other financial aid for each child meeting the eligibility requirements.

Application Procedure: For CCC&TI, the student must have submitted a FAFSA and have completed the process before a PLUS loan will be certified.

Federal Stafford Loan or Federal Direct Loan (Subsidized and Unsubsidized)
Federal Stafford Loans or Federal Direct Loans are either subsidized or unsubsidized, depending on whether the student has demonstrated financial need. Subsidized means that the federal government pays the interest on the loan for the student while the student is in school and for six months after the student ceases enrollment; such loans are available to students who demonstrate sufficient financial need. Unsubsidized means that the student does not demonstrate financial need and is responsible for the interest for the entire life of the loan. The interest rate on Stafford or Direct loans is fixed and may change each July 1.

The amount a student can borrow through the subsidized Stafford or Direct Loan depends on the student’s collegiate grade level as noted below:
- Freshmen $3,500
• Sophomores $4,500
  (has at a minimum 32 completed credit hours)

In addition to the above amounts, independent students can borrow additional funds through the unsubsidized Stafford Loan Program, depending on their collegiate classification. There are cumulative lifetime amounts that any student can borrow through the Stafford Loan or Direct Loan Program (subsidized and unsubsidized).

• Pending changes in the law will determine if loans are Federal Direct Loans.

Federal Supplemental Educational Opportunity Grant (FSEOG)
This program of direct grants of financial aid is for students of exceptional financial need. Those that complete the FAFSA process prior to the target application date for fall semester will be the first to be considered. FSEOG will be disbursed by the following method at CCC&TI:
• EFC must be 0 and
• The student must meet Satisfactory Academic Standards as set by the U.S. Department of Education.
• Amounts of disbursements will be determined by credit hour enrollment status at first of term disbursement date. The maximum annual FSEOG award for 2010-2011 was $400.00. Funding is limited. Awards are made until funds are exhausted.

Student applies for an FSEOG award by filling out the FAFSA. The FSEOG will be included as part of the student’s total financial aid package developed through the school the student attends. Annual applications are required.

Federal Work-Study Program
Caldwell Community College and Technical Institute participates in the federal work-study program which provides on and off campus work opportunities for students needing financial assistance to attend school. Work is available for students to assist in the America Reads program that permits students to tutor in local elementary schools. Other employment opportunities are available in the library, faculty and administrative offices, laboratories, shops and as on-campus tutors.
Students working under this program are paid monthly for the work performed. In arranging a job and determining how many hours a week a student may work under this program, the Financial Aid Office will take into account the student’s
• need for financial assistance
• class schedule
• academic progress

Application Procedure: Students apply for the FAFSA, this identifies need. Students interested in the FWS program should contact the Financial Aid Office for additional application forms and information.
State-Supported Grant, Loan and Scholarship Programs

Listed below are some of the state-supported grant and loan programs available at Caldwell Community College and Technical Institute. Because grant and loan programs may change from year to year, please check with the Financial Aid office for current information. Also, the North Carolina State Education Assistance Authority publishes a handbook, “Financial Aid for North Carolinians” that provides up-to-date state-supported grant and loan program information. This can be located at http://www.cfnc.org. Click on “Paying for College” green tab and on the left hand side, click on “Publications and Forms.” The handbook is near the bottom and is downloaded via PDF format.

State Grants

North Carolina Community College Grant
To be eligible for the North Carolina Community College Grant (NCCCG) students must 1) be a resident of North Carolina, 2) enroll for at least 6 credit hours per semester in a curriculum program, and 3) complete the Free Application for Federal Student Aid (FAFSA). Eligibility is determined based on the same criteria as the Federal Pell Grant; students not eligible for the Federal Pell Grant may be considered for the grant based on their estimated family contribution (EFC) as determined on the Student Aid Report (SAR). The Financial Aid Office will include awards in the awarding package. The value per grant will vary according to information that is generated from the Pell Grant application. The NCCCG does not include summer semester. It is only a fall and spring semester award.

North Carolina Education Lottery Scholarship (ELS)
Eligibility: Applicant must
• Be a North Carolina resident for tuition purposes
• Enroll for at least six credit hours per semester in a curriculum program
• Meet the Satisfactory Academic Progress requirements of the institution
• Be admitted, enrolled and classified as an undergraduate student in matriculated status in a degree, certificate or diploma program at an eligible North Carolina institution (UNC campuses, Community College Campuses, Independent College Campuses and certain other private colleges)

Eligibility is determined based on the same criteria as the Federal Pell Grant with one exception; students not eligible for the Federal Pell Grant with an estimated family contribution (EFC) of $5,000 or less will be eligible for ELS. Students who have earned baccalaureate (four-year) college degrees are ineligible.

Application Procedure: Applicants must complete the FAFSA which is also used to qualify for Federal Pell Grants.
North Carolina Education and Training Voucher Program (NCETV Program)
The NCETV Program is designed to help foster youth and former foster youth through college or vocational/technical training.

Eligibility: Applicants must meet these requirements
- Eligible for the NC LINKS program – you must have been in foster care as a teenager and a citizen or qualified non-citizen. Have no personal assets of more than $10,000
- Aged out of the foster care system at age 18 or were adopted from foster care with adoption finalization after your 16th birthday
- Must be 18, 19, or 20 year of age to enter the ETV program
- Accepted into or are enrolled in a degree, certificate or other accredited program at a college, university, technical or vocational school and show progress toward completing that degree or certificate.

Value: Recipients are eligible to receive up to $5,000 per school year to be used for tuition, books, and qualified living expenses.

Application Procedure: Scholarship applications are available online at http://www.statevoucher.org. Click on North Carolina, and on the left-hand side of the page you will see the link to the application form. Applicants must submit an essay between 250-500 words explaining their goals for furthering their education.

North Carolina Student Incentive Grant (SIG)
Legal residents of North Carolina who are enrolled full time and maintaining academic progress may be considered for the NCSIG. Students must demonstrate "substantial financial need." The NCSIG program is administered in North Carolina by the College Foundation, Inc. Recipients must
- be a US citizen
- be a North Carolina resident
- be enrolled or accepted for enrollment on a full-time basis at a North Carolina post-secondary institution
- not be enrolled in a program designed primarily for career preparation in a religious vocation
- maintain satisfactory academic progress.

Award is available to undergraduates who demonstrate “substantial financial need.”

The application procedures are 1) complete and file the FAFSA, 2) show on the form that North Carolina is his/her state of legal residence, and 3) list at least one North Carolina community college, university, technical or vocational school in the release section of the form. The deadline for completing the FAFSA to be considered for the NCSIG award is usually March 15 of each year.

North Carolina Less Than Half-Time Grant
The State Board allocated funds to colleges to provide need-based assistance to students enrolled less than half-time in certificate, diploma or associate degree programs. Students must complete the FAFSA and have an Expected Family Contribution (EFC)
from 801 through 4000. Qualified students enrolled less than half time shall be eligible for $30 per semester hour up to a maximum of $150.

**North Carolina Targeted Assistance Grant**
The State Board allocated funds for community college students who enroll in low-enrollment programs that prepare students for high-demand occupations. The amount of the actual award and the programs that are used is selected by the institution and will change yearly. A student must submit the FAFSA to be considered for the NCTAG. Recipients will be notified by the Financial Aid Office of their award and the amount in their award notification process.

**North Carolina National Guard Tuition Assistance Program (NCNGTAP)**
**Eligibility:** Recipients must
- Be an active member of the North Carolina Army or Air National Guard
- Remain a member of the National Guard for two years following the end of the academic period for which tuition assistance is provided
- Enroll in an eligible institution (public or private) located within the state of North Carolina
- Satisfactorily complete an eligible institution (public or private) located within the state of North Carolina
- Satisfactorily complete courses in which tuition assistance is provided.

**Value:** Subject to change yearly, based on availability of funds.

**Application Procedure:** A separate application must be completed for each semester the member will be attending. Application and information is available online from the student’s unit and then provided to the Veteran’s Coordinator 20 days prior to the start of the term.

**Scholarship/Loan Programs**
College Foundation of North Carolina, a service of the State of North Carolina provided by Pathways, CFI, and North Carolina State Educational Assistance Authority provides financial aid information through their web site at [http://www.cfnc.org/static/pdf/paying/pubs/pdf/FANC.pdf](http://www.cfnc.org/static/pdf/paying/pubs/pdf/FANC.pdf). Listed below are some of their offerings. Applicants are encouraged to visit the web site above for additional offerings.

**Dottie Martin Teachers’ Scholarship**
This annual scholarship is designed for any student who is studying education. Eligible participants can be considered for the scholarship after approval of their program by the Board of Directors of the Dottie Martin Teachers’ Scholarship fund. Preference will be given to those who are particularly interested in child guidance and counseling who want to make a difference in the lives of North Carolina’s children.

**Eligibility:** Applicants must
- Plan to teach in North Carolina once their education is completed
- Presently be in an education program with an established career plan for teaching (high school students or recent high school graduates are not eligible to apply)
• Fully complete a series of background history forms present in the application
• Provide a recent college transcript, three letters of recommendation, and a typed essay which includes: reason for applying, career goals, teaching plans, and reasons why the applicant should receive the Dottie Martin scholarship and the financial burden which they would incur without the scholarship.

Application Procedures: Email fglass@triad.rr.com or call 336-766-0067 for an application, or contact the financial aid office at the college you are attending. Applications must be mailed no later than June 1.

North Carolina Association of Certified Public Accountants (NCACPA)
The North Carolina Association of CPAs’ (NCACPA) charitable foundation, the NC CPA Foundation, Inc. annually awards accounting scholarships, ranging from $1,000 to $5,000, to deserving North Carolina accounting students. To find out more call 800-772-2836 or email chapter@ncacpa.org.

Eligibility: The award is available to deserving North Carolina accounting students who:
• Have a NC residence
• Enroll in a NC college or university
• Have completed at least one college or university level accounting course
• Have completed at least 36 semester hours (or equivalent) by the start of the spring semester of the year of application
• Enroll or are enrolled in an academic program leading to a degree in accounting or its equivalent, either currently or during the first semester following the awarding of the scholarship
• Are sponsored by two accounting faculty members who sign the application form
• Provide evidence of academic achievement with GPA (including accounting subjects and overall) of 3.0 or higher on 4.0 scale
• Submit typed essay on topic of “What role do CPAs play in society and should that role change, given events of the past few years?”

North Carolina Community College Foundation Endowment for Teacher Preparation
The GlaxoSmithKline Foundation, Inc., the North Carolina General Assembly and Bank of America have contributed more than $2 million toward the establishment of an endowment within the North Carolina Community College Foundation to support an expanded role for North Carolina’s community colleges in teacher preparation.
Eligibility and priorities: Preference in awarding grants to students who meet one or more of the following qualifications:
• Students who are “career changers” who have returned to school from other occupations or from home responsibilities.
• Students preparing to teach mathematics or science in middle or high school.
• Students enrolled in community colleges serving low-wealth counties, as designated by the North Carolina Department of Public Instruction (Burke, Caldwell, Lincoln and Wilkes are a few of these identified counties, for a complete list see Financial Aid).
• Students must have completed the FAFSA.
**Funding, Conditions and Requirements:** The Foundation will award grants once per academic year. The total award per recipient will be $2,500 per semester for up to two consecutive semesters of full-time study (a minimum of 12 hours per semester).

Receipt of second semester funds will be contingent upon satisfactory academic performance, with a minimum grade point average of 2.7 on a 4.0 scale, and progress toward the community college degree. Recipients may re-apply for a second year of funding.

Acceptance of the grants carries with it the following obligations:

- Recipient must complete all credentials and begin work as a teacher in a public or charter school in a low-wealth county in North Carolina within six years of the first grant award.
- Recipient must teach two full years for each full year of scholarship grants. The first two years of the obligation must be completed within eight years of the grant award. Any additional obligation must be completed within ten years.
- Recipient must attend, if invited, a meeting of the Foundation or other appropriate group to report on the impact of the scholarship grant on his or her experience in preparing to teach.
- Recipient must sign a promissory note for each award which will be forgiven when the teaching obligation is fulfilled. The terms of the note will provide for a payback as noted in paragraph 2.
- Recipients who are unable to meet these obligations will be required to repay the grant within ten years of the grant award.

**Application Process:** Applications will be made available through the Financial Aid Office once they are received from the North Carolina Community College System Office. They will be placed on the CCC&TI Financial Aid Scholarship Bulletin Boards and on the Financial Aid website. These are generally released late summer.

**North Carolina Hospitality Education Foundation**
The Hospitality Education Foundation of the North Carolina Restaurant Association provides scholarships for individuals pursuing educational programs in hospitality and tourism. Scholarships are awarded in four categories with two of these at the community college level.

For the high school students’ scholarship applicants:
- Must be high school seniors who plan to enroll or students already enrolled in a full-time undergraduate course of study at an accredited two-year or four-year college or university, or vocational-technical school in North Carolina
- Pursuing a course of study in culinary arts, hospitality management or tourism.
- North Carolina resident.

For the community college culinary students applicants must be:
- Students who are already enrolled in a full-time undergraduate course of study at an accredited two-year college or culinary program
- Pursuing a degree in culinary arts, hospitality management or tourism
- North Carolina resident.
North Carolina Student Loan Program for Health, Science, and Mathematics
The NC State Education Assistance Authority (NCSEAA) administers this program. The loan obligation may be forgiven through approved employment within the state of North Carolina provided the recipient works in the field for which he/she was funded. Associate Degree/Certificate Programs can receive $3,000 per year. Maximum loan amount is $6,000 for two years if unconditionally accepted into specific program discipline.

One calendar year of full-time employment in designated shortage areas is required for each school year a loan was received. Approved service areas include state facilities and educational systems, or designated healthcare and veterinary science disciplines. Should the student not complete the service obligation, cash repayment will be required. The in-school interest rate is 4%. The out-of-school interest rate ranges from 10% to 15%, depending upon the circumstances of repayment.

Who is eligible? To be considered for a loan, you must: 1) be a citizen of the US and a legal resident of North Carolina, 2) have attained unconditional acceptance or promotion in your respective field, and 3) must establish financial need. Eligible fields of study are Physical Therapist Assistant, Radiography, Nuclear Medicine Technologist, and Nursing.

All new applications and supporting materials must be submitted to the NCSEAA no later than June 1st for the upcoming academic year. Renewal applications must be completed prior to April 1 of the given year. Applications are made available at www.ncseaa.edu/. Click on Paying for College tab, then on Loan Programs then on Career Specific Loans.

North Carolina Veterans' Scholarships
Eligibility: Award is available to children (under age 25 at time of application) of certain deceased or disabled veterans or of veterans who were listed as POW/MIA. Veteran’s disabilities must have occurred during a period of war. Veteran must have been legal resident of North Carolina at time of entry into service, or child must have been born in North Carolina and resided there continuously.

Value: Full scholarships provide for four academic years of free tuition, room and board allowances, and mandatory fees at state-supported institutions. Limited scholarships provide free tuition and mandatory fees at public universities. Awards may be used for either undergraduate or graduate study.

Application Procedure: For information concerning this scholarship program, contact the Veterans Coordinator in the Financial Aid Office or your local Veteran’s Affairs Office or the North Carolina Division of Veterans Affairs, 919-733-3851. The division of Veterans Affairs notifies applicants of approval of benefits. Applications are due by March 1.

Nurse Education Scholarship Loan Program (NESLP)
The NESLP is designed to reduce the shortage of practicing nurses in North Carolina. Eligibility: NESLP awards are
Available through the financial aid offices of North Carolina colleges and universities that offer nurse education programs that prepare students for licensure in North Carolina as Licensed Practical Nurses (LPN's or RN's)

Based upon financial need and other factors such as academic performance

Applicants must be residents of North Carolina for tuition purposes.

Application Procedure: Contact the financial aid office for application information. Recipients once selected must sign a promissory note.

Repayment: Recipient enters into a contract with the State of North Carolina to work full-time as a licensed nurse in North Carolina. A minimum of six months consecutive full-time employment with one employer is required to qualify for service cancellation. Loans not repaid through service must be repaid in cash. The interest rate for cash repayment is 10% from the date of disbursement. Recipient has up to seven years to repay loans in service or ten years to repay loans in cash.

Nurse Scholars Program (NSP)
The NSP is a competitive, merit-based scholarship/loan program available to students who have chosen to enter the nursing profession. An 11-member Nurse Scholars Commission selects recipients for the award on the basis of superior academics, leadership potential, and desire to practice nursing on a full-time basis in North Carolina.

Eligibility: Applicants must

- Be NC residents for tuition purposes
- Plan to enter a nursing program at a North Carolina college, university, or hospital that offers nurse education programs which prepare students for licensure as Registered Nurses (RN's)
- Financial need is not a criterion.

Application Procedure: Applications may be obtained by visiting the following web-site http://www.ncseaa.edu/NSP.htm. You may also call 866-866-CFNC for information or check with the Financial Aid Office.

Prospective Teacher Scholarship/Loan (PTSL)
Eligibility requirements for new and renewal applicants at two-year qualifying campuses and deadlines will be posted at http://www.ncseaa.edu/PTSL.htm.

The Prospective Teacher Scholarship Loan is a competitive, merit-based scholarship-loan program available to students who have chosen to enter the education profession. A school official such as a high school counselor or principal must recommend students for this award. Recipients must have maintained a minimum unweighted cumulative grade point average of a 3.0 or better, received a score of 900 or better on the SAT or score of 19 or better on the ACT, enroll in a teacher preparation program at any of the eligible institutions, and plan to pursue a degree in teacher education to become a certified teacher and demonstrate a commitment to teach in the State's public schools.

Teacher Assistant Scholarship Loan (TASL) Two-Year Degree
The Teacher Assistant Scholarship/Loan (two-year) program provides funding to attend a North Carolina community college to receive an early childhood associate degree or a two-year degree in other skills of particular use to the state's public school system.
Eligibility: To be considered, applicant must: be a legal resident of North Carolina, have a minimum of one year’s experience as a teacher assistant, currently be employed as a full-time teacher assistant in an instructional area in a K-12 public school in North Carolina, have a cumulative GPA of 2.5, provide proof of being admitted to one of the approved programs at a North Carolina community college, complete 12 semester hours within a 12-month period while maintaining a 2.5 or better cumulative grade point average, and remain employed as a full-time teacher assistant in an instructional area while pursuing a two-year degree.

Scholarships/loans are in an amount of up to $3,500 per year for those seeking licensure and $1,200 per year for those not seeking licensure. The maximum a recipient may receive toward earning licensure is $14,000. The number of awards made per year is dependent upon state funding.

Application procedures: General information, eligibility requirements for new and renewal applicants at two-year and four-year qualifying campuses, application deadlines and applications for the consolidated TASF program will be posted at http://www.ncseaa.edu/pdf/TASF_FAQs.pdf in December of each year.
Scholarships

Crumley and Associates – Crib to College Scholarship
Crumley and Associates is a law firm with 10 offices in North Carolina. The Crib to College Scholarship will provide financial assistance and laptop computers to five outstanding North Carolina high school seniors who will enroll at accredited colleges or universities.

Eligibility: To be considered, a candidate must
• Have a cumulative grade point average of 3.5 or better
• Be a graduating senior at a North Carolina high school
• Enroll at an accredited two-year community college or four-year university next fall.

Value: Five $1,000 scholarships will be awarded. Each of the five scholars will also receive a laptop computer.

Application procedures: The application will be available January 1, and the application deadline is March 15. The application is available only on the company website and must be completed online. Transcripts must be mailed by the school and postmarked no later than March 15 to be considered. Contact: Stephen Keaney at smkeaney@crumleyandassociates.com for more information. Scholarship recipients will be announced and notified by mail by May 1. Related Internet links: http://www.crumleyroberts.com/community/scholarship-programs/

GlaxoSmithKline Opportunity Scholarship
This program offers Triangle residents who have overcome significant adversity the opportunity to improve their lives through further education or training.

Eligibility: Applicant must
• Have been a permanent resident of Durham, Orange or Wake County for a minimum of one year
• Be a US citizen and/or legal resident of the US
• Demonstrate the potential to succeed despite adversity
• Have an exceptional desire to improve himself/herself through further education or training

There are no limitations on age, income level, previous education, course of study or training program the applicant is planning to pursue. The scholarship may be used to begin a program or continue a program in which the applicant is already enrolled. It may be used for state universities in North Carolina or community colleges. GlaxoSmithKline Inc. and Triangle Community Foundation employees and their family members are not eligible.

Value: Up to $5,000 per year for a maximum of four years.

Application Procedure: Applications may be obtained online at http://trianglecf.org/award/gsk-opportunity-scholarship/ or by contacting Linda Depo at the
Triangle Community Foundation, PO Box 12834, Research Triangle Park, NC 27709, 919-474-8370, email: Linda@trianglecf.org. All application materials must be postmarked on or before March 15. A selection committee of community leaders determines recipients.

Golden LEAF Scholarship
Provides grants up to $700 per semester, including summer session for curriculum students and up to $200 per semester for occupational education students to be applied toward their tuition, registration fees, and related expenses at the community colleges where they are enrolled. Scholarships will be need and merit based on a first-come, first-served basis. Eligible recipients can choose to attend any of the 58 member institutions of the North Carolina Community College System.

Eligibility and application procedures can be found at www.cfnc.org/goldenleaf. The Financial Aid Office will advertise the availability of applications on the CCC&TI Financial Aid website and on the scholarship bulletin boards located on campus.

Golden LEAF Transfer Scholarship
Designed to assist current high school seniors, current NC community college students and students currently enrolled at public North Carolina four-year universities.

Eligibility
To be considered for this award, a student must:
• Enroll at any participating North Carolina public university as a full-time degree-seeking undergraduate student.
• Be an incoming freshman, an incoming transfer student from a North Carolina community college.
• Be a permanent resident of a qualifying rural county that is economically distressed and/or tobacco dependent. Note: this requirement does not apply to current recipients of the Golden LEAF Scholarship at public universities applying for grant renewal.
• Demonstrate financial need.
• Students who have earned four-year (bachelors) degrees are not eligible for consideration

Application Procedures: Applications may be submitted online at www.cfnc.org/goldenleaf by March 15.

Ray Jefferies Scholarship
One scholarship valued at $1000 will be issued jointly to the recipient and to the college.

Eligibility: To qualify as a candidate for the Ray Jefferies Scholarship, a student must meet the following criteria:
• Be elected the president of the North Carolina Comprehensive Student Government Association (N4CSGA) for the academic school year.
• Have the SGA Advisor and/or Dean of Students submits a written statement verifying their position to the appointed N4CSGA Trustee.
This scholarship is awarded annually to the president of the NC Comprehensive Community College Student Government Association (N4CSGA) who has demonstrated outstanding leadership skills. This scholarship is awarded without regard to race, sex, color, creed, religion, age, national origin or disability. Recipient is encouraged to write a letter of appreciation to the sponsor.

Latino Diamante Scholarship
Diamante, Inc. is a statewide non-profit organization, working to be a catalyst for change by nourishing cultural and community participation among Hispanics in North Carolina. Diamante offers scholarships to high school seniors recognizing contributions to the community, leadership qualities, and the achievements of Hispanic youth in North Carolina.

**Eligibility:** The award is available to students who will be college freshmen or sophomores who
- Plan to enroll at North Carolina institutions of higher education
- Provide a recommendation from a high school principal, a college counselor or a community leader
- Present a certified copy of school transcripts with a minimum C+ or 2.5 grade point average
- Submit an essay

**Value:** Two scholarships valued at a minimum of $500 each will be awarded for the academic year. Funds will be used for tuition and educational expenses.

**Application Procedures:** The application and program details may be obtained by contacting Diamante, Inc., 106 Lochwood East Drive, Cary, NC 27518; 919-852-0075; scholarships@diamanteinc.org. Information is also available at http://www.cfnc.org/Gateway?command=GetFAQProgramDetail&id=140. The application deadline is August 15, with selected applicants notified by September 15.

North Carolina AmeriCorps
The Americorps Program offers full and part-time opportunities for participants to provide service to their community. Monthly stipends and educational vouchers are available to full and part-time members who successfully complete their terms of service (10 months to one year) in a one-year program.

**Eligibility:** Eligible candidates must
- Be U.S. citizens, U.S. nationals or lawful permanent resident aliens of the United States.
- Be 17 years of age or older
- Have a high school diploma or a G.E.D. or obtain one while serving
- People with disabilities are strongly encouraged to apply.

**Value:** Upon completing 1700 hours of service in one year, members receive educational vouchers worth $4,725 for full-time service and $2,362 for 900 hours of less than full-time service, and $1,000 for 300 hours in an education award only position. The vouchers can be used to help pay off student loans, or to finance college, graduate
school, or vocational training. In addition, the living stipend for members during the year they provide service is $10,900-$21,800 for full-time participants, and up to $10,900 for less than full-time participants.

Application Procedure: For more information about the AmeriCorps Program, contact Alicia Hartsfield, Americorps Senior Program Office, Mail Service 03121, Mail Service Center, Raleigh, NC 27699-0312; e-mail Alicia.hartsfield@ncmail.net. You may also call or visit the web the North Carolina Commission on Volunteerism and Community Service at http://www.volunteernc.org, 919-715-3470 or 800-820-4483.

North Carolina Bar Association Foundation Scholarship (NBCBA)
Eligibility: Applicant must
• Be the natural or adopted child of a NC law enforcement officer who was killed or permanently disabled in the line of duty
• Apply prior reaching his or her 27th birthday
• Be enrolled or accepted for admission in a college, vocational training school or other educational institution approved by the scholarship committee of the young Lawyers Division of the NC Bar Association
• Demonstrate financial need or and merit

Value: Funding varies in amount each year depending upon availability.

Application Procedure: Applications may be obtained by writing, The NC Bar Association Scholarship, PO Box 3688, Cary, NC 27519; 800-668-7407. The applications are available beginning in December. The deadline is April 1 each year. For more information, visit the website at http://www.ncbar.org or email Jacquelyn Terrell-Foundation.jterrell@ncbar.org.

North Carolina 4-H Youth Development Scholarships
Eligibility: Applicant must
• Be a resident of North Carolina for tuition purposes
• Enroll as an undergraduate in a four-year accredited North Carolina community college
• Have an outstanding record of 4-H Youth Development Program participation and achievement
• Possess an excellent high school academic record
• Demonstrate an aptitude for college work through SAT scores

For some of the awards, financial need is a prerequisite. Some awards have geographic restrictions to regions of the state, while others are specific to a degree program or to a designated college or university.

Value: Scholarship amounts begin at $500. Some scholarships are renewable.

Application Procedure: Applications are available in the fall through each county cooperative extension office (local 4-H officials) in North Carolina by calling Shannon McCollum, Extension 4-H Associate at 919-515-8486.
North Carolina Hispanic College Fund (NCHCF)
The NCHCF is a charitable fund established by the NC Society of Hispanic Professionals to benefit Hispanic students in North Carolina. Applicants must enroll in a degree program at a community college or a four year university, and must be committed to public service and community development.

Eligibility: Applicants must
- Be accepted to a two or four-year college or university
- Be of Hispanic/Latino background and have graduated from an NC high school within the past two years
- Have a four-year (high school) cumulative GPA of 2.5 or better on a 4.0 scale (3.5 on a 5.0 scale)
- Preference will be given to foreign-born applicants or the native-born children of foreign-born parents. Preference will be given to students who enroll full-time; however, part-time students are encouraged to apply.

Value: the NCHCF awards annual scholarships valued between $500 and $2,500. Scholarship recipients may reapply for renewal for up to four years. The number of scholarships awarded varies from year to year. Scholarships will be designated for tuition, fees, and room and board.

Application Procedures: Application packets are available year-round. They can be obtained by emailing or calling the NC Society of Hispanic Professionals at: mailbox@theNCHSP.org or 919-654-4516. Applications are available online at http://thencshp.org/programs/nc-hispanic-college-fund/

North Carolina Needs Based Nursing and Teaching Scholarship (NCNTS)
The NCNTS is to increase educational opportunities for students who wish to become nurses and teachers. Annual scholarship amounts range from $1425 for part-time student to $1,900 for full-time students.

Eligibility Criteria:
- Each student must complete the FAFSA
- Each student must be enrolled for a minimum of six credit hours
- Nursing students must be enrolled in a Diploma or Associate Degree Program
- Teacher Education students must be enrolled in a College Transfer Program
- Each student must maintain satisfactory progress as determined by the college
- Each student must have at least a 2.5 GPA to be awarded the scholarship

Application Procedures: Each college will develop their own scholarship applications and will select students from a pool of qualified applicants. Two recipients will be selected each academic year.

Application information may be obtained in the Financial Office.

North Carolina Veterans Scholarship
Award is available to children of certain deceased or disabled veterans or those listed as POW/MIA. Veteran must have been a legal resident of North Carolina at time of entry.
into service, or child must have been born in North Carolina and resided there continuously.

Full scholarships provide for four academic years of free tuition, room, and board allowances and mandatory fees at state-supported institutions. Limited scholarships provide free tuition and mandatory fees. Awards may be used for either undergraduate or graduate study.

For information concerning this scholarship program, contact the North Carolina Division of Veterans Affairs, 325 N. Salisbury Street, Raleigh, NC 27603, (919) 733-3851. The Division of Veterans Affairs notifies applicants of approval of benefits.

State Employees Association of North Carolina (SEANC) Scholarships (Merit-Based)
First established in 1974, the SEANC Scholarship Program provides endowments to SEANC members, their spouses, and their children to attend technical schools, community colleges, trade schools, junior colleges, or four-year universities on a full-time basis. SEANC also offers a need-based scholarship for state employees and their families.

Two merit-based categories of scholarships are available:
- Based on academic merit and character of the applicant. Financial need is not a consideration. This scholarship is available to SEANC members, their spouses, and their children.
- Reserved for SEANC members only (not spouses or dependents), who are full-time state employees enrolled in a minimum of six semester hours of undergraduate work or 3 semester hours of graduate work at an accredited post-secondary institution.

Value: Awards are $500 for community colleges. The scholarships are nonrenewable, but previous recipients may reapply for funding.

Application Procedure: Scholarship applications are available on request from an applicant’s local SEANC representatives after the first of December each year. A printable scholarship application can be found on SEANC’s website. The application period begins in January and closes on April 15. Applications must be submitted to the appropriate scholarship chairman in a member’s local district prior to the deadline. Visit the website http://www.seanc.org and click “Member Benefits” for more information.

State Employees Association of North Carolina (SEANC) Scholarships (Need-Based)
First established in 1974, the SEANC Scholarship Program provides endowments to SEANC members, their spouses, and their children to attend technical schools, community colleges, trade schools, junior colleges, or four-year universities on a full-time basis.
Eligibility: This award is available to SEANC members, their spouses, and their children, and is based on academic merit and the financial need of the applicant. Value: Awards are $500 for community colleges and SEANC members with full-time jobs. The scholarships are nonrenewable, but previous recipients may reapply for funding.

Application Procedure: Scholarship applications are available on request from an applicant’s local SEANC representatives after the first of December each year, with the application period beginning in January and closing on April 15. A printable scholarship application can be found on SEANC’s website. Applications must be submitted be submitted to the appropriate scholarship chairperson in a member’s local district prior to the deadline. Visit the website http://www.seanc.org and click “Benefits” for more information.

State Employees’ Credit Union Foundation Scholarships
“People Helping People” Scholarship Program for Community College Students
The “People Helping People” Scholarship Program was established in 2004 by the State Employees’ Credit Union Foundation. The scholarships were awarded for the first time in the fall of 2005 to students attending North Carolina community colleges. Each of the state’s 58 community colleges will offer two (2) scholarships.

Eligibility: A candidate must
• Be an applicant or full-time student who is a high school graduate or has completed the G.E.D. program, enrolled in an associate degree, diploma or certificate program
• Be a U.S. citizen and a resident of North Carolina eligible for in-state tuition
• Demonstrate financial need using the FAFSA
• Demonstrate scholastic achievement and maintain a 2.5 or higher grade point average on a 4.0 scale or must attain a score of 3,000 on the GED test
• Use the scholarship to pay tuition, books, fees, course supplies and transportation
• Agree to continue at the community college where enrolled at the time of the scholarship award for the duration of the scholarship, for four consecutive semesters or until completing a diploma program
• Not be a Director, employee or family member of an employee of the State Employee’s Credit Union or the SECU Foundation

The decision of the Scholarship Selection Committee will be final.

Value: Each “People Helping People” Scholarship for community college students is valued at $5,000 ($1,250 per semester for up to 4 consecutive semesters of study at a qualifying campus).

Application Procedure: Recipients of the scholarships will be selected by their community colleges. Application details and other information will be available through the financial aid offices by the end of July.
Wachovia Technical Scholarship
The recipients of the scholarships will be selected each year from applicants meeting the established criteria at local community colleges. Colleges may not submit alternate recipients for the Wachovia scholarship in the spring semester after March 1.

Eligibility: Recipient must
- Be enrolled full-time in a second year of a two-year educational/technical program
- Demonstrate financial need and scholastic promise
- Use the scholarship to pay for tuition, books, and transportation

Value: One scholarship per college valued at $500 each. These scholarships are distributed among the 58 colleges in the community college system, and are distributed in two payments: $250 for fall semester and $250 for spring semester.

Application Procedure: Each college shall establish a special committee to select scholarship recipients.

Youth Development Centers Scholarships
The purpose of the Youth Development Centers Scholarship program shall be to recognize the graduation or GED completion of students who earned their high school credential while committed to a Youth Development Center (YDC) of the North Carolina Department of Juvenile Justice and Delinquency Prevention. Recipients of the scholarships must have completed their commitment to the YDC and be enrolled in curriculum or occupational extension programs of a member institution in the North Carolina Community College System. Students enrolled in curriculum programs may be awarded one-year scholarships of up to two thousand dollars per year ($1000 per semester) for 12 semester hours or more, not to exceed actual costs and subject to availability of funds. Enrollments for less than 12 semester hours shall be prorated. Funds may be used for tuition, books, college assessed fees, and student insurance and course related supplies. Students enrolled in occupational extension courses and/or Human Resources Development programs may be awarded registration fees, textbook costs and course supplies up to $500 per semester and not to exceed actual costs. These scholarships are handled as a 3rd party billing; therefore, the certification forms are sent directly to the college business office. The YDC scholarship is limited to students who are referred through the Department of Juvenile Justice and Delinquency Prevention (DJJDP).

Qualifying students can obtain application forms from DJJDP Education Services – Address: 1801 Mail Service Center, Raleigh, NC 27699-1801 or phone Michael Haley at (919) 733-3388 ext. 349 or e-mail: Michael.Haley@ncmail.net.

Locally Supported Scholarships
CCC&TI has numerous types of scholarships listed below. Applications are available online and in the Financial Aid Office. Some of the scholarships listed below are need-based and require the FAFSA be completed by May 1 each year.
Non Need-Based Scholarships

Bill and Vivian Armfield Scholarship
This fund was established by David and Amy Clark to honor the Armfield’s contributions to CCC&CTI. The recipient must be a Caldwell County resident interested in pursuing a career in elementary education through the college transfer program. Applications are available through the high school counselors’ office at any of the three Caldwell County local high schools.

Kenny Beane Scholarship
Established in 1998 by friends and family of Kenny Beane. The purpose of this scholarship is to assist students enrolled in a vocational certificate or diploma program. Applications are available in the Industrial/Transportation Department.

Donna and Robert Belk Scholarship
Established in 2003 in memory of Donna Belk’s mother, Mrs. Charles Below and her aunts, Hilda Smith and Mildred Bell. To honor their years in education, the scholarship will be presented to a second year or transfer student with financial need who is enrolled in a Pre-Teaching or Health Sciences program. See Financial Aid Office for application.

G. Lewis Bernhardt Scholarship
Established in 2003 from the estate of Mr. G. Lewis “Bub” Bernhardt. This scholarship provides financial assistance to TRIO/ETS students to enhance the ability of the student to continue his/her education. TRIO/ETS students are encouraged to speak with their TRIO/ETS counselor for application information.

Boone Area Lions Club Scholarship
Established in 2006 to provide a scholarship for a Watauga County student who is visually impaired or has a visually impaired family member. See Financial Aid for application process.

J.E. Broyhill Fund (Gateway Scholarship)
This scholarship is for tuition for students enrolled at CCC&CTI who have completed at least one semester at Gateway High School and graduated from high school. Application information available at Gateway School.

John A. Forlines, Jr. Educational Scholarship
Established in 2003 by friends and family of John A. Forlines, Jr. in honor of his many contributions and years of service to the college. Forlines was a founding trustee and served as the first chairman of the Board of Trustees. He served in that capacity for 19 years and currently serves on the Foundation Board of Directors. His support and strong belief in education will provide financial assistance to many needy students. See Financial Aid for application process.

Riley Thomas Greer Scholarship
Established from the estate of William White, Jr. in memory of his grandfather, Riley
Thomas Greer. This fund will provide a merit scholarship to a deserving student who exhibits academic promise and is preferably enrolled, or plans to enroll, in a program leading to a degree in the sciences. Student must be in the top 20% of class based on grades and/or test scores. See Financial Aid for application process.

Hammary Furniture Company Sam Reid Scholarship
Established by Hammary to honor Sam Reid, a fifty-year employee, this scholarship is available to current Hammary employees, their spouses, and direct descendants, as well as to Mr. Reid’s grandchildren. Applications are available in the Financial Aid Office or from the Personnel Office at Hammary Furniture Company.

Industrial/Transportation Scholarship
Established May 24, 1994 and endowed April 2000. Scholarships will be awarded to full-time and/or part-time students on the basis of achievement or financial need. A student must be beginning or continuing study in a technical field that is assigned to the Industrial/Transportation Department. Applications are available in the Industrial/Transportation Office or the Financial Aid Office.

Don Jensen Habilitation Scholarship
Established in 2002 by Tom Brittain to honor Don Jensen for his dedication to improving the lives of disabled citizens. This scholarship provides assistance to deserving students enrolled in any habilitation program with preference given to students enrolled in a coop program or working in a habilitation facility. See Financial Aid for application process.

J. Wade and Mary Sue Kincaid Memorial Scholarship
Established December 2000 by Steve and Kim Kincaid in memory of J. Wade Kincaid. Scholarships will be awarded to students enrolled at CCC&TI (curriculum or non-curriculum) who are current Kincaid Furniture Company employees with over one year of service, spouses of eligible employees, retirees, or direct descendants of eligible employees or retirees. Applications are available in the Financial Aid Office, Corporate and Continuing Education, and at Kincaid Furniture Company in the Human Resources Office.

McAfee Scholars Award
Established during the 1986-87 school year as a memorial to the late Charles McAfee, longtime college business instructor, this award will be given to a graduating senior from a local high school for use in a business-oriented program of study at CCC&TI. See Financial Aid for application process.

Music Scholarship
The Music Scholarship was established in 1983 to grant scholarships to worthy music students. Talent and academics are foremost considerations. Full or part-time students are to be considered. Applications are available in the Financial Aid Office. Selection will be made by the Director of the Music Programs.
Jerry and Gail Orr Scholarship  
Established in 2006 by Jerry and Gail Orr. The scholarship will provide tuition for a student pursuing a degree in a science-related field. See Financial Aid for application process.

W. Michael Pearson Scholars Award  
Established in May 2000 by Marjorie H. Pearson in memory of W. Michael Pearson. This is designated for a yearly $1,000 merit scholarship for each of the three high schools in Caldwell County to attend CCC&TI. See Financial Aid for application process.

Presidential Scholars Award  
Established in 2001 by the CCC&TI Foundation. This scholarship is to promote and to recognize outstanding academic achievement among students at Caldwell and Watauga high schools. See Financial Aid for application process.

Thad and Reva Tunmire Truck Driving Scholarship  
Established January 2000 in honor of Thad and Reva Tunmire, the scholarship is awarded to students enrolled in the Truck Driving Program at CCC&TI. Applications are available in the Industrial/ Transportation Office or the Financial Aid Office.

TRIO/SSS Alumni Scholarship  
The scholarship was established in 2005 by the TRIO Alumni Group. Any TRIO/SSS student may apply. See the TRIO/SSS staff for application information.

Watauga Nursing Scholarship  
Created through a fund-raising drive in 1990, this fund is to be used for a Watauga County resident who is accepted in the nursing program. Applications are available in the Financial Aid Office.

James Douglas Weiller Scholarship  
Established December 2000 by Barbara and Don Weiller and Mia Weiller in memory of James Douglas Weiller. This is designated for a yearly scholarship based on need as determined by the scholarship committee for non-traditional students (25 years old and older) enrolled in the Truck Driver Training Certificate Program at CCC&TI. Applications are available in the Industrial/ Transportation Office or the Financial Aid Office.

Boyd C. Wilson Family Scholarship  
Established in 2005 as a memorial to Boyd C. Wilson Sr. by his family. The scholarship will provide funds for a Caldwell County resident who plans to transfer to a 4-year university to obtain a teaching degree after completing training at CCC&TI. See Financial Aid for application process.

Scholarships Selected by Scholarship Committee  
Applications are available in the Financial Aid Office and on the website. Application deadline for these is April 1 each year.
Julia Alexander Memorial Scholarship
Established in 1981, this award is designated for a student in an office-related technology program who maintains a GPA of 2.5. This fund honors a past president of the college’s NCAEOP chapter. Selections will be done by NCAEOP.

The Arts and Sciences Faculty Scholarship
The scholarship is awarded annually to a college transfer student to honor retired arts and sciences faculty. If awarded to a math student, it will honor Lloyd Coffey; if a history student, it will honor Ray Huckabee. Selections done by Scholarship Committee.

Wilson and Ola Brown Scholarship
Given in 1997 by Gilma Roberts in honor of her parents, the recipient must be a full-time student enrolled in the college transfer program, a first-generation college student. Selections done by Scholarship Committee.

Business Club Scholarship
The Business Club of CCC&TI established this fund in 1989. An annual award is presented to a student enrolled in a business curriculum. Selections done by the Business Club.

Vester Corpening Scholarship
Established in 1980 by the Ebony Kinship Club, this memorial fund will aid needy students from Caldwell County. Selections done by Ebony Kinship.

M. L. DeVane Scholarship
The Ebony Kinship Club of CCC&TI established this fund in 1975 to aid a student enrolled full-time at this institution. Selections done by Ebony Kinship.

Ebony Kinship Scholarship
Selections done by Ebony Kinship.

First Generation Scholarship
Established in 1984 by the board of trustees of CCC&TI, this fund provides assistance to students who represent the first generation of their families to attend college. Selections done by Financial Aid Office.

Frazier Literature Scholarship
This scholarship was given in memory of Mr. and Mrs. John Alexander Frazier. It is awarded to academically successful students who are pursuing English degrees. Selections done by the College Transfer Faculty Committee.

Rufus C. Gwyn Memorial Scholarship Fund
To honor Rufus C. Gwyn, a former instructor of data processing, the faculty awards a scholarship each year to a student who is graduating from CCC&TI and whose intentions are to further his/her education. Selections done by Scholarship Committee.
Helen J. Hatley Achievement Award
The CCC&TI Board of Trustees established this fund in 1984 to honor Helen Hatley, Controller Emeritus. The award is presented at graduation each year to a student who has completed one half of the required hours in a specific technical or college transfer curriculum. Selections done by Scholarship Committee.

Jimmy Hemphill Scholarship
This scholarship was established in August 1998 by friends, family and colleagues to honor Jimmy Hemphill, former executive vice-president, upon his retirement from CCC&TI. Selections done by Scholarship Committee.

Beverly Holt Scholarship
This scholarship was established in 2003 and endowed in 2007 by friends and family of Beverly Holt in her memory. The scholarship is awarded to a cardiovascular sonography student with financial need. Selections done by Scholarship Committee.

Claudia S. Kincaid Achievement Award
The friends and coworkers of the late Claudia Kincaid, Dean Emeritus, Student Development of CCC&TI, established this fund in 1983. The award is presented at graduation each year to a student who has completed one half of the required hours in a specific curriculum with a cumulative GPA of 3.50 or better. Selections done by Scholarship Committee.

Elizabeth M. Miller Scholarship
Established November 2001 by Dr. and Mrs. Kenneth K. Humphreys in memory of Mrs. Humphreys’ mother, Elizabeth M. Miller. This scholarship is available by faculty nomination for a deserving second year, fulltime, female student who has at least a “B” average for the first year of college. Selections done by Scholarship Committee.

Samuel William Orlando Scholarship
Established in 2003 as a memorial to Sam Orlando, an instructor at the Watauga campus of CCC&TI, by his friends and family. The recipient must attend the Watauga Campus of CCC&TI and must have taken, or plan to take, at least two religion courses; however, no specific major is required. Selections done by Scholarship Committee.

Eunice Query Scholarship
Established in July of 1995. An endowed perpetual scholarship to honor Ms. Eunice Query, this scholarship will be awarded to a student after the completion of two academic semesters. Selections done by Scholarship Committee.

Query-Hickman Scholarship
Established in 1993 to honor William Hunter Query and Lucille Query Hickman, this scholarship will be awarded to a student after the completion of two academic semesters. Selections done by Scholarship Committee.
Gilma Roberts Scholarship
Established in 2008 in memory of Gilma Roberts, CCC&TI retiree, by her family and friends. This fund will provide a scholarship to a deserving full-time student who has earned a 3.0 GPA or higher in college course work. Selections done by scholarship committee.

Dan and Ila Stallings Scholarship
This fund was established by Dr. Stallings' wife and children to honor his years of service to CCC&TI and his many contributions to education. An annual scholarship is awarded to a second year student with financial need, who is enrolled in the Fine Arts program. Selections done by Scholarship Committee.

Dent and Louise Sullivan Scholarship
Established in 2003 to provide a scholarship to a deserving 2nd year fulltime student working toward an accounting degree with plans to transfer to a four-year institution. Selections done by Scholarship Committee.

Scholarships Awarded By Financial Need
Robert and Patricia Annas Endowed Scholarship
Established by Robert Annas in memory of his parents. The fund is restricted to individuals who are seeking educational retraining as a result of losing their job from plant shutdown, layoffs, etc.

Blackwelder Foundation Memorial Scholarship
The Blackwelder Foundation established this scholarship in 1986 as a memorial to Dr. Blackwelder.
Additional criteria:
• Caldwell County resident
• Nursing or medical field

Margaret (Peg) MacQueen Broyhill Endowed Scholarship
The Foundation Board of CCC&TI established an endowed scholarship in honor of Peg Broyhill in 2008 in recognition of her long-term service to the Foundation, the college and its students. The scholarship will assist Caldwell County students who have unmet financial need.

Caldwell County Medical Society Student Aid Fund
In 1984, the Caldwell County Medical Society established this scholarship for students in health-related programs.
Additional criteria:
• Health-related program

Barbara L. Clark Scholarship
Established in 2006 as a memorial to Barbara Clark by her family and friends. The scholarship will provide funds to a mature female who is working full-time and attending college part-time. Preference will be given to a mature female who is enrolled in college courses that will lead to a better job.
Coffey Foundation Scholarship
The Coffey Foundation established this scholarship fund in 1978 as a memorial to Mr. Harold Coffey.
Additional criteria:
• Caldwell and contiguous counties resident
• Preference given to nursing and other medical program students

Meriden and Hazel French Scholarship
Established in 2008 through a gift of the estate of Meriden and Hazel French. This scholarship will assist any and all persons needing financial assistance to continue their education.

T. C. and Annie High Scholarship
Established by the family of T. C. and Annie High.
Additional criteria:
• Student from the southern part of Caldwell County

The Knights of Pythias, Caldwell Lodge 78, Scholarship
Established in 1992 by the Knights of Pythias with a gift of $50,000
Additional criteria:
• Students from Caldwell County

Emory C. McCall Scholarship
Friends of the late Emory C. McCall established this memorial scholarship as a perpetual fund in 1976.

Gladys and Glenn Miller Memorial Scholarship
Established in 1997 as a memorial to Gladys and Glenn Miller by their daughter, Dr. Susan Maynard.

Myron L. Moore, Jr. Scholarship
The Lenoir Mirror Company established this fund in 1983 to assist needy students.

Carl B. and Olene B. Prestwood Scholarship
The family and friends of Carl and Olene Prestwood established this scholarship in their memory to assist deserving students.

Orville B. and Grace C. Peterson Memorial Scholarship
This scholarship was established in 2003 through a gift from the estate of O. B. and Grace Peterson.

Thomas M. Robbins Nursing Scholarship
Established in 1998
Additional criteria:
• Nursing students
Cade Shaver Memorial Scholarship
Established in 1980 by the Cade Shaver Sunday School Class of the First Baptist Church, Hudson, NC. This scholarship is to be awarded to a student with financial need who is majoring in religion, teaching or human services.

Mrs. D.L. Snyder Scholarship
Established in 1997 by the family of Mrs. Snyder on the occasion of her 95th birthday. Recipient must be enrolled in an allied health program and have a 3.0 GPA on a minimum 12 semester hours.

June Wendelborg Scholarship
Established by June Wendelborg in 2002 to provide a scholarship to a deserving student with documented financial need. Student must be a Caldwell County resident who is enrolled full-time.

Hugh and Martha Wilson Family Scholarship
Established in 1997 to honor Hugh and Martha Wilson by their children. Additional criteria:
• Residents of Caldwell County

Other Sources of Financial Assistance

CCC&TI receives additional financial assistance for our students that are designated for specific divisions of the institution or are not actually classified as scholarships. Listed below, by division, are some of the many other sources provided to assist our students. For additional information please contact the appropriate division.

Adult, Corporate & Continuing Education
Bank of Granite Literacy Fund
Literacy students who have special needs.

Dr. H.E. Beam Scholarship
Established October 2000 in honor of Dr. H. Edwin Beam by friends, family and colleagues.

The scholarship is for tuition, fees and/or instructional supplies for non-curriculum students in programs of study exceeding 90 contact hours leading to specific employment opportunities.

CCC&TI Foundation Incentive Scholarship
Award certificates will be sent to students shortly after they complete either their GED and/or Adult High School Diploma. Funds will be used to assist these graduates with their continuing education.

Nurse Aide I-II Scholarships
Based on need, these scholarships cover the cost of tuition, books and supplies for
students enrolled in the Nurse Aide I or II program of study. Payment is authorized by the Vice President of Adult, Corporate and Continuing Education.

Career Center
Barton and Estoy Hayes Scholarship
An incentive scholarship for Career Center students to continue their education at CCC&TI.

Emergency Assistance Funds
(Available for all students)
These funds are contingent upon funding availability.

David Pittman Emergency Assistance Fund
Established by friends and family of Dr. David Pittman, former CCC&TI faculty member and administrator, this fund is used to aid Watauga campus students facing emergency situations. Assistance is limited to $40 in any academic year and may be returned as a gift to the fund at anytime. Any faculty or staff member may initiate action for a student once they have determined there is a true emergency situation. Once that has been determined the faculty or staff member must give the student a note indicating the need and send it with the student to the Financial Aid Office on the Watauga Campus.

Gilma Brown Roberts Emergency Assistance Fund
This fund was established in 1982 by the institution’s staff and faculty to aid students facing critical emergency situations. Assistance is limited to $40 in any academic year and may be returned as a gift to the fund at anytime. Any faculty or staff member may initiate action for a student once they have determined there is a true emergency situation. Once that has been determined the faculty or staff member must give the student a note indicating the need and send it with the student to the Financial Aid Office on the Hudson Campus.

Federal Programs for Veterans & Dependents
Other than the scholarship and loan programs for veterans and/or their dependents there are additional programs available to assist with educational expenses. They are as follows:
1) Montgomery GI Bill – Active Duty (MCGIB/Chapter 30)
2) Post 9/11 GI Bill – Must have active duty after 9/11/2001. (Chapter 33)
3) Montgomery GI Bill – Selected Reserve (MCGIB/Chapter 1606)
4) Reserve Education Assistance Program (REAP/Chapter 1607)
5) Restored Entitlement Program for Survivors (REPS/Section 156)
6) Selected Reserve/National Guard Student Loan Repayment Program
7) Survivors’ and Dependents’ Educational Assistance Program (DEA/Chapter 35)
8) Tuition Assistance “Top Up” Program
9) Veterans Educational Assistance Program (VEAP/Chapter 32)
10) Vocational Rehabilitation for Veterans with Service Connected Disabilities/Chapter 31
11) Work Study Program

For more information regarding these programs please see the Veterans Coordinator in the Financial Aid Office or contact the local Veteran’s Affairs Office.

Child Care Services

Caldwell Community College and Technical Institute offers funding to assist students with child care expenses. Funding for these services is received through federal and state grants. Additional funding is received through the CCC&TI Foundation providing the largest contribution. Students who are interested in applying for child care assistance must submit the Free Application For Federal Student Aid (FAFSA) and request a child care application packet from the Financial Aid Office on both campuses. Funding of these services is contingent upon continued funding from all sources.
Services for Students

Counseling and Advising Services

CCC&TI provides either directly, or through collaboration and referral, a variety of academic and employment services, as well as both career counseling and brief personal counseling and referral. Services within the Counseling and Advisement department are designed to promote student learning and reduce barriers to attaining personal, academic, and career goals. Service areas include career and personal counseling and referral, academic advisement, and transition advisement for high school populations.

Counselors are available on the Caldwell and Watauga campuses, both day and evening, to provide confidential assessment, personal counseling, and information and referral services. Although an appointment is preferred, walk-ins are welcome as staffing permits. Referrals to private counseling or mental health providers may be made for students in need of extended counseling services beyond the brief counseling services offered by the college’s professional counselors. The CCC&TI Foundation provides funds to help pay for a portion of those services delivered by a private provider. Students in urgent need of counseling services at a time when no college counselor is available may contact an on-call mental health professional toll free through Smoky Mountain Center for Mental Health at 1-800-849-6127. In cases of risk of injury or psychiatric emergency students should contact 911.

Additional personal, career, and employee development activities are offered throughout the year in the form of workshops and support groups. Career assessment and counseling services are provided both by individual appointment or weekly career development workshops as needed. Students seeking employment assistance are encouraged to register with the CCC&TI Jobs Network by accessing the link from the college web site, as an additional tool beyond the individual assistance offered by the employment counselor on campus. Students may also utilize resource links from the Counseling and Advisement Services pages on the college website.

Academic Advising Center

The main purpose of the Academic Advising Center (AAC) is to provide academic advising for college transfer students in the Associate in Arts and the Associate in Science programs. In addition to academic advisement, services provided include:

- Placement test score interpretation
- Assistance with college program selection
- Support services information
- Semester schedule planning
- Assistance with registration
- Assistance with transition from high school programs to CCC&TI admission
- Transfer information for students transitioning from CCC&TI to four-year colleges and universities
- Assistance with adding and/or dropping classes
Housing

The college does not have housing facilities and does not find housing for students.

Transportation

The college provides no transportation service for students. There are no buses or other forms of public transportation, so students must have their own forms of transportation and/or participate in carpools.

TRIO Programs

Federally funded TRIO comprises various programs that, since 1965, have promoted opportunity in education. The TRIO Office consists of TRIO/SSS (at CCC&TI since 1993) and TRIO/ETS (at CCC&TI since 2002) and serves 825, ages 11 and up. Its purpose is to:

• provide general and strategic direction for TRIO/SSS and TRIO/ETS
• leverage the strengths of each program for the benefit of both
• explore new ways that TRIO programs can support the mission of CCC&TI and open educational opportunities for all.

TRIO/SSS

TRIO/SSS is a TRIO program whose aim is to provide additional opportunities and services to first-generation college students with financial need, or disabled students who demonstrate need for academic support and are enrolled in an associate degree program. Components of the program include:

• writing and publishing opportunities through the TRIO Tribune online
• regular opportunities for student and faculty interaction at TRIO deli lunches
• a study skills course
• tutoring
• mentoring
• academic financial aid and transfer advisement
• personal and career counseling
• participation in TRIO/SSS service groups
• opportunity to develop and exercise leadership skills
• opportunity to teach others (basic skills, pre-job) through service-learning mini courses
• opportunity for TRIO/SSS work scholar positions on campus
• opportunity to be involved in cultural events
• laptop check-outs
• TRIO Alumni Scholarship and TRIO Direct Scholarship opportunities
• access to TRIO Ariane Angley Assistance Fund

TRIO/ETS

The second TRIO program is TRIO/ETS, whose purpose is to get academically talented students enrolled in postsecondary studies. Working with 625 middle and high school students from Caldwell County Public Schools, TRIO/ETS provides information about college, financial aid, and career exploration. Services include:
• writing and publishing opportunities through the Sam Says online newsletter
• tutoring
• study skills and strategies for success in school
• day and overnight trips to college campuses
• leadership opportunities through the TRIO Youth Leadership League
• cultural enrichment activities
• help with college applications
• information on scholarships and FAFSA
• an opportunity to apply for the G. Lewis Bernhardt Scholarship and the TRIO/ETS “Go Anywhere!” Award, reserved only for TRIO/ETS students.

**Academic Support Center**

The Academic Support Center offers a variety of services to enhance student learning, including:

• free tutoring in areas such as English, math, accounting and other subjects as needed
• interactive computer tutorials in a range of subject areas
• word processing and printers for typing papers
• internet access
• video tutorials
• English and reading labs
• review materials for ATI entrance nursing test, Accuplacer (placement tests) and PRAXIS
• study skills
• supplemental instruction (an academic enrichment program that utilizes peer-assisted study sessions)

The Academic Support Center is located in F146 on the Caldwell Campus and in Room 110 at the Watauga Instructional Facility. All services are free to students enrolled in Caldwell Community College and Technical Institute. Appointments are not necessary. Students may reach the Academic Support Center by calling 726-2725 or 297-3811. Instructors and tutors are available to assist students if they need help.

**Writing Center**

The Writing Center is designed to provide writers with the tools necessary to write and communicate effectively, thereby promoting success throughout college as well as in the workplace. The Writing Center offers a positive, individualized and collaborative learning environment with trained staff who are willing and able to assist writers one-to-one with all types, modes, and levels of writing at all stages of the writing process. The Writing Center is a free service for all CCC&TI students, faculty, and staff. Open Monday through Friday, no appointments are necessary in the Writing Center located on the Caldwell Campus in F-148 and on the Watauga Campus in the Student Services Center, Room 100. Online services are also available via Pronto and the Online Writing Center. Visit the Writing Center tab on Blackboard for more information.
Disability Services
The offices of Disability Services at CCC&TI are located in Room F151 on the Caldwell Campus and in Room 110 of the Instructional Facility on the Watauga Campus. Disability Services provides comprehensive, quality support to students with disabilities to insure access to the programs and offerings at CCC&TI. Personnel in Disability Services work with students, instructors, staff and others to coordinate accommodations and other support services for all qualified students with disabilities. In order to be eligible for services, a student must provide current documentation from an appropriate, licensed professional service provider. Acceptable documentation includes a medical report, psychological evaluation, physician’s report, or records from the Division of Services for the Blind, Services for the Deaf and Hard of Hearing, and/or Vocational Rehabilitation.

Section 504/American with Disabilities Act
No otherwise qualified handicapped individual shall, solely by reason of such disability, be excluded from participation in, or benefits of, or be subjected to discrimination by any public or private entity. The American with Disabilities Act defines disability as “a physical or mental impairment that substantially limits one or more major life activities such as walking, talking, seeing, hearing, learning, breathing, working; or having a record of such impairment; or being regarded as having one.”

Confidentiality
The college will not share specific information about a student’s disability with anyone, including faculty, without that student’s written permission.

How to Obtain Services
Students may receive assistance by doing the following:
- Notify Teena McRary in Disability Services at the Caldwell campus (828)726-2724 or by email at tmcrary@cccti.edu or Nancy Leonard at the Watauga campus (828) 297-3811 or by email at nleonard@cccti.edu.
- Provide Disability Services with current documentation of the disability.
- Request accommodations and auxiliary aids in a timely fashion
- Schedule follow-up visits regularly with Disability Services, at least once at the beginning of each semester. We want to know how students are doing and how we can help.

Testing Center
The purpose of CCC&TI’s testing program is to provide appropriate, fair, accessible, and reliable testing services to students, faculty, and staff. All new students are referred to this area for placement inventories that determine appropriate beginning courses in English, math, and reading. Adult High School Diploma and GED tests are also administered by the Testing Center. Instructor makeup tests are administered through the testing center for students who have missed a regularly scheduled test in the classroom and for students taking individualized instruction.
The Broyhill Center for Learning Resources
The purpose of the Broyhill Center for Learning Resources is to support the established objectives of the total educational program through a collection of print and non-print media and audiovisual equipment, through orientation and through reference services. Students are encouraged to look upon the center as an extension of their classroom instruction. The center has study stations and resources to support instruction and to provide for recreational reading, listening, and viewing. In addition, the staff is always ready to be of assistance.

Student Identification Cards
Student identification cards will be distributed to currently enrolled curriculum students free of charge. The student must provide his/her student identification number. Student identification cards will be provided to currently enrolled Continuing Education and Basic Skills students at a charge of $2.50 per card. Students may replace lost student i.d. cards that have not yet expired at a charge of $5.00 per card. For more information on identification cards, contact the Marketing and Communications Department on the Caldwell Campus and Student Services on the Watauga Campus.

Student Activities and Organizations

Student Activities
CCC&CTI believes that student participation in extracurricular activities contributes to the total development of the individual. In order to finance these activities, a student activity fee is charged to each student. A student activity fee of $7 per credit course up to a maximum of four courses ($28.00) is charged each student per semester (fall and spring), and $3 per course up to a maximum of $9 for summer semester. The fee is used to support activities and organizations such as: Student Government Association (SGA); campus clubs; Fall Festival, Spring Fling, Intercollegiate Athletics (NJCAA); intramurals; recreational equipment; scholarships; trophies; speakers; film series; a variety of cultural programs; skiing excursions; and to support a variety of other activities on campus. Students who wish to initiate new activities should contact the Student Government Association or Student Activities Director for assistance.

Student Government Association
The Student Government Association (SGA) represents the curriculum student body of CCC&CTI. The purpose of the SGA is to serve as a united voice of the students, provide a medium for leadership development, promote self-governance within the student body in order to support students’ rights, responsibilities and code of conduct and lead the student body in extra-curricular and student-life activities. Officers are elected in the spring of each year to serve the student body the following year. SGA Senators are appointed in the fall and serve the fall and spring semesters. SGA takes responsibility in promoting various activities and opportunities for out of class learning, social contacts, entertainment, and self-governance. The elected officers strive to promote the general welfare of the students in a democratic fashion. General Assembly meetings are held each month to provide an opportunity for the student body to interact with the SGA and learn about upcoming events on campus. A copy of the SGA Constitution may be found in the SGA Office or Student Activities Office located in E118 and E121.
Club and Organizations

Students are encouraged to join clubs and organizations offered on campus. The following organizations are related to subject or department areas: Basic Law Enforcement Club, Blue Ridge Flying Eagles (Aviation Club), Biomed Club, Business Club (Caldwell), Cosmetology Club (Day-Night), Culinary Guild, Early Childhood Club, IT Club, Omega Rho Sigma (Ophthalmic Assistant), Paralegal Club, Phi Beta Lambda (Future Business Leaders of America), Phi Theta Kappa (National Honor Society), Physical Therapist Assistant Club, Pi Sigma Gamma (Nuclear Medicine Technology), Rho Alpha Delta, Sonography Club, Student Nurses Association, Speech Language Pathology Club and TRIO-Student Support Services.

The following general interest clubs are open to all students:

- Alpha Omega - is a Christian based organization promoting a healthy school spirit, community relations and activities that build positive relationships among members and provides a spiritual or Christian atmosphere on campus.
- Business Club - is a local club whose purpose is to promote interest, knowledge and appreciation for the free enterprise system.
- Ebony Kinship - enhances communications between CCC&TI and the African-American community in arts and cultural affairs.
- Mentor's Club - their purpose is to assist Communities In Schools with their mentoring programs by providing CCC&TI students to serve as mentors and/or to recruit mentors.
- Phi Beta Lambda (Future Business Leaders of America) - FBLA-PBL is the largest business career student organization in the world. It meets on the Caldwell and Watauga campuses. www.FBLA-PBL.org.
- Rotaract is a Rotary sponsored service club for young men and women.
- Sustainable Community Club - interested in sustainable living for all CCC&TI students.

All clubs must be organized in a manner consistent with the requirements of the Student Government Association. In addition, all student activities and clubs that receive or dispense funds must do so in accordance with procedures specified by the Vice President of Finance & Administration. Activities designed to raise funds and requests for using those funds must be approved in advance by the Student Activities Director, the Vice President of Student Services, the SGA President and the club advisor. In some instances, the Executive Director of the CCC&TI Foundation may need to approve fundraising activities. Receipt and disbursement of funds shall be in accordance with provisions of the North Carolina Administrative Code, the State Auditor’s office, the NC Community College System, and the college. The College Executive Council retains final authority to approve, modify, or discontinue student activities or clubs.

Committees open to student involvement

- Go Green Committee - focused on environmental issues.
- Global Diversity Committee - focused on issues surrounding global awareness and diversity.

Honor Societies

Students are invited to join based on criteria set by each organization.
• Ambassador Program - Student Ambassadors are a select group of students demonstrating academic excellence who represent the college at a variety of events.

• Phi Theta Kappa - The objective of the Alpha Lambda Pi Chapter, in addition to those specified in Article II of the National Constitution shall be to promote the intellectual atmosphere of CCC&TI.

• Sigma Alpha Pi - The National Society of Leadership and Success-Is a community of leaders dedicated to creating lasting and positive change. Sigma Alpha Pi offers student's leadership training, a national speaker series, and peer coaching in small groups. www.societyleadership.org

Honor Societies
Students are invited to join based on criteria set by each organization.

Phi Theta Kappa - The objective of the Alpha Lambda Pi Chapter, in addition to those specified in Article II of the National Constitution, shall be to promote the intellectual atmosphere of CCC&TI.

Ambassador Program - selected CCC&TI students participate in quality-mentoring opportunities to Career Center High School students and the college.

Student Ambassadors
The CCC&TI Student Ambassadors are a select group of students demonstrating academic excellence who represent the college at a variety of events. Nominated by faculty members, the ambassadors serve CCC&TI by conducting campus tours, assisting with special events, mentoring students and representing the college at a variety of campus and community activities. Students eligible for nomination must have a minimum grade point average of 3.0.

Intercollegiate Sports
CCC&TI participates in intercollegiate athletics during fall and spring semesters. Sports include Division III NJCAA Men’s and Women’s Basketball. For more information on athletics, contact the respective coach or CCC&TI’s athletic director at 828.726.2388.

Intramurals
CCC&TIs Caldwell Campus offers a comprehensive intramural sports program with a variety of team and individual activities, including basketball, volleyball, ping pong, pool and others on demand. Students, faculty, and staff members are encouraged to participate on a voluntary basis. The program provides the opportunity for recreation, physical fitness, skill improvement, team building, spirit and good sportsmanship. Individuals participating in the intramural program assume responsibility for their own safety and health. It is recommended that each participant have an annual physical examination and be adequately protected by accident and health insurance. See the Director of Student Activities for more information.
WISE UP Workshops

WISE-Up is a noon-hour workshop series for students to provide information related to academics, careers and wellness. Topics may include using Blackboard and other technology resources, stress management, math anxiety, book discussions and more. Visit the Cobra calendar on the website for specific workshops and times.

Chorus

Students are encouraged to sing with the chorus and earn one hour of elective credit. The CCC&CTI chorus performs three to five concerts a year. No auditions are required, although some knowledge of music is preferred. Many styles of music are performed including classical, spiritual, pop, and rock.

Theater

Foothills Performing Arts Theatre, Inc. (FPA) is a nonprofit community theatre group located in B Building of CCC&CTI’s Caldwell Campus. The award-winning theatre group has received regional and statewide recognition for its performances. CCC&CTI students are encouraged to participate in all FPA productions as actors, crew members, and volunteers. Tickets for students are offered at reduced rates and are available by contacting FPA at 726-2318. Visit www.foothillsperformingarts.org for show listings and dates.

J.E. Broyhill Civic Center

The J.E. Broyhill Civic Center of CCC&CTI is located in Lenoir two miles north of the Caldwell Campus on US 321. The civic center features a 1000-seat performance theatre and meeting rooms along with a hospitality lab/catering kitchen located on the conference level. Facilities are available for rent for conferences, meetings, weddings and other events. Be sure to check out the civic center’s annual Showcase of Stars events at www.broyhillcenter.com. From comedy and dance to Broadway shows and a variety of music programs, each year’s season lineup offers something for everyone. In addition, the college presents several Performing Artist Series programs throughout the year at the civic center featuring regional, national and internationally known musical artists, lecturers, dance and dramatic presentations. Discounted tickets for civic center events are available to CCC&CTI students and employees with a college I.D. Students are admitted to CCC&CTI’s Performing Artist Series events at no charge with an I.D. Contact the Box Office at 726-2407 for complete details and ticket information.

Publications

See also News and Events
Student news and activities are communicated in the college’s campus newsletter, The Caldwell Chronicle, found at various campus locations, though student Google mail accounts and on the college website at www.cccti.edu. Special student publications appear periodically depending on student interest in newsletters, newspapers and other publications. New publications to be produced on a regular basis must have a faculty or staff sponsor and be approved by the Vice President of Student Services and the college’s Public Information Office.
Regardless of the source of funding, the college retains editorial control of all student publications. Student editors have the responsibility to ensure that such publications establish and maintain an atmosphere of responsible discussion. All articles expressing opinions must be signed. Sponsors may exercise editorial control, and decisions regarding the initiation or continuance of any student publications are vested with the college’s Executive Council. All financial operations of student publications must be in accordance with procedures specified by the Controller.

Student Rights, Responsibilities and Code of Conduct

Freedom to teach and freedom to learn are inseparable facets of academic freedom. The freedom to learn depends upon appropriate opportunities and conditions in the classroom, on the campus, and in the community. Students should exercise their freedom with responsibility. As members of the academic community, students are subject to the obligations that accrue to them by virtue of this membership. As members of the larger community of which the college is a part, students are entitled to all rights and protection accorded them by the laws of that community. By the same token, students are also subject to all laws, the enforcement of which is the responsibility of duly constituted authorities. When students violate laws, they may incur penalties prescribed by legal authorities. In such instance, college discipline will be initiated only when the presence of the student on campus will disrupt the educational process of the college. However, when a student’s violation of the law also adversely affects the college’s pursuit of its recognized educational objectives, the college may enforce its own regulations. When students violate college regulations, they are subject to disciplinary action by the college whether or not their conduct violates the law. If a student’s behavior simultaneously violates both college regulations and the law, the college may take disciplinary action independent of that taken by legal authorities.

Student Rights

- All rights and privileges guaranteed to every citizen by the Constitution of the United States and by the state of North Carolina shall not be denied any student.
- Student performance will be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.
- Students have the right to freedom of expression, inquiry, and assembly without restraint or censorship subject to reasonable and nondiscriminatory rules and regulations regarding time, place, and manner.
- Students have the right to inquire about and to propose improvements in policies, regulations and procedures affecting the welfare of students through established student government procedures, campus committees, and college offices.
- Students and former students have the right to review their official records and to request a hearing if they challenge the contents of these records.
- No disciplinary sanctions other than temporary removal from class or activity (only for duration of said activity) may be imposed upon any student without due process. Due process procedures are established to guarantee a student accused of a student code of conduct violation the right to a hearing, a presentation of charges, evidence for charges, the right to present evidence, the right to have witnesses on one’s behalf and to hear witnesses on behalf of the accuser(s), the right to counsel, and the right of appeal.
Crime Awareness and Campus Security

Prospective and current students who would like information concerning campus policies and procedures relating to The Crime Awareness and Campus Security Act of 1990 may request a copy of the college’s safety plan on file in the office of the vice president of facilities services. In addition, information may be found in the Student Handbook.

The Victims of Trafficking and Violence Protection Act of 2000 required colleges and universities to inform students and employees how to learn the identity of registered sex offenders on campus. This law contains the Campus Sex Crimes Protection Act which became effective October 28, 2002. Sex offender information is compiled by the North Carolina State Bureau of Investigation and posted at http://sexoffender.ncsbi.gov/. Information about registered sex offenders can also be obtained from the local sheriff’s department in Caldwell or Watauga counties.

Parking Regulations

• Parking for students, faculty, and staff is on a first-come, first-served basis except for certain designated areas.
• Students, faculty, and staff must register all vehicles they expect to use on campus. A current parking hangtag must be displayed on the rearview mirror of the automobile.
• Temporary handicapped parking permits are issued by NC License Tag Bureau.

Students are responsible for being aware of all traffic and parking regulations as outlined in the college’s Institutional Policy and Procedures manual. Lack of knowledge of these regulations will not justify forgiveness of penalties for violations.

Student Code of Conduct

The college reserves the right to maintain a safe and orderly educational environment for students and staff. Therefore, when, in the judgment of college officials, a student’s conduct disrupts or threatens to disrupt the college community, appropriate disciplinary action will be taken to restore and protect the sanctity of the community. Students are expected to conduct themselves in accordance with generally accepted standards of scholarship and morality. The purpose of this code is not to restrict student rights but to protect the rights of individuals in their academic pursuits. The following are violations of the Student Code of Conduct:

• Academic dishonesty (See Academic Integrity Policy); a second violation of the CCC&TI Academic Integrity Policy shall be treated as a disciplinary issue carrying severe consequences.
• Theft of, misuse of, or damage to college property, or theft of or damage to property of a member of the college community or a campus visitor on college premises or at college functions; unauthorized entry upon the property of the college or into a college facility or a portion thereof which has been restricted in use and thereby placed off limits; unauthorized presence in a college facility after closing hours.
• Possession, use or distribution of alcoholic beverages or being in a state of
intoxication on the college campus or at college sponsored or supervised functions off campus or in college owned vehicles. Possession, use or distribution of any illegal drugs, except as expressly permitted by law. Any influence which may be attributed to the use of drugs or of alcoholic beverages shall not in any way limit the responsibility of the individual for the consequences of his/her actions.

- Lewd or indecent conduct, including public physical or verbal action or distribution of obscene or libelous written material.
- Mental or physical abuse of any person on college premises or at college sponsored or college supervised functions, including verbal or physical actions which threaten or endanger the health or safety of any such persons or which promote hatred or racial prejudice.
- Any act, comment, or behavior which is of a sexually suggestive or harassing nature and which in any way interferes with a student’s or an employee’s performance or creates an intimidating, hostile or offensive environment.
- Any act or misuse of technology that is directly prohibited by the current computer usage policy.
- Intentional obstruction or disruption of teaching, research, administration or disciplinary proceedings or other college activities, including public service functions and other duly authorized activities on college premises.
- Occupation or seizure in any manner of college property, a college facility or any portion thereof for a use inconsistent with prescribed, customary or authorized use.
- Participating in or conducting an assembly, demonstration or gathering in a manner which threatens or causes injury to person or property; which interferes with free access to, ingress or egress of college facilities; or which is harmful, obstructive or disruptive to the educational process or institutional functions of the college; remaining at the scene of such an assembly after being asked to leave by a representative of the college staff.
- Possession or use of a firearm, incendiary device or explosive, except in connection with a college approved activity. This also includes unauthorized use of any instrument designed to inflict serious bodily injury to any person.
- Setting off a fire alarm or using or tampering with any fire safety equipment, except with reasonable belief in the need for such alarm or equipment.
- Gambling.
- Smoking in classrooms, shops, labs or other unauthorized areas.
- Violation of college regulations regarding the operation and parking of motor vehicles.
- Forgery, alteration, or misuse of college documents, records, or instruments of identification with intent to deceive.
- Failure to comply with instructions of college officials acting in performance of their duties.
- Violation of the terms of disciplinary probation or any college regulation during the period of probation.
- Fiscal irresponsibility such as failure to pay college levied fines, failure to repay college funded loans or the passing of worthless checks to college officials. The college will not accept checks from students who have written the college a check with insufficient funds.
- Violation of a local, state or federal criminal law on college premises adversely affecting the college community’s pursuit of its proper educational purposes.
• Any conduct which materially and adversely affects the educational process.
• Any physical, emotional or behavioral problems that adversely affects the safety of students and the educational process.

Disciplinary Procedures

Immediate Dismissal
If an act of misconduct threatens the health or well-being of any member of the academic community or seriously disrupts the function and good order of the college, an instructor or administrative officer may direct students involved to cease and desist such conduct and advise them that failing to cease and desist will result in immediate dismissal. If the students fail to cease and desist, the instructor or administrative officer may then dismiss them from the class or the college until a resolution of the matter can be made. Prior to dismissal, the student(s) shall be given the opportunity to explain his or her conduct to the instructor or administrative officer.

The instructor or administrative officer invoking such dismissal shall notify the vice president of student services in writing of the individuals involved and the nature of the infraction as soon as possible but no more than two days following the incident. The vice president of student services, responsible for implementing student discipline procedures, shall resolve the matter in a timely fashion utilizing the steps outlined below. In order to provide an orderly procedure for handling student disciplinary cases in accordance with due process and justice, the following procedures will be followed:

Charges
Any administrative official, faculty member, or student may file charges with the vice president of student services against any student or student organization for violations of college regulations. The individual(s) making the charge must make the following information available to the vice president of student services:
• name of the student(s) involved.
• the alleged violation of the specific code of conduct.
• the time, place, and date of the incident.
• the name(s) of person(s) directly involved or witnesses to the infractions.
• any action taken that related to the matter.
• desired solution.

Investigation and Decision
Within 5 working days after the charge is filed, the vice president of student services shall complete a preliminary investigation of the charge and shall schedule a meeting with the student. After discussing the alleged infraction with the student, the vice president of student services may act as follows:
• Drop the charges.
• Impose a sanction consistent with those shown below.
• Refer the student to a college office or community agency for services.

Notification
The decision of the vice president of student services shall be presented to the student in writing immediately following the meeting with the student. In instances where the student cannot be reached to schedule an appointment with the vice president or where
the student refuses to cooperate, the vice president of student services shall send a certified letter to the student’s last known address providing the student with a list of the charges, the vice president’s decision, and instructions governing the appeal process.

Sanctions
The vice president of student services may apply the following sanctions as appropriate:

Reprimand
A written communication which gives official notice to the student that any subsequent offense against the Student Code of Conduct will carry heavier penalties because of this prior infraction.

General Probation
An individual may be placed on General Probation when involved in a minor disciplinary offense. General Probation has two important implications: The individual is given a chance to show his/her capability and willingness to observe the Student Code of Conduct without further penalty; secondly, if he/she errs again, further action will be taken. This probation will be in effect for no more than two semesters.

Restrictive Probation
Restrictive Probation results in loss of good standing and becomes a matter of record. Restrictive conditions may limit activity in the college community. Generally, the individual will not be eligible for initiation into any local or national organization and may not receive any college award or other honorary recognition. The individual may not occupy a position of leadership or responsibility with any college or student organization, publication, or activity. This probation will be in effect for not less than two semesters. Any violation of Restrictive Probation may result in immediate suspension.

Restitution
The student must pay for damaging, misusing, destroying or losing property belonging to the college, college personnel, or students.

Interim Suspension
Students will be excluded from class and/or other privileges or activities as set forth in the notice, until a final decision has been made concerning the alleged violation.

Loss of Academic Credit or Grade
This punishment is imposed as a result of academic dishonesty (as determined by the Grade Appeal Procedure).

Withholding Transcript, Diploma, or Right to Register
This sanction is imposed when financial obligations are not met.

Suspension
The student is excluded from class(es) and/or all other privileges or activities of the college for a specified period of time. This sanction is reserved for those offenses warranting discipline more severe than probation or for repeated misconduct. Students
who receive this sanction must get specific written permission from the vice president of student services before returning to the college campus.

Expulsion
The student is dismissed from campus for an indefinite period. The student loses his/her student status. The student may be readmitted to the college only with the approval of the president.

Group Probation
This sanction is given to a college club or other organized group for a specified period of time. If group violations are repeated during the term of the sentence, the charter may be revoked or activities restricted.

Group Restriction
A club or other organization is removed from college recognition during the semester in which the offense occurred or for a longer period (usually not more than one other semester). While under restriction, the group may not seek or add members, hold or sponsor events in the college community, or engage in other activities as specified.

Group Charter Revocation
This sanction involves removal of college recognition for a group, club, society, or other organization for a minimum of two years. Re-charter after that time must be approved by the president.

Appeals Procedure
A student who disagrees with the decision of the vice president of student services may file a formal grievance as outlined below.

Grievance Policy and Procedures

Statement of Policy
Caldwell Community College and Technical Institute is committed to mutual respect among all constituents of the college community. The purpose of this procedure is to provide CCC&TI students an equitable and orderly process to resolve grievances other than sexual harassment complaints and grade appeals. Because separate policies/procedures exist for these disputes, complaints of this nature are excluded from consideration under this policy.

Definition: A grievance exists in any situation in which students feel that there has been a violation, misinterpretation, or misapplication of an existing college policy including complaints alleging discrimination or harassment on the basis of race, color, creed, national origin, sex, age, sexual orientation, disabling condition, or other personal characteristics.

Every attempt should be made to resolve violations of policy in an informal manner and only when these attempts are not successful should the formal procedure be
utilized. Persons involved in the grievance procedures shall not be coerced, intimidated, or suffer any reprisal.

Informal Procedure
Prior to filing a formal grievance, students are strongly encouraged to discuss their grievances with the person alleged to have caused the grievance. The purpose of this informal discussion is to provide the student, faculty member, or other person with authority the opportunity to address and resolve the grievance at the lowest possible level.

a. The student shall first informally discuss the matter in question with the college faculty or staff member most directly involved. If the meeting with the college employee fails to produce a satisfactory settlement, the student may appeal directly to the employee’s immediate supervisor.
b. Should an informal discussion fail to produce a satisfactory settlement of the grievance, the student should contact the employee’s immediate supervisor, who will attempt to mediate a resolution. If these informal discussions do not satisfactorily resolve the grievance, the student may initiate the formal grievance procedure.

Formal Procedure
Step One: In the event the matter is not resolved informally, the student may submit the grievance in writing to the vice president of student services who shall hear all parties involved in the grievance and render a written decision. Note: The grievance may be initiated at or moved to Step Two without a hearing at a lower step(s), if both parties agree.

A copy of the grievance must be filed as provided in Step One within twenty (20) business days from the date on which the act or purported act which is the subject of the grievance occurred.

The vice president of student services will hear all parties involved in the grievance and render a written decision within five (5) business days of receipt of the grievance. If the grievance is against the vice president of student services, the executive vice president will perform the functions of the vice president of student services as required by this policy.

a. Should a grievance not be satisfactorily resolved or should no decision be forthcoming in the time prescribed above, the grievance may, within five (5) business days, be submitted to the next step.

If the finding or resolution of a grievance at any step in the grievance procedure is not appealed within ten (10) business days, the grievance will be considered settled on the basis of the last answer provided, and there shall be no further appeal or review.

Step Two: If the grievance is not resolved satisfactorily in Step One, it may be appealed to the Grievance Committee, who will make a decision regarding the grievance. This decision shall be binding to all parties.
The Grievance Committee will hear all parties involved in the grievance and render a written decision within ten (10) business days of receipt of the appeal from the Step One decision.

a. Time limits under the procedure may be changed by mutual agreement only.

The chair of the grievance committee will be appointed at the first meeting called by the president or by the chair of the board of trustees if the grievance is related to the president. The grievance committee will consist of four (4) standing members and three (3) members selected at the time a grievance is presented. In addition to the committee members, a recorder will be assigned. The four standing members will serve for two (2) years; and, in order to provide continuity, initially two members will be appointed for two years and two members will serve one year. The parties involved may challenge the impartiality of any of the seven members selected by the president or by the chair of the board of trustees. This committee will act as a hearing committee for all student grievances.
The Associate in Applied Science degree programs are designed to prepare persons for technician-level occupations. More emphasis is given to theory than in diploma courses. Also, roughly one-half of the course requirements are in general education and the sciences underlying the particular occupational area. A core of general competencies in communication, computation, the use of technology, global awareness/diversity, and critical thinking must be met by all graduates of associate degree programs. These requirements are met through a variety of student learning outcomes identified in the General Education Assessment Plan and documented through the General Education Assessment Report issued annually and posted on the CCC&TI Office of Institutional Effectiveness and Research webpage. CCC&TI offers the following Associate in Applied Science degree programs:

- Accounting
- Automotive Systems Technology
- Aviation Management and Career Pilot Technology
- Biomedical Equipment Technology
- Business Administration
- Business Administration/Logistics Management
- Cardiovascular Sonography
- Computer Information Technology
- Computer Programming
- Culinary Arts
- Early Childhood Education
- Electrical/Electronics Technology
- Electronics Engineering Technology
- Emergency Preparedness Technology
- General Education
- General Occupational Technology
- Landscape Gardening
- Mechanical Engineering Technology
- Medical Office Administration
- Medical Sonography
- Networking Technology
- Nuclear Medicine Technology
- Associate Degree Nursing
- Office Administration
- Paralegal Technology
- Physical Therapist Assistant
- Radiography
- Speech Language Pathology Assistant
- Web Technologies
Diploma and Certificate Programs

Diploma and certificate programs are designed to prepare persons for trade-level occupations. Emphasis is given to the development of manipulative skills. CCC&TI offers the following programs:

**Diploma Programs**
- Accounting *
- Automotive Systems Technology
- Business Administration *
- Collision Repair and Refinishing Technology
- Computer Information Technology *
- Computer Programming
- Cosmetology
- Early Childhood Education *
- Electrical/Electronics Technology
- General Occupational Technology *
- Landscape Gardening *
- Medical Office Administration *
- Office Administration*
- Ophthalmic Medical Assistant
- Web Technologies

**Certificate Programs**
- Accounting - Accounting Applications *
- Accounting - Basic Income Tax *
- Automotive Systems Basic Engine Performance
- Automotive Systems Basic Undercar
- Aviation Management and Career Pilot Technology
- Basic Law Enforcement Training
- Business Administration: Management *
- Business Administration: Marketing *
- Cardiovascular Sonography
- Collision Repair and Refinishing Technology
- Computer Information Technology - Database Specialist*
- Computer Information Technology - Software Specialist*
- Computer Programming - C#
- Computer Programming - Java
- Computer Programming - Visual Basic
- Cosmetology
- Cosmetology Instructor
- Early Childhood - Child Care Operator *
- Early Childhood - Infant/Toddler *
- Early Childhood - School-Age Provider *
- Early Childhood - Teacher/Caregiver *
Echocardiography
Electrical/Electronics Technology
EPT - Response & Recovery
EPT - Preparedness & Mitigation
Landscape Gardening - General *
Landscape Gardening - Installation and Maintenance *
Landscape Gardening - Landscape Design*
Landscape Gardening - Micro-propagation*
Landscape Gardening - Production *
Manicuring/Nail Technology
Manicure Instructor
Mechanical Engineering Technology
Networking Technology - Routing Basics
Nursing Assistant
Office Administration: Receptionist *
Office Administration: Word Processing Clerk *
Paralegal Technology: Family Law
Paralegal Technology: Wills and Estates
Truck Driver Training
Web Technologies - Web Design

* Program available at the Watauga Campus. Limited or no core courses will be offered at night
Special Coding System

F  Course will be offered Fall Semester.
S  Course will be offered Spring Semester.
SS Course will be offered Summer Semester.
D  Course will be offered when sufficient students and instructor are available.

The numbers to the right of the course title represent the following: class, lab, credit. For example:

<table>
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<tr>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
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<tr>
<td>3</td>
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<td>3</td>
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ENG 111 Expository Writing

In order to determine contact hours, class hours and lab hours are added.

General Education Requirements

A core of general competencies in communication, computation, the use of technology, global awareness/diversity, and critical thinking must be met by all graduates of associate degree programs. These requirements are met through a variety of student learning outcomes identified in the General Education Assessment Plan and documented through the General Education Assessment Report issued annually and posted on the CCC&TI Office of Institutional Effectiveness and Research webpage.

In the interest of helping students succeed in their chosen curricula, CCC&TI offers English, mathematics and reading improvement courses. Initial student placement in developmental courses is based in individual college placement testing policies and procedures. Students should begin developmental course work at the appropriate level indicated by the college’s placement test.
Career Information
The Accounting curriculum is designed to provide students with the knowledge and the skills necessary for employment and growth in the accounting profession. Using the “language of business,” accountants assemble and analyze, process, and communicate essential information about financial operations. In addition to course work in accounting principles, theories, and practice, students will study business law, finance, management, and economics. 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 positions in many types of organizations including accounting firms, small businesses, manufacturing firms, banks, hospitals, school systems, and governmental agencies. With work experience and additional education, individuals may advance in the accounting profession.

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<tr>
<th>Fall Semester I</th>
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<tbody>
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</tr>
<tr>
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Total Hours: 62 22 73
### Accounting (D25100)

**Diploma Program**

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Cooperative Education (up to 4)

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**Accounting– Accounting Applications (C25100A)**

Certificate Program

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**Accounting–Basic Income Tax (C25100B )**

Certificate Program

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Automotive Systems Technology (A60160)
Associate in Applied Science Degree

Career Information
The Automotive Systems Technology curriculum prepares individuals for employment as automotive service technicians. It provides an introduction to automotive careers and increases student awareness of the challenges associated with this fast and ever-changing field. Classroom and lab experience integrate technical and academic course work. Emphasis is placed on theory, servicing and operation of brakes, electrical/electronic systems, engine performance, steering/suspension, automatic transmission/ transaxles, engine repair, climate control, and manual drive trains. Upon completion of this curriculum, students should be prepared to take the ASE exams and be ready for full-time employment in dealerships and repair shops in the automotive service industry.

Special Admission Requirements
• Placement tests
• Mechanical Aptitude Test

Fall Semester I
AUT  110  Intro to Auto Technology          2  2  3
AUT  116  Engine Repair                     2  3  3
AUT  116A Engine Repair Lab                 0  3  1
AUT  161  Basic Automotive Electricity      4  3  5
ENG  111  Expository Writing                3  0  3
ENG  111A Expository Writing Lab            0  2  1
Semester Total                             11  13  16

Spring Semester I
ENG  114  Prof. Research & Reporting        3  0  3
AUT  141  Suspension & Steering Systems     2  3  3
AUT  141A Suspension & Steering Lab         0  3  1
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**Total Hours** 49 65 73
# Automotive Systems Technology (D60160)

## Diploma Program

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**Total Hours**: 24 36 37

# Basic Undercar (C60160U)

## Certificate

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**Total Hours**: 10 17 16
# Basic Engine Performance (C60160E)
## Certificate

### Fall Semester I

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<td>AUT 181</td>
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**Total Hours**: 10 14 15
Aviation Management and Career Pilot Technology (A60180)
Associate’s Degree Program

Career Information
The Aviation Management and Career Pilot Technology curriculum prepares individuals for a variety of aviation and aviation-related careers including commercial airlines, general aviation, aerospace industry, military, and state and federal aviation organizations. Course work includes fundamentals of flight, aerodynamics, aircraft performance, meteorology, navigation, federal regulations, aviation management, instrument and commercial ground training. Optional course work includes flight and simulator training or business management training. Graduates will hold a commercial pilot certificate with an instrument rating or specialize in aviation management. Graduates may find employment as commercial, corporate, and military pilots, fixed base operators, airport managers, instructors, and flight dispatchers.

Special Admission Requirements
- Application
- Placement tests
- High school transcript
- Adult high school diploma or GED
- Transcript of college work
- Interview with program coordinator
- Federal Aviation Administration Medical Certificate
- 17 years of age or older
- Additional requirements and costs for career pilot
## Aviation Management (A60180M)

### Fall Semester I

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### Career Pilot Option (A60180P)

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Spring Semester II

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<td>AER 281</td>
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Total Hours 57 36 73

Aviation Management & Career Pilot Technology

Certificate (C60180)

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Total Hours 9 7 12
Basic Law Enforcement Training Certificate
(C55120)

Career Information
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; investigate, patrol, custody, and court procedures; emergency responses; and ethics and community relations. Graduates receive a curriculum certificate and may be eligible to take 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.

Special Admission Requirements
- Application
- Minimum of twenty (20) years of age
- High school transcript
- Medical physical
- Adult high school diploma or GED
- Background free of criminal offenses
- Sponsored by a law enforcement agency
- Reading placement test 65 or better or completion of 080
- Interview with school director

Fall Semester I

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Biomedical Equipment Technology (A50100)
Associate’s Degree Program

Career Information
The Biomedical Equipment Technology curriculum prepares individuals to install, operate, troubleshoot, and repair sophisticated devices and instrumentation used in the health care delivery system. Emphasis is placed on preventive and safety inspections to ensure biomedical equipment meets local and national safety standards. Course work provides a strong foundation in mathematics, physics, electronics, anatomy, physiology, and troubleshooting techniques. Some courses will include job experience and job shadowing, as well as people skills and communication, both in written and oral form. Graduates should qualify for employment opportunities in hospitals, clinics, clinical laboratories, shared service organizations, and manufacturers’ field service. With an AAS degree and two years experience, an individual should be able to become a certified Biomedical Equipment Technician.

Special Admission Requirements
- Application
- High school transcript
- Health form after acceptance
- Placement tests
- Adult high school diploma or GED

Fall Semester I

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Business Administration (A25120)
Associate’s Degree Program

Career Information
The Business Administration curriculum is designed to introduce students to the various aspects of the free enterprise system. Students will be provided with a fundamental knowledge of business functions, processes, and an understanding of business organizations and the 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 life-long learning. Graduates are prepared for employment opportunities in governmental agencies, financial institutions, large to small businesses or industry.

Fall Semester I

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Cooperative Education (up to 8)

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**Business Administration (D25120)**

**Diploma Program**

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Cooperative Education (up to 4)
Business Administration (C25120M)  
Management Certificate

Fall Semester I
BUS 110 Introduction to Business 3 0 3  
BUS 115 Business Law I 3 0 3  
BUS 137 Principles of Management 3 0 3  
Semester Total 9 0 9  

Spring Semester I
BUS 153 Human Resource Management 3 0 3  
BUS 270 Professional Development 3 0 3  
MKT 223 Customer Services 3 0 3  
Semester Total 9 0 9  
Total Hours 18 0 18  

Business Administration (C25120K)  
Marketing Certificate

Fall Semester I
BUS 110 Introduction to Business 3 0 3  
BUS 115 Business Law I 3 0 3  
MKT 120 Principles of Marketing 3 0 3  
Semester Total 9 0 9  

Spring Semester I
BUS 270 Professional Development 3 0 3  
MKT 220 Advertising and Sales Promotion 3 0 3  
MKT 223 Customer Service 3 0 3  
Semester Total 9 0 9  
Total Hours 18 0 18  

Business Administration/Logistics Management (A2512E)

Career Information
Logistics Management is a concentration under the curriculum title of Business Administration. This curriculum prepares students for careers in transportation and warehousing through the study of the principles of organization and management in
logistics. 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 transportation, warehousing, inventory control, material handling, computerization, and federal transportation and OSHA regulations are emphasized. Graduates should qualify for employment in logistics-related jobs such as material handling foreman, transportation supervisor, traffic manager, warehouse manager, and inventory control manager.

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 120</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 110</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>CIS 110</td>
<td>Introduction to Computers</td>
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<tr>
<td>ENG 111</td>
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Semester Total: 14 6 17

Spring Semester I

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<td>COM 120</td>
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<td>ENG 112</td>
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<td>ENG 113</td>
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Semester Total: 15 0 15

Summer Semester I

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Fall Semester II

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<td>BUS 240</td>
<td>Business Ethics</td>
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<td>LOG 220</td>
<td>Logistics Management</td>
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<td>LOG 230</td>
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Semester Total: 17 2 18
### Spring Semester II

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<td>LOG 120</td>
<td>Global Logistics</td>
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<td>LOG 210</td>
<td>Fleet Management</td>
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**Semester Total**

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**Total Hours**

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**Major Electives**

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<td>ACC 122</td>
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<td>ACC 129</td>
<td>Individual Income Taxes</td>
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<td>ACC 130</td>
<td>Business Income Taxes</td>
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<td>ACC 140</td>
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<td>ACC 150</td>
<td>Accounting Software Applications</td>
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<td>ACC 220</td>
<td>Intermediate Accounting I</td>
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<td>ACC 227</td>
<td>Practices in Accounting</td>
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<td>ACC 269</td>
<td>Auditing and Assurance Services</td>
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<td>Business Math</td>
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<td>BUS 125</td>
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<td>BUS 139</td>
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<td>BUS 147</td>
<td>Business Insurance</td>
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<td>BUS 153</td>
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<td>BUS 220</td>
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<td>Survey of Economics</td>
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<td>Advertising and Sales Promotion</td>
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<td>OST 286</td>
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<td>WEB 110</td>
<td>Internet/Web Fundamentals</td>
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Cooperative Education (up to 8)
Cardiovascular Sonography (A45160)
Associate’s Degree Program

Career Information
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, adult echocardiography, and vascular technology. Graduates may find employment in hospitals, physician’s offices, mobile services, and educational institutions.

Special Admission Requirements
- Application
- View information session DVD
- High school transcript
- Adult high school diploma or GED
- Transcripts of college work
- Placement tests
- Hospital visit arranged by admissions counselor (degree program)
- Interview with program director
- Current Certification in CPR after acceptance (degree program)
- Health form after acceptance (degree program)

The following courses are prerequisite courses and must be taken with a minimum grade of “C” prior to admission to the Cardiovascular Sonography Program:

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<thead>
<tr>
<th>Course</th>
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<tr>
<td>BIO 163</td>
<td>Basic Anatomy and Physiology</td>
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<td>ENG 111</td>
<td>Expository Writing</td>
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<tr>
<td>ENG 111A</td>
<td>Expository Writing Lab</td>
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<tr>
<td>MAT 115</td>
<td>Mathematical Models</td>
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<td>PHY 110</td>
<td>Conceptual Physics</td>
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Semester Totals 12 8 16

Fall Semester I
- COM 120 Intro Interpersonal Communication
  or
- COM 231 Public Speaking
  or
- ENG 113 Literature-Based Research

116
Cardiovascular Sonography Certificate (C45160)
Certificate Program

A certificate will be awarded upon successful completion (2.0 GPA) of a minimum of 14 credit hours from requirements listed below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tr>
<td>CVS 163</td>
<td>Echo I</td>
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<td>CVS 164</td>
<td>Echo II</td>
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<tr>
<td>SON 111</td>
<td>Sonographic Physics</td>
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<tr>
<td>SON 250</td>
<td>Vascular Sonography</td>
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<td>CVS 161</td>
<td>CVS Clinical Education II</td>
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<td>CVS 164</td>
<td>Echo II</td>
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<td>SON 111</td>
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<td>CVS 260</td>
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<td>SON 250</td>
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<td>Semester Total</td>
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<tr>
<td>CVS 261</td>
<td>CVS Clinical Education V</td>
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<tr>
<td>CVS 277</td>
<td>Cardiovascular Topics</td>
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<td>PSY 150</td>
<td>General Psychology</td>
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<td>SON 111</td>
<td>Sonographic Physics</td>
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<td>SON 250</td>
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<td>Total Hours</td>
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</table>
Note: This program is designed for Sonographers. Graduates from the Cardiovascular Sonography Certificate program are not eligible to apply to the American Registry of Diagnostic Medical Sonographers.

Echocardiography Certificate (C45160A) Certificate Program

A certificate will be awarded upon successful completion (2.0 GPA) of a minimum of 12 credit hours from the following requirements.

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<tbody>
<tr>
<td>CVS 163</td>
<td>Echo I</td>
<td>3</td>
</tr>
<tr>
<td>CVS 164</td>
<td>Echo II</td>
<td>3</td>
</tr>
<tr>
<td>SON 111</td>
<td>Sonographic Physics</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>Hours</strong></td>
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Note: This program is designed for sonographers. Graduates from the Echocardiography Certificate program are not eligible to apply to the American Registry of Diagnostic Medical Sonographers.
Collision Repair and Refinishing Technology
(D60130)
Diploma Program

Career Information
The Collision Repair and Refinishing Technology curriculum prepares individuals to become qualified technicians who possess the diverse skills required to perform quality repairs and proper refinishing techniques on automobile bodies and to diagnose and repair mechanical and electrical systems. Coursework includes classroom and laboratory experiences that integrate technical application with academic theory. Emphasis is placed on autobody fundamentals, painting and refinishing, structural and non-structural damage repair, mechanical and electrical component repair or replacement, and common industry practices. Graduates should be qualified to take National Institute for Automotive Service Excellence (ASE) certification examinations and also for entry-level employment in automotive dealerships, independent repair shops, or through self-employment, as collision repair and refinishing technicians.

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>AUB 111</td>
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<td>AUB 121</td>
<td>Non-Structural Damage I</td>
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<td>AUB 131</td>
<td>Structural Damage I</td>
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<tr>
<td>AUB 134</td>
<td>Autobody MIG Welding</td>
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<td>ENG 102</td>
<td>Applied Communications II</td>
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Spring Semester I

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<td>AUB 112</td>
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<td>AUB 114</td>
<td>Special Finishes</td>
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<td>AUB 132</td>
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<td>MAT 101</td>
<td>Applied Math I</td>
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Summer Semester I

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<td>AUB 136</td>
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<td>AUB 141</td>
<td>Mechanical &amp; Elec. Components</td>
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<td>AUB 162</td>
<td>Autobody Estimating</td>
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<td>CIS 113</td>
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Total Hours 50 43
Collision Repair and Refinishing Technology  
(C60130)  
Certificate Program

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<th>Course Title</th>
<th>Credits</th>
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<td>AUB 121</td>
<td>Non-Structural Damage I</td>
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<td>AUB 131</td>
<td>Structural Damage I</td>
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<tr>
<td>AUB 134</td>
<td>Autobody MIG Welding</td>
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Satisfy one of the following options:

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<tbody>
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<tr>
<td>AUB 136</td>
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And

<table>
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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>Computer Basics</td>
<td>0</td>
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</tbody>
</table>

Total Hours: 7/8 24 18
Computer Information Technology (A252606)
Associate’s Degree Program

Career Information
The Computer Information Technology curriculum is designed to prepare graduates for employment with organizations that use computers to process, manage, and communicate information. This is a flexible curriculum that can be customized to meet community information systems needs. Course work will develop a student’s ability to communicate complex technical issues related to computer hardware, software, and networks in a manner that computer users can understand. Classes cover computer operations and terminology, operating systems, database, networking, security, and technical support. Graduates should qualify for employment in entry-level positions with businesses, educational systems, and governmental agencies which rely on computer systems to manage information. Graduates should be prepared to sit for industry-recognized certification exams.

Fall Semester I

<table>
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<th>Title</th>
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<td>CIS 115</td>
<td>Programming/Logic Concepts</td>
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<td>DBA 110</td>
<td>Database Concepts</td>
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<td>ENG 111</td>
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<td>or</td>
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Semester Total 11/10 12/14 16

Spring Semester I

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<td>BUS 110</td>
<td>Introduction to Business</td>
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<td>COM 120</td>
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<td>DBA 115</td>
<td>Database Applications</td>
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<tr>
<td>ENG 113</td>
<td>Literature-Based Research</td>
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<td>Professional Research &amp; Report</td>
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<td>NOS 110</td>
<td>Operating System Concepts</td>
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<td>Social Science Elective</td>
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**Summer Semester I**

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**Fall Semester II**

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<td>Windows Single User</td>
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**Spring Semester II**

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<td>Adv Hard/Software Support</td>
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<td>CTS 289</td>
<td>System Support Project</td>
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**Major Electives**

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Total Hours 57/56 43/45 76
### Computer Information Technology (D252606)

**Diploma Program**

#### Fall Semester I

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Cooperative Education (up to 4 hours)
### Computer Information Technology - Database Specialist (C25260D) Certificate Program

**Fall Semester I**

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**Total Semester Hours**: 12, 13, 18

### Computer Information Technology - Software Specialist (C2526O6S) Certificate Program

**Fall Semester I**

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<tr>
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<td>Tech Support Functions</td>
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<td>Computer Training/Support</td>
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<td>DBA 115</td>
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**Total Semester Hours**: 12, 13, 18
Computer Programming (A25130)
Associate’s Degree Program

Career Information
The Computer Programming curriculum prepares individuals for employment as computer programmers and related positions through study and applications in computer concepts, logic, programming procedures, languages, generators, operating systems, networking, data management, and business operations. Students will solve business computer problems through programming techniques and procedures, using appropriate languages and software. The primary emphasis of the curriculum is hands-on training in programming and related computer areas that provide the ability to adapt as systems evolve. Graduates should qualify for employment in business, industry, and government organizations as programmers, programmer trainees, programmer/analysts, software developers, computer operators, systems technicians, database specialists, computer specialists, software specialists, or information systems managers.

Fall Semester I
CIS 110 Introduction to Computers 2 2 3
CIS 115 Programming/Logic Concepts 2 3 3
DBA 110 Database Concepts 2 3 3
ENG 111 Expository Writing 3 0 3
ENG 111A Expository Writing Lab 0 2 1
NET 110 Networking Concepts 2 2 3
or
NET 125 Networking Basics 1 4 3
Semester Total 10/11 12/14 16

Spring Semester I
COM 120 Intro Interpersonal Communication 3 0 3
CSC 139 Visual Basic Programming 2 3 3
CTS 115 IS Business Concepts 3 0 3
or
BUS 110 Introduction to Business 3 0 3
ENG 113 Literature-Based Research 3 0 3
or
ENG 114 Professional Research & Reporting 3 0 3
NOS 110 Operating System Concepts 2 3 3
Semester Total 13 6 15

Summer Semester I
MAT 115 Mathematical Models 2 2 3
Humanities/Fine Arts Elective 3 0 3
Semester Total 5 2 6

125
## Fall Semester II

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<td>C# Programming</td>
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<td>Systems Analysis &amp; Design</td>
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<td>SEC 110</td>
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<td>NOS 120</td>
<td>Linux/UNIX Single User</td>
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*Major Elective 3

**Semester Totals** 18

## Spring Semester II

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<td>CSC 253</td>
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<td>CSC 289</td>
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*Major Elective 3

**Social Science Elective 3**

**Semester Totals** 18

**Total Hours** 73

*Major Electives (must choose at least one NOS course):*

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<tr>
<td>BUS 240</td>
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<tr>
<td>CTS 120</td>
<td>Hardware/Software Support</td>
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<td>Database Applications</td>
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<td>NOS 220</td>
<td>Linus/UNIX Admin I</td>
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<td>NOS 230</td>
<td>Windows Admin I</td>
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<td>WEB 110</td>
<td>Web/Internet Fundamentals</td>
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<td>Web Markup and Scripting</td>
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Cooperative Education (up to 8)

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### Computer Programming (D25130)

**Diploma Program**

#### Fall Semester I

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<td>CIS 115</td>
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<td>Database Concepts</td>
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<td>NET 110</td>
<td>Networking Concepts</td>
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or

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126
NET 125 Networking Basics  1  4  3
SEC 110 Security Concepts  3  0  3
Semester Total 10/11 10/12 15

Spring Semester I
CSC 139 Visual BASIC Programming  2  3  3
DBA 115 Database Applications  2  2  3
NOS 110 Operating System Concepts  2  3  3
*Major Elective  2  2  3
*Major Elective  2  2  3
Semester Total 10 12 15

Summer Semester I
COM 120 Intro Interpersonal Communication  3  0  3
ENG 111 Expository Writing  3  0  3
ENG 111A Expository Writing Lab  0  2  1
Semester Total 6 2 7
Total Hours 26/27 24/26 37

*Major Elective
BUS 240 Business Ethics  3  0  3
CSC 151 Java Programming  2  3  3
CSC 251 Advanced Java Programming  2  3  3
CSC 153 C# Programming  2  3  3
Cooperative Education (up to 4 hours)

Computer Programming - C# (C25130C)
Certificate Program

Fall Semester I
CIS 110 Intro to Computers  2  2  3
CIS 115 Programming/Logic Concepts  2  3  3
CSC 153 C# Programming  2  3  3
NET 110 Networking Concepts  2  2  3
or
NET 125 Networking Basics  1  4  3
Semester Total 7/8 10/12 12

Spring Semester I
CSC 253 Advanced C# Programming  2  3  3
NOS 110 Operating System Concepts  2  3  3
Semester Total 4 6 6
Total Semester Hours 11/12 16/18 18
### Computer Programming - Java (C25130J)

**Certificate Program**

**Fall Semester I**

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<td>NET 110</td>
<td>Networking Concepts</td>
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Semester Total: 7/8 10/12 12

**Spring Semester I**

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Semester Total: 4 6 6

Total Semester Hours: 11/12 16/18 18

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### Computer Programming - Visual BASIC (C25130V)

**Certificate Program**

**Fall Semester I**

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Semester Total: 7/8 10/12 12

**Spring Semester I**

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Semester Total: 4 6 6

Total Semester Hours: 11/12 16/18 18
Cosmetology (D55140)
Diploma Program (1500 hours)

Career Information
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.

Special Admission Requirements
- Application
- Adult high school diploma or GED
- Interview with program coordinator
- High school transcript
- Transcripts of college work
- Reading placement test

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<tbody>
<tr>
<td>COS 111</td>
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<td>Applied Communications II</td>
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## Cosmetology Certificate (C55140)

**Certificate Program (1200 hours)**

### Fall Semester

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</table>

### Spring Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COS 113</td>
<td>Cosmetology Concepts II</td>
<td>4</td>
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<tr>
<td>COS 114</td>
<td>Salon II</td>
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<tr>
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### Summer Semester

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>COS 115</td>
<td>Cosmetology Concepts III</td>
<td>4</td>
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<tr>
<td>COS 116</td>
<td>Salon III</td>
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</tbody>
</table>

Total Hours: 12 60 32

## Cosmetology Instructor Certificate (C55160)

**Certificate Program**

### Career Information

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. A certificate will be awarded upon successful completion (2.0 GPA) of a minimum of 24 credit hours from requirements listed below.

<table>
<thead>
<tr>
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<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>COS 271</td>
<td>Instructor Concepts I</td>
<td>5</td>
</tr>
<tr>
<td>COS 272</td>
<td>Instructor Practicum I</td>
<td>0</td>
</tr>
<tr>
<td>COS 273</td>
<td>Instructor Concepts II</td>
<td>5</td>
</tr>
<tr>
<td>COS 274</td>
<td>Instructor Practicum II</td>
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</tr>
<tr>
<td>Total Hours</td>
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Total Hours: 10 42 24
Manicure Instructor Certificate (C55380)
Certificate Program

Career Information
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. A certificate will be awarded upon successful completion (2.0 GPA) of a minimum of 13 credit hours from requirements listed below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COS 251</td>
<td>Manicure Instructors' Concepts</td>
<td>8</td>
</tr>
<tr>
<td>COS 252</td>
<td>Manicure Instructors' Practicum</td>
<td>0</td>
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Manicuring/Nail Technology Certificate (C55400)
Certificate Program

Career Information
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 prepare 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, in related businesses. A certificate will be awarded upon successful completion (2.0 GPA) of a minimum of 12 credit hours from requirements listed below.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>COS 121</td>
<td>Manicure/Nail Technology I</td>
<td>4</td>
</tr>
<tr>
<td>COS 222</td>
<td>Manicure/Nail Technology II</td>
<td>4</td>
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<td><strong>Total Hours</strong></td>
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Career Information
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.

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CUL</td>
<td>110</td>
<td>Sanitation and Safety</td>
<td>2</td>
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<tr>
<td>CUL</td>
<td>110A</td>
<td>Sanitation and Safety Lab</td>
<td>0</td>
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<tr>
<td>CUL</td>
<td>112</td>
<td>Nutrition for Food Service</td>
<td>3</td>
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<tr>
<td>CUL</td>
<td>120</td>
<td>Purchasing</td>
<td>2</td>
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<tr>
<td>CUL</td>
<td>140</td>
<td>Culinary Skills I</td>
<td>2</td>
</tr>
<tr>
<td>ENG</td>
<td>111</td>
<td>Expository Writing</td>
<td>3</td>
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<tr>
<td>ENG</td>
<td>111A</td>
<td>Expository Writing Lab</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
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<td>Total Semester</td>
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</table>

Total Semester 12 10 17
### Spring Semester I

<table>
<thead>
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<th>Course</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>CUL 135</td>
<td>Food and Beverage Service</td>
<td>2</td>
</tr>
<tr>
<td>CUL 135A</td>
<td>Food and Beverage Service Lab</td>
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</tr>
<tr>
<td>CUL 150</td>
<td>Food Science</td>
<td>1</td>
</tr>
<tr>
<td>CUL 160</td>
<td>Baking I</td>
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<tr>
<td>CUL 160A</td>
<td>Baking I Lab</td>
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</tr>
<tr>
<td>CUL 170</td>
<td>Garde Manger I</td>
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</tr>
<tr>
<td>CUL 170A</td>
<td>Garde Manger I Lab</td>
<td>0</td>
</tr>
<tr>
<td>ENG 114</td>
<td>Professional Research and Reporting</td>
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**Total Semester**: 8 18 16

### Summer Semester I

<table>
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<th>Credits</th>
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<tbody>
<tr>
<td>COE 112</td>
<td>Co-op Work Experience I</td>
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<tr>
<td></td>
<td>Social/Behavioral Science Elective</td>
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<tr>
<td></td>
<td>Humanities/Fine Arts Elective</td>
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**Total Semester**: 6 20 8

### Fall Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>BUS 230</td>
<td>Small Business Management</td>
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<tr>
<td>CUL 240</td>
<td>Culinary Skills II</td>
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<td>CUL 240A</td>
<td>Culinary Skills II Lab</td>
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<tr>
<td>CUL 270</td>
<td>Garde Manger II</td>
<td>1</td>
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<tr>
<td>CUL 270A</td>
<td>Garde Manger II Lab</td>
<td>0</td>
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<tr>
<td></td>
<td>Catering Cuisine</td>
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<tr>
<td>MAT 115</td>
<td>Mathematical Models</td>
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**Total Semester**: 7 20/21 16/17

### Spring Semester II

<table>
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<td>CUL 230A</td>
<td>Global Cuisines Lab</td>
<td></td>
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<tr>
<td></td>
<td>Contemporary Cuisines</td>
<td>1</td>
</tr>
<tr>
<td>CUL 260</td>
<td>Baking II</td>
<td></td>
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<tr>
<td>CUL 260A</td>
<td>Baking II Lab</td>
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<tr>
<td></td>
<td>Pastry &amp; Confections</td>
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<td>CUL 280</td>
<td>Pastry &amp; Confections Lab</td>
<td>0</td>
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<tr>
<td>COM 120</td>
<td>Intro Interpersonal Communication</td>
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</tr>
<tr>
<td>HRM 245</td>
<td>Human Resource Management Hospitality</td>
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</table>

**Total Semester**: 8 18 16

**Total**: 41 86/87 73/74
Early Childhood Education (A552204)
Associate’s Degree Program

Career Information
The Early Childhood Associate curriculum prepares individuals to work with children from infancy through middle childhood 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 parents 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.

Fall Semester I

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDU 119</td>
<td>Intro to Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>EDU 131</td>
<td>Child, Family, &amp; Community</td>
<td>3</td>
</tr>
<tr>
<td>EDU 144</td>
<td>Child Development I</td>
<td>3</td>
</tr>
<tr>
<td>EDU 146</td>
<td>Child Guidance</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts</td>
<td></td>
<td>3</td>
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<tr>
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Spring Semester I

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<tbody>
<tr>
<td>CIS 110</td>
<td>Intro to Computers</td>
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<tr>
<td>EDU 184</td>
<td>Early Childhood Intro Practicum</td>
<td>1</td>
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<tr>
<td>EDU 145</td>
<td>Child Development II</td>
<td>3</td>
</tr>
<tr>
<td>EDU 153</td>
<td>Health, Safety, &amp; Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>Expository Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111A</td>
<td>Expository Writing Lab</td>
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<tr>
<td>Semester Total</td>
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Summer Semester I
EDU 221 Children w/Exceptionalities 3 0 3
ENG 113 Literature-Based Research
or
ENG 114 Prof Research & Reporting 3 0 3
*Math/Science Elective 2/3 2/3 3/4
Semester Total 8/9 2/3 9/10

Fall Semester II
COM 120 Intro Interpersonal Communication
or
COM 231 Public Speaking 3 0 3
EDU 151 Creative Activities 3 0 3
EDU 259 Curriculum Planning 3 0 3
EDU 261 Early Childhood Administration I 3 0 3
EDU 271 Educational Technology 2 2 3
PSY 150 General Psychology 3 0 3
Semester Total 17 2 18

Spring Semester II
EDU 251 Exploration Activities 3 0 3
EDU 262 Early Childhood Administration II 3 0 3
EDU 280 Language & Literacy Experiences 3 0 3
EDU 284 Early Childhood Capstone Practicum 1 9 4
*Social Science or EDU Elective 3 0 3
Semester Total 13 9 16
Total Hours 66/67 20/21 74/75

*Math/Science Elective
BIO 110 Principles of Biology 3 3 4
BIO 140 Environmental Biology 3 0 3
BIO 140A Environmental Biology Lab 0 3 1
MAT 115 Mathematical Models 2 2 3
MAT 140 Survey of Mathematics 3 0 3
MAT 140A Survey of Mathematics Lab 0 2 1
MAT 171 Precalculus Algebra 3 0 3
MAT 171A Precalculus Algebra 0 2 1

*Social Science or EDU Elective
SOC 213 Sociology of the Family 3 0 3
EDU 234 Infants, Toddler, and Twos 3 0 3
EDU 235 School-Age Dev. & Prog 3 0 3
# Early Childhood Education (D552204)

(Formerly D55220 for Early Childhood Education Diploma)

Diploma Program

**Fall Semester I**

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 119</td>
<td>Intro to Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>EDU 144</td>
<td>Child Development I</td>
<td>3</td>
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<tr>
<td>EDU 146</td>
<td>Child Guidance</td>
<td>3</td>
</tr>
<tr>
<td>EDU 151</td>
<td>Creative Activities</td>
<td>3</td>
</tr>
<tr>
<td>EDU 259</td>
<td>Curriculum Planning</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>EDU 261 Early Childhood Administration I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>EDU 271 Educational Technology</td>
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**Semester Total**

| | 18 | 2 | 19 |

**Spring Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<tbody>
<tr>
<td>EDU 131</td>
<td>Child, Family, &amp; Community</td>
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<td>EDU 145</td>
<td>Child Development II</td>
<td>3</td>
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<tr>
<td>EDU 153</td>
<td>Health, Safety, and Nutrition</td>
<td>3</td>
</tr>
<tr>
<td>EDU 184</td>
<td>Early Childhood Intro Practicum</td>
<td>3</td>
</tr>
<tr>
<td>EDU 251</td>
<td>Exploration Activities</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>EDU 262 Early Childhood Administration II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>EDU 280 Language &amp; Literacy Experiences</td>
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</table>

**Semester Total**

| | 16 | 3 | 17 |

**Summer Semester I**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>EDU 221</td>
<td>Children w/Exceptionalities</td>
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<tr>
<td>ENG 111</td>
<td>Expository Writing</td>
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</tr>
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<td>ENG 111A</td>
<td>Expository Writing Lab</td>
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</tr>
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<td>2/3</td>
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</table>

**Semester Total**

| | 8/9 | 4/5 | 10/11 |

**Total Hours**

| | 42/43 | 9/10 | 46/47 |

---

*Math/Science Elective*

<table>
<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIO 110</td>
<td>Principles of Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 140</td>
<td>Environmental Biology</td>
<td>3</td>
</tr>
<tr>
<td>BIO 140A</td>
<td>Environmental Biology Lab</td>
<td>0</td>
</tr>
<tr>
<td>MAT 115</td>
<td>Mathematical Models</td>
<td>2</td>
</tr>
<tr>
<td>MAT 140</td>
<td>Survey of Mathematics</td>
<td>3</td>
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<tr>
<td>MAT 140A</td>
<td>Survey of Mathematics Lab</td>
<td>0</td>
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<tr>
<td>MAT 171</td>
<td>Precalculus Algebra</td>
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<td>MAT 171A</td>
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Child Care Operator (C55220CC)
Certificate Program

<table>
<thead>
<tr>
<th>Fall Semester I</th>
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</thead>
<tbody>
<tr>
<td>EDU 119 Intro to Early Childhood Education 4 0 4</td>
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<tr>
<td>EDU 144 Child Development I</td>
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<tr>
<td>or</td>
</tr>
<tr>
<td>EDU 145 Child Development II 3 0 3</td>
</tr>
<tr>
<td>EDU 261 Early Childhood Administration I 3 0 3</td>
</tr>
<tr>
<td>Semester Total 10 0 10</td>
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<table>
<thead>
<tr>
<th>Spring Semester I</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 146 Child Guidance 3 0 3</td>
</tr>
<tr>
<td>EDU 184 Early Childhood Intro to Practicum 1 3 2</td>
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<td>EDU 262 Early Childhood Administration II 3 0 3</td>
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<tr>
<td>Semester Total 7 3 8</td>
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Infant/Toddler (C55220IT)
Certificate Program

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<tbody>
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<td>EDU 119 Intro to Early Childhood Education 4 0 4</td>
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<tr>
<td>EDU 131 Child, Family, and Community 3 0 3</td>
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<td>EDU 144 Child Development I 3 0 3</td>
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<tr>
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<table>
<thead>
<tr>
<th>Spring Semester I</th>
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</thead>
<tbody>
<tr>
<td>EDU 153 Health, Safety, &amp; Nutrition 3 0 3</td>
</tr>
<tr>
<td>EDU 184 Early Childhood Intro Practicum 1 3 2</td>
</tr>
<tr>
<td>EDU 234 Infant, Toddlers, and Twos 3 0 3</td>
</tr>
<tr>
<td>Semester Total 7 3 8</td>
</tr>
<tr>
<td>Total Hours 17 3 18</td>
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</table>

School-Age Provider (C55220SA)
Certificate Program

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<th>Fall Semester I</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU 131 Child, Family, and Community 3 0 3</td>
</tr>
<tr>
<td>EDU 146 Child Guidance 3 0 3</td>
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<tr>
<td>Elective EDU 119, 151, 153, 251 or 280</td>
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</tr>
<tr>
<td>Semester Total</td>
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### Spring Semester

<table>
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<th>Course Title</th>
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<tbody>
<tr>
<td>EDU 184</td>
<td>Early Childhood Intro Practicum</td>
<td>1</td>
</tr>
<tr>
<td>EDU 145</td>
<td>Child Development II</td>
<td>3</td>
</tr>
<tr>
<td>EDU 235</td>
<td>School Age Dev. and Programming</td>
<td>3</td>
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<tr>
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### Teacher/Caregiver (C55220TC)

**Certificate Program**

#### Fall Semester I

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<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
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<td>Intro to Early Childhood Education</td>
<td>4</td>
</tr>
<tr>
<td>EDU 144</td>
<td>Child Development I</td>
<td></td>
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<tr>
<td>or</td>
<td>EDU 145 Child Development II</td>
<td>3</td>
</tr>
<tr>
<td>EDU 146</td>
<td>Child Guidance</td>
<td>3</td>
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#### Spring Semester I

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Electrical/Electronics Technology (A35220)
Associate’s Degree Program

Career Information
The Electrical/Electronics Technology curriculum is designed to provide training for persons interested in the installation and maintenance of electrical/electronic systems found in residential, commercial and industrial facilities. Course work, most of which is hands-on, will include such topics as AC/DC theory, basic wiring practices, electronics, 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/electronics field as an on-the-job trainee or apprentice assisting in the layout, installation, and maintenance of electrical/electronic systems.

Fall Semester I

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<td>ELN 131</td>
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*Major Electives*

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### Electrical/Electronics Technology

#### Diploma Program

**Fall Semester II**

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**Semester Total** 10/11 13/18 16/17

**Spring Semester I**

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**Semester Total** 8/10 15 14/16

**Summer Semester I**

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**Semester Total** 6 8/11 9/10

**Total Hours** 24/27 36/44 39/43
## Electrical/Electronics Technology

### Electrical Controls (C35220C)

#### Certificate Program

**Fall I**

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**Spring I**

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<tr>
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Electronics Engineering Technology (A40200)
Associate's Degree Program

Career Information
The Electronic Engineering Technology curriculum prepares individuals 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. A broad-based core of courses, including basic electricity, solid-state fundamental, digital concepts, and microprocessors, ensures the student will develop the skills necessary to perform entry-level tasks. Emphasis is placed on developing the student’s ability to analyze and troubleshoot electronic systems. Graduates should qualify for employment as engineering assistants or electronic technicians with job titles such as electronics engineering technician, field service technician, maintenance technician, electronic tester, electronic systems integrator, bench technician, and production control technician.

Fall Semester I
CIS 110 Introduction to Computers 2 2 3
ELC 131 DC/AC Circuit Analysis 4 3 5
ENG 111 Expository Writing 3 0 3
ENG 111A Expository Writing Lab 0 2 1
MAT 121 Algebra/Trigonometry I 2 2 3
or
MAT 171 Precalculus Algebra 3 0 3
MAT 171A Precalculus Algebra Lab 0 2 1
Semester Total 11/12 9 15/16

Spring Semester I
ELN 131 Semiconductor Applications 3 3 4
ELN 133 Digital Electronics 3 3 4
ENG 113 Literature Based Research 3 0 3
or
ENG 114 Professional Research & Report Major Elective 1/4 1/4 3/4
Semester Total 10/13 7/10 14/15

Summer Semester I
DFT 151 CAD I 2 3 3
ELN 231 Industrial Controls 2 3 3
HYD 110 Hydraulics Pneumatics I 2 3 3
Major Elective 1/4 1/4 3/4
Semester Total 7/10 10/13 12/13
### Fall Semester II

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<td>Networking Concepts</td>
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### Spring Semester II

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<td>Home Automation Systems</td>
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Emergency Preparedness Technology (A55420)

Associate’s Degree Program

Career Information
The Emergency Preparedness Technology 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 online 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 within their current organizations.

Fall Semester I

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Spring Semester I

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 Semester Total 12  2  13
CIS 110 Introduction to Computers  
ENG 113 Literature-Based Research  
or  
ENG 114 Professional Research & Report  
EPT 130 Mitigation & Preparedness  
FIP 256 Municipal Public Relations  
Track Elective  
Semester Total 13/14 2 14/15  

Summer Semester I  
EPT 120 Sociology of Disaster  
FIP 228 Local Gov’t Finance  
EPT 220 Terrorism & EM  
Humanities/Fine Arts Elective  
Semester Total 12 0 12  

Fall Semester II  
EPT 225 Hazard Analysis & Risk Assessment  
EPT 230 Emergency Planning  
COM 120 Intro Interpersonal Communication  
or  
COM 231 Public Speaking  
MAT 115 Mathematical Models  
or  
MAT 140 Survey of Mathematics  
MAT 140A Survey of Mathematics Lab  
Track Elective  
Semester Total 14/15 2 15/16  

Spring Semester II  
EPT 210 Response & Recovery  
EPT 260 Business Continuity  
EPT 275 Emergency OPS Center Mgt.  
Social Science Elective  
Track Elective  
Semester Total 15 0 15  
Total Hours 66/68 4/6 69/71  

Students will choose 9 semester credit hours from only one of the following tracks to fulfill the major electives for the Emergency Preparedness Technology degree.  

Fire Protection Track Electives  
FIP 120 Introduction to Fire Protection 3 0 3  

146
### FIP 136 Inspections & Codes 3 0 3
### FIP 152 Fire Protection Law 3 0 3
### FIP 164 OSHA Standards 3 0 3
### FIP 176 Hazmat: Operations 4 0 4
### FIP 230 Chem. Of Hazardous Mat I 5 0 5
### FIP 240 Fire Service Supervision 3 0 3
### FIP 276 Managing Fire Services 3 0 3

**Criminal Justice Track Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CJC 111</td>
<td>Intro to Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJC 112</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>CJC 113</td>
<td>Juvenile Justice</td>
<td>3</td>
</tr>
<tr>
<td>CJC 131</td>
<td>Criminal Law</td>
<td>3</td>
</tr>
<tr>
<td>CJC 215</td>
<td>organization &amp; Administration</td>
<td>3</td>
</tr>
<tr>
<td>CJC 231</td>
<td>Constitutional Law</td>
<td>3</td>
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### EPT Response & Recovery (C55420R)

**Certificate Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPT 120</td>
<td>Sociology of Disaster</td>
<td>3</td>
</tr>
<tr>
<td>EPT 150</td>
<td>Incident Management</td>
<td>3</td>
</tr>
<tr>
<td>EPT 210</td>
<td>Response &amp; Recovery</td>
<td>3</td>
</tr>
<tr>
<td>EPT 260</td>
<td>Business Continuity</td>
<td>3</td>
</tr>
<tr>
<td>EPT 275</td>
<td>Emergency OPS Center Mgmt.</td>
<td>3</td>
</tr>
<tr>
<td>FIP 256</td>
<td>Municipal Public Relations</td>
<td>3</td>
</tr>
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<td><strong>Total Hours</strong></td>
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### EPT Preparedness & Mitigation (C55420P)

**Certificate Program**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPT 124</td>
<td>EM Service Law &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>EPT 130</td>
<td>Mitigation &amp; Preparedness</td>
<td>3</td>
</tr>
<tr>
<td>EPT 220</td>
<td>Terrorism &amp; Emergency Mgmt.</td>
<td>3</td>
</tr>
<tr>
<td>EPT 230</td>
<td>Emergency Planning</td>
<td>3</td>
</tr>
<tr>
<td>FIP 228</td>
<td>Local Gov’t Finance</td>
<td>3</td>
</tr>
<tr>
<td>FIP 236</td>
<td>Emergency Management</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Hours</strong></td>
<td></td>
<td><strong>18</strong> 0 18</td>
</tr>
</tbody>
</table>
Associate in General Education (A10300)
Associate's Degree Program

The Associate in General Education curriculum is designed for the academic enrichment of students who wish to broaden their education, with emphasis on personal interest, growth and development. Course work includes study in the areas of humanities and fine arts, social and behavioral sciences, natural sciences and mathematics, and English composition. Opportunities for the achievement of competence in reading, writing, oral communication, fundamental mathematical skills, and the basic use of computers will be provided. Through these skills, students will have a sound base for lifelong learning. Graduates are prepared for advancements within their field of interest and become better qualified for a wide range of employment opportunities. Many of the courses are equivalent to college transfer courses; however, the program is not principally designed for college transfer.

General Education Core

English Composition (10 SHC)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>Expository Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111A</td>
<td>Expository Writing Lab</td>
<td>0</td>
</tr>
<tr>
<td>ENG 113</td>
<td>Literature-Based Research</td>
<td>2</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 114</td>
<td>Professional Research &amp; Reporting</td>
<td>3</td>
</tr>
<tr>
<td>COM 120</td>
<td>Intro Interpersonal Communication</td>
<td>3</td>
</tr>
</tbody>
</table>

Humanities/Fine Arts (3 SHC)
Select courses from the following discipline areas: music, art, drama, dance, foreign languages, interdisciplinary humanities, literature, philosophy, and religion.

Social/Behavioral Sciences (3 SHC)
Select courses from the following discipline areas: anthropology, economics, geography, history, political science, psychology, and sociology.

Mathematics or Natural Sciences (3 SHC)
Select courses from the following discipline areas: astronomy, biology, chemistry, earth sciences, mathematics, or physics.

Other Required Hours (46-47 SHC)
Other required hours include additional general education and professional courses.

Total Semester Hours Credit (SHC) in program: 64/65
General Occupational Technology (A55280)  
Associate's Degree Program

The General Occupational Technology curriculum provides individuals with an opportunity to upgrade their skills and to earn their associate degrees by taking courses suited for their occupational interests and/or needs. The curriculum content will be individualized for students according to their occupational interests and needs. A program of study for each student will be selected from associate degree-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.

Minimum General Education Courses (20-23 Hours required):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>Expository Writing</td>
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</tr>
<tr>
<td>ENG 111A</td>
<td>Expository Writing Lab</td>
<td>0</td>
</tr>
<tr>
<td>ENG 113</td>
<td>Literature-Based Research</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 114</td>
<td>Professional Research &amp; Reporting</td>
<td>3</td>
</tr>
<tr>
<td>COM 120</td>
<td>Intro Interpersonal Communication</td>
<td>3</td>
</tr>
<tr>
<td>or COM 231</td>
<td>Public Speaking</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Social Sciences</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Mathematics/Natural Sciences</td>
<td></td>
<td>3/4</td>
</tr>
<tr>
<td>CIS 110</td>
<td>Introduction to Computers</td>
<td>2</td>
</tr>
<tr>
<td>or CIS 111</td>
<td>Basic PC Literacy</td>
<td>1</td>
</tr>
<tr>
<td>or CIS 113</td>
<td>Computer Basics</td>
<td>0</td>
</tr>
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</table>

Other Program Courses (44-53 Hours required):

Other major courses are chosen from courses required by curriculum offered by the college. The course selection process will utilize the College’s Procedural Guidelines for this Associate degree program.

The first step in the planning and development of a curriculum Plan of Study for this Associate degree program is to meet with the professional staff located in Student Services.

Total Required Credit Hours for AAS Degree: 64-76
**General Occupational Technology (D55280)**

**Diploma Program**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>General Education Hours</td>
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<td>Other Major/Required Hours</td>
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<tr>
<td>Other Required Hours</td>
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<td><strong>Total Hours</strong></td>
<td><strong>37-48</strong></td>
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</table>

**General Education Courses**

Must Select: (7 hours)

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<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>Expository Writing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111A</td>
<td>Expository Writing Lab</td>
<td>0</td>
</tr>
<tr>
<td>COM 120</td>
<td>Intro Interpersonal Communication</td>
<td>2</td>
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<tr>
<td>or</td>
<td>Public Speaking</td>
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**Other Major/Required Courses (choose 30 hrs.)**

<table>
<thead>
<tr>
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<th>Course Title</th>
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<tr>
<td>BIO 163</td>
<td>Basic Anatomy and Physiology</td>
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<tr>
<td>BIO 168</td>
<td>Anatomy and Physiology I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 169</td>
<td>Anatomy and Physiology II</td>
<td>3</td>
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<tr>
<td>BIO 275</td>
<td>Microbiology</td>
<td>3</td>
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<tr>
<td>CHM 151</td>
<td>General Chemistry I</td>
<td>3</td>
</tr>
<tr>
<td>CIS 111</td>
<td>Basic PC Literacy</td>
<td>1</td>
</tr>
<tr>
<td>or</td>
<td>Computer Basics</td>
<td>0</td>
</tr>
<tr>
<td>ENG 113</td>
<td>Literature-Based Research</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td>Professional Research &amp; Report</td>
<td>3</td>
</tr>
<tr>
<td>MAT 151</td>
<td>Statistics</td>
<td>3</td>
</tr>
<tr>
<td>MAT 151A</td>
<td>Statistics Lab</td>
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<tr>
<td>MED 121</td>
<td>Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>PHY 110</td>
<td>Conceptual Physics</td>
<td>3</td>
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<tr>
<td>PSY 150</td>
<td>General Psychology</td>
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<tr>
<td>PSY 237</td>
<td>Social Psychology</td>
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<tr>
<td>PSY 241</td>
<td>Developmental Psychology</td>
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<td>PSY 281</td>
<td>Abnormal Psychology</td>
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</table>

Refer to specific AAS program in Health Sciences for the appropriate Major and/or Required courses.

**Total Required Credit Hours for Diploma:** 37
Landscape Gardening (A15260)
Associate's Degree Program

Career Information
The Landscape Gardening curriculum emphasizes intensive, practical, hands-on training in applied horticulture to reinforce classroom lecture on theory and technique. Course work includes plant propagation, greenhouse and nursery plant culture, turf management, plant identification, arboriculture, diseases and pests of plants, and landscape planning, maintenance, and construction. Graduates will be prepared for employment opportunities in applied horticulture related to landscape development and maintenance for residential and commercial operations. Graduates should be prepared to take the North Carolina Pesticide Applicator’s Examination and the North Carolina Certified Plant Professional Examination.

Fall Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 113</td>
<td>0 2 1</td>
<td>Computer Basics</td>
</tr>
<tr>
<td>ENG 111</td>
<td>3 0 3</td>
<td>Expository Writing</td>
</tr>
<tr>
<td>ENG 111A</td>
<td>0 2 1</td>
<td>Expository Writing Lab</td>
</tr>
<tr>
<td>LSG 111</td>
<td>2 0 2</td>
<td>Basic Landscape Techniques</td>
</tr>
<tr>
<td>LSG 121</td>
<td>0 6 2</td>
<td>Fall Gardening Lab</td>
</tr>
<tr>
<td>MAT 121</td>
<td>2 2 3</td>
<td>Algebra/Trigonometry I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Social Science Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Humanities/Fine Arts Elective</td>
</tr>
<tr>
<td></td>
<td>13 12 18</td>
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</table>

Spring Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>COE 111</td>
<td>0 10 1</td>
<td>LSG Co-op Work Experience I</td>
</tr>
<tr>
<td>ENG 114</td>
<td>3 0 3</td>
<td>Prof. Research and Reporting</td>
</tr>
<tr>
<td>Hor 114</td>
<td>2 2 3</td>
<td>Landscape Construction</td>
</tr>
<tr>
<td>Hor 134</td>
<td>2 2 3</td>
<td>Greenhouse Operations</td>
</tr>
<tr>
<td>Hor 160</td>
<td>2 2 3</td>
<td>Plant Materials I</td>
</tr>
<tr>
<td>Hor 162</td>
<td>2 2 3</td>
<td>Applied Plant Science</td>
</tr>
<tr>
<td>LSG 122</td>
<td>0 6 2</td>
<td>Spring Gardening Lab</td>
</tr>
<tr>
<td>TRF 110</td>
<td>3 2 4</td>
<td>Intro Turfgrass Culture and ID</td>
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<tr>
<td></td>
<td>14 26 22</td>
<td>Semester Total</td>
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Summer Semester I

<table>
<thead>
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<tbody>
<tr>
<td>COE 121</td>
<td>0 10 1</td>
<td>LSG Co-op Work Experience II</td>
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<tr>
<td>LSG 232</td>
<td>1 2 2</td>
<td>Garden Management</td>
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<tr>
<td>Hor 164</td>
<td>2 2 3</td>
<td>Horticulture Pest Management</td>
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<tr>
<td>Hor 257</td>
<td>1 3 2</td>
<td>Arboriculture Practices</td>
</tr>
<tr>
<td>Hor 260</td>
<td>2 2 3</td>
<td>Plant Materials II</td>
</tr>
<tr>
<td>LSG 123</td>
<td>0 6 2</td>
<td>Summer Gardening Lab</td>
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151
### Fall Semester II

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<tr>
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<tr>
<td>BUS 230</td>
<td>Small Business Management</td>
<td>3</td>
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<td>or</td>
<td>BUS 137 Principles of Management</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>COE 131</td>
<td>LSG Co-op Work Experience III</td>
<td>0</td>
<td>10</td>
<td>1</td>
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<tr>
<td>COM 120</td>
<td>Intro Interpersonal Communication</td>
<td>3</td>
<td>0</td>
<td>3</td>
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<tr>
<td>LSG 231</td>
<td>Landscape Supervision</td>
<td>2</td>
<td>6</td>
<td>4</td>
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<tr>
<td>Hor 112</td>
<td>Landscape Design I</td>
<td>2</td>
<td>3</td>
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Elective from list below

Students must take a minimum of 3 credit hours from the following list of electives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hor 118</td>
<td>Equipment Op &amp; Maint</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Hor 166</td>
<td>Soil and Fertilizer</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td></td>
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<tr>
<td>Hor 168</td>
<td>Plant Propagation</td>
<td>2</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Hor 213</td>
<td>Landscape Design II</td>
<td>2</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Hor 215</td>
<td>Landscape Irrigation</td>
<td>2</td>
<td>2</td>
<td>3</td>
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</tr>
<tr>
<td>Hor 225</td>
<td>Nursery Production</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Hor 245</td>
<td>Hor Specialty Crops</td>
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<td>3</td>
<td>3</td>
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<td>Hor 255</td>
<td>Interiorscapes</td>
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<td>2</td>
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<tr>
<td>Hor 265</td>
<td>Adv. Plant Materials</td>
<td>1</td>
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<tr>
<td>Hor 266</td>
<td>Micropropagation</td>
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<tr>
<td>Hor 266A</td>
<td>Microprop Lab Techniques</td>
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<tr>
<td>SPA 120</td>
<td>Spanish for the Workplace</td>
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Semester Total: 12/13  21/22/23  17/18

### Spring Semester II

<table>
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<tr>
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<th>Title</th>
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<th>Winter</th>
<th>Spring</th>
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<tbody>
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<td>Co-op Work Experience IV</td>
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Semester Total: 0  20  2

Total Hours: 45/46  104/105/106  72/73

### Landscape Gardening Diploma (D15260)

#### Fall Semester I

<table>
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<th>Title</th>
<th>Credits</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>LSG 111</td>
<td>Basic Landscape Techniques</td>
<td>2</td>
<td>0</td>
<td>2</td>
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<td>LSG 121</td>
<td>Fall Gardening Lab</td>
<td>0</td>
<td>6</td>
<td>2</td>
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</tr>
<tr>
<td>ENG 111</td>
<td>Expository Writing</td>
<td>3</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>ENG 111A</td>
<td>Expository Writing Lab</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td></td>
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<tr>
<td>MAT 121</td>
<td>Algebra/Trigonometry I</td>
<td>2</td>
<td>2</td>
<td>3</td>
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Semester Total: 7  10  11

#### Spring Semester I

<table>
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<th>Title</th>
<th>Credits</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
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<tbody>
<tr>
<td>Hor 114</td>
<td>Landscape Construction</td>
<td>2</td>
<td>2</td>
<td>3</td>
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<tr>
<td>Hor 160</td>
<td>Plant Materials I</td>
<td>2</td>
<td>2</td>
<td>3</td>
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</tr>
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<td>Course Title</td>
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**Summer Semester I**

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<td>Hor 257</td>
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**Landscape Gardening Certificate – General (C15260G)**

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<td>Hor 260</td>
<td>Plant Materials II</td>
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<td>Hor 164</td>
<td>Horticulture Pest Management</td>
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<td>LSG 111</td>
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<td>Hor 168</td>
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Mechanical Engineering Technology (A40320)
Associate's Degree Program

Career Information
The Mechanical Engineering Technology curriculum prepares graduates for employment as technicians in the diversified mechanical and manufacturing engineering fields. Mechanical Engineering technicians assist in design, development, testing, process design and improvement, and troubleshooting and repair of engineered systems. Emphasis is placed on the integration of theory and hands-on application of engineering principles. In addition to course work in engineering graphics, engineering fundamentals, materials and manufacturing processes, mathematics, and physics, students will study 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.

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**Fall Semester II**

- **DFT 153 CAD III**: 2 3 3
- **ELC 112 DC/AC Electricity**: 3 6 5
- **ENG 113 Literature Based Research**: 3 0 3
- **ENG 114 Professional Research and Reporting**: 3 0 3
- **PHY 110 Conceptual Physics**: 3 0 3
- **PHY 110A Conceptual Physics Lab**: 0 2 1
- **PHY 151 College Physics I**: 3 2 4
- **Semester Total**: 11 11 15

**Spring Semester II**

- **ATR 282 Robotics and CIM**: 3 2 4
- **COM 120 Intro Interpersonal Communication**: 3 0 3
- **MEC 250 Statics/Strength of Materials**: 4 3 5
- **MEC 172 Introduction to Metallurgy**: 3 0 3
- **Humanities/Fine Arts Elective**: 1/4 1/4 1/3
- **Major Elective**: 14/17 6/9 16/18
- **Semester Total**: 14/17 6/9 16/18
- **Total Hours**: 49/56 56/62 71/76

**Major Elective**

- **COE 111 Co-op Work Experience I**: 0 10 1
- **COE 112 Co-op Work Experience II**: 0 10 1
- **DFT 154 Intro to Solid Modeling**: 2 3 3
- **EGR 285 Design Project**: 0 4 2
- **ELC 128 Introduction to PLC**: 2 3 3
- **ISC 112 Industrial Safety**: 2 0 2
- **MAT 172 Pre-calculus**: 3 0 3
- **MAT 172A Pre-calculus Lab**: 0 2 1
- **MEC 172 Introduction to Metallurgy**: 2 2 3
# Mechanical Engineering Technology (C40320)  
Certificate Program

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Total Hours: 6 18 12
Medical Office Administration (A25310)
Associate's Degree Program

Career Information
This curriculum prepares individuals for entry-level positions in medical and allied health facilities. Jobs include transcriptionist, secretary, hospital unit secretary, records clerk, insurance form preparer, patient accounting clerk, and clinical technician. Course work includes processing, compiling, recording, and maintaining medical records; utilizing office equipment and software; medical law and ethics; billings and coding; and transcribing medical documents. Employment opportunities include the offices of allied health facilities, HMOs, insurance claims processors, laboratories, and manufacturers and suppliers of medical and hospital equipment.

Fall Semester I
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<td>OST 148</td>
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**Total Hours**

59/62 25/28 72/75

*Major Electives*

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**Medical Office Administration (D25310)**

**Diploma Program**

**Fall Semester I**

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**Spring Semester I**

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*Total Hours: 36 16 44

*Major Electives

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Cooperative Education (up to 4)
Medical Sonography (A45440)
Associate’s Degree Program

Career Information
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.

Special Admission Requirements

- Application
- View information session DVD
- High school transcript/Adult high school diploma/GED
- College transcripts, if applicable
- Placement tests
- Hospital visit arranged by admissions counselor
- Interview with program director
- Current Certification in CPR after acceptance
- Health Form after acceptance

The following courses are pre-requisite courses and must be taken with a minimum grade of “C” prior to admission to the Cardiovascular Sonography Program:

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Semester Total 12 8 16

Fall Semester I
COM 120  Intro Interpersonal Communication or
COM 231  Public Speaking 3 0 3
ENG 113  Literature-Based Research or
ENG 114  Professional Research and Reports 3 0 3
PSY 150  General Psychology 3 0 3
SON 110  Introduction to Sonography 1 6 3
SON 130  Abdominal Sonography 2 3 3
Semester Total 9 9 12

Spring Semester I
SON 111  Sonographic Physics 3 3 4
SON 120  SON Clinical Education I 0 15 5
SON 131  Abdominal Sonography II 1 3 2
SON 140  Gynecological Sonography 2 0 2
Semester Total 6 21 13

Summer Semester I
CIS 113  Computer Basic 0 2 1
SON 121  SON Clinical Education II 0 15 5
Semester Total 0 17 6

Fall Semester II
SON 220  SON Clinical Education III 0 24 8
SON 225  Case Studies 0 3 1
SON 241  Obstetrical Sonography I 2 0 2
SON 250  Vascular Sonography 1 3 2
Humanities/Fine Art Elective 3 0 3
Semester Total 6 30 16

Spring Semester II
SON 221  SON Clinical Education IV 0 24 8
SON 242  Obstetrical Sonography II 2 0 2
SON 289  Sonographic Topics 2 0 2
Semester Total 4 24 12
Total Hours 37 109 75

Total Hours 37 109 75
Networking Technology (A25340)
Associate’s Degree Program

Career Information
The Networking Technology curriculum prepares individuals for employment supporting network infrastructure environments. Students will learn how to use technologies to provide reliable transmission and delivery of data, voice, image, and video communications in business, industry, and education. Course work includes design, installation, configuration, and management of network infrastructure technologies and network operating systems. Emphasis is placed on the implementation and management of network software and the implementation and management of hardware such as switches and routers. Graduates may find employment in entry-level jobs as local area network managers, network operators, network analysts, and network technicians. Graduates may also be qualified to take certification examinations for various network industry certifications, depending on their local program.

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Cooperative Education (up to 8 hours)
Networking Technology-Routing Basics
(C25340R)
Certificate Program

Fall Semester I

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Semester Total: 669

Spring Semester I

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<td>NOS 110</td>
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Semester Total: 599

Total Semester Hours: 11 15 18
Nuclear Medicine Technology (A45460)  
Associate’s Degree Program

Career Information
The Nuclear Medicine Technology curriculum provides the clinical and didactic experience 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. Students are required to maintain current CPR certification during clinical classes. 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.

Special Admission Requirements
- Application
- Information session
- High school transcript/Adult high school diploma/GED
- College transcripts, if applicable
- Placement tests
- Health Form after acceptance

Fall Semester I

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**Note:** Students are required to have their radiation exposure monitored. Semester fees for this service are due at registration and are not refundable.
Associate Degree Nursing (A45110)
Associate’s Degree Program

Career Information
The Associate Degree Nursing curriculum provides individuals with the knowledge and skills necessary to provide nursing care to clients and groups of clients throughout the life span in a variety of settings. Courses will include content related to the nurse’s role as provider of nursing care, as manager of care, as member within the discipline of nursing, and as a member of the interdisciplinary team. Graduates of this program are eligible to apply to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a Registered Nurse. Employment opportunities include hospitals, long term care facilities, clinics, physician’s offices, industry, and community agencies.

Special Admission Requirements
- Application
- Attend orientation session once accepted into program
- High school transcript/Adult high school diploma/GED
- College transcripts, if applicable
- Placement tests
- Assessment Technologies Institute Testing (ATI) (completed prior to Acceptance)
- Current certification in CPR after acceptance
- Health Form after acceptance
- Current certification as a Nurse Aide I and currently listed with North Carolina Division of Facility Services with no substantial findings

Fall Semester I

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### Spring Semester I

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**Total Hours**

- 48/50
- 73
- 73/75
Career Information
The Nursing Assistant curriculum prepares individuals to work under the supervision of licensed health care professionals in performing nursing care and services for persons of all ages. Course work emphasizes growth and development throughout the life span, 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. Graduates of this curriculum may be eligible to be listed on the registry as a Nursing Assistant I and Nursing Assistant II. They may be employed in home health agencies, hospitals, clinics, nursing homes, extended care facilities and doctors’ offices.

Special Admission Requirements
- Must have a high school diploma or GED to receive the Nursing Assistant Certificate

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<th>Course Title</th>
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Total Hours: 10, 20, 18
Office Administration (A25370)
Associate's Degree Program

Career Information
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.

Fall Semester I
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Total Hours

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ECO 151 Survey of Economics 3 0 3
ECO 251 Principles of Microeconomics 3 0 3
ECO 252 Principles of Macroeconomics 3 0 3
Cooperative Education (up to 8)

Office Administration (D25370)
Diploma Program

Fall Semester I
CIS 111 Basic PC Literacy 1 2 2
ENG 111 Expository Writing 3 0 3
ENG 111A Expository Writing Lab 0 2 1
MKT 223 Customer Service 3 0 3
OST 130 Comprehensive Keyboarding 2 2 3
OST 136 Word Processing 2 2 3

Semester Total 11 8 15

Spring Semester I
COM 120 Intro Interpersonal Communication 3 0 3
or
COM 231 Public Speaking

OST 134 Text Entry and Formatting 2 2 3
OST 164 Text Editing Applications 3 0 3
OST 236 Advanced Word/Information 2 2 3
OST 286 Professional Development 3 0 3

Semester Total 13 4 15

Summer Semester I
OST 122 Office Computations 1 2 2
OST 184 Records Management 2 2 3
OST 289 Administrative Office Management 2 2 3
*Major Elective 3 0 3
*Major Elective 3 0 3

Semester Total 11 6 14

Total Hours 35 18 44

*Business Elective
ACC 120 Principles of Financial Accounting I 3 2 4
ACC 121 Principles of Financial Accounting II 3 2 4
ACC 129 Individual Income Taxes 2 2 3
ACC 140 Payroll Accounting 1 2 2
ACC 150 Accounting Software Applications 1 2 2
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**Office Administration-Receptionist (C25370R)**

**Certificate Program**

**Fall Semester I**

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# Office Administration

## Word Processing Clerk (C25370W)

Certificate Program

### Fall Semester I

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<td>Text Editing Applications</td>
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**Total Semester:** 12 10 17 176
Ophthalmic Medical Assistant (D45510)
Diploma Program

Career Information
The Ophthalmic Medical Assistant Program prepares individuals to provide support services under the supervision of a licensed physician specializing in Ophthalmology. The curriculum will provide the students with the knowledge and skills to work with Ophthalmologists and their patients. Course work includes didactic, laboratory, and clinical training with an emphasis on ophthalmic history, taking ocular measurements, ocular testing, lensometry, administering topical and oral medications, and caring for instruments. Graduates are employed in medical institutions, clinics, or physicians groups. The graduate is then a candidate to take the Joint Commission on Allied Health Personnel in Ophthalmology National Certification Exam for certified ophthalmic assistant (COA).

Special Admissions Requirements
- Application
- High school transcript/Adult high school diploma/GED
- College transcripts, if applicable
- Placement tests
- Information session/Interview with program faculty
- Current Certification in CPR after acceptance
- Health Form after acceptance

Summer Semester

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<tr>
<th>Code</th>
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<th>COM</th>
<th>ENG 111</th>
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<th>OPH 150</th>
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177
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<td>Ophthalmic Optics and Basic Refractometry</td>
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Paralegal Technology (A25380)
Associate’s Degree Program

Career Information
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 law 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.

Fall Semester I

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Spring Semester I

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<td>ENG 113</td>
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| or
<p>| ENG 114 | Professional Research &amp; Reporting    | 3       |
| LEX 120 | Legal Research I                     | 2       |
| LEX 140 | Civil Litigation I                   | 3       |
| OST 134 | Text Entry and Formatting            | 2       |
| Semester Total                  | 6       |</p>
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**Semester Total** 8 2 9

### Summer Semester I

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**Semester Total** 12 6 15

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<td>Introduction to Business</td>
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Cooperative Education (up to 8)
### Paralegal Technology (C25380F)  
#### Family Law Certificate

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### Paralegal Technology (C25380W)  
#### Wills and Estates Certificate

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Physical Therapist Assistant (A45640)
Associate’s Degree Program

Career Information
The Physical Therapist Assistant curriculum prepares graduates to work in direct patient care settings under 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.

Special Admission Requirements
- Application
- Completion information session
- High school transcript/Adult high school diploma/GED
- College transcripts, if applicable
- Placement tests
- Current Certification in CPR after acceptance
- Health Form after acceptance

Summer Semester I
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<td>BIO 168</td>
<td>Anatomy and Physiology I</td>
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<td>or</td>
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Radiography (A45700)
Associate’s Degree Program

Career Information
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.

Special Admission Requirements
- Application
- Information session
- High school transcript/Adult high school diploma/GED
- College transcripts, if applicable
- Placement tests
- Hospital visits arranged by admissions counselor
- Current Certification in CPR after acceptance
- Health Form after acceptance
- Students are required to have their radiation exposure monitored. Semester fees for this service are due at registration and are not refundable.

Fall Semester I

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<td>Expository Writing</td>
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<td>RAD 110 Radiography Intro &amp; Patient Care</td>
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<td>PSY 150 General Psychology</td>
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<td>RAD 231 Radiographic Physics II</td>
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<td>RAD 241 Radiobiology/Protection</td>
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Total Hours: 36 111 74
Speech-Language Pathology Assistant (A45730)
Associate's Degree Program

Career Information
The Speech-Language Pathology Assistant curriculum prepare graduates to work under the supervision of a Licensed Speech-Language Pathologist, who screens for speech, language, and hearing disorders 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 experience include working with patients of various ages and with various communication disorders. Graduates may be eligible for registration with the North Carolina Board of Examiners for Speech-Language Pathologist and Audiologist and must be supervised by a Licensed Speech-Language Pathologist. They may be employed in health care or education settings.

Special Admission Requirements
• Application
• Information session – DVD Conformation
• High school transcript/Adult high school diploma/GED
• College transcripts, if applicable
• Placement tests
• Current Certification in CPR after acceptance
• Health Form after acceptance

Fall Semester I
BIO 168   Anatomy and Physiology I  3 3 4
MED 121   Medical Terminology I  3 0 3
PSY 150   General Psychology  3 0 3
SLP 111   Ethics & Standards for SLPA’s  3 0 3
SLP 140   Normal Communication  3 0 3
Semester Total 15 3 16

Spring Semester I
BIO 169   Anatomy and Physiology II  3 3 4
CIS 110   Introduction to Computers  2 2 3
or
CIS 111   Basic PC Literacy  1 2 2
ENG 111   Expository Writing  3 0 3
ENG 111A  Expository Writing Lab  0 2 1
PSY 241   Developmental Psychology  3 0 3
SLP 130   Phonetics/Speech Patterns  2 2 3
Semester Total 12/13 9 16/17
### Summer Semester I

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<td>SLPA Administrative Procedures &amp; Mtg.</td>
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### Fall Semester II

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<tr>
<td>ENG 114</td>
<td>Prof. Research &amp; Report Writing</td>
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<tr>
<td>PSY 265</td>
<td>Behavioral Modification</td>
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<td>SLP 211</td>
<td>Developmental Disorders</td>
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<td>SLP 220</td>
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Truck Driver Training (C60300)
Certificate Program

Career Information
The Truck Driver Training curriculum prepares individuals to drive tractor trailer 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 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 and are employable by commercial trucking firms. They may also become owner-operators and work as private contract haulers. A certificate will be awarded upon successful completion (2.0 GPA) of a minimum of 12 credit hours from requirements listed below.

Special Admission Requirements
- Application
- Official driving record
- D. O. T. physical examination
- Reading placement test score of 40 or higher
- Disclosure form
- High school transcript
- Drug testing

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<tr>
<th>TRP 100 Truck Driver Training</th>
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# Web Technologies (A252906)
(Formerly A25290 Internet Technologies)
Associate’s Degree Program

## Career Information
The Web Technologies curriculum prepares graduates for careers in the information technology arena using computers and distributed computing to disseminate and collect information via the web. Course work in this program covers the terminology and use of computers, network devices, networks, servers, databases, applications, programming languages, as well as web applications, site development and design. Studies will provide opportunity for students to learn related industry standards. Graduates should qualify for career opportunities as designers, administrators, or developers in the areas of web applications, websites, web services, and related areas of distributed computing.

### Fall Semester I
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<th>Course Name</th>
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<td>CIS 115</td>
<td>Programming/Logic Concepts</td>
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<td>DBA 110</td>
<td>Database Concepts</td>
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<td>ENG 111</td>
<td>Expository Writing</td>
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<td>ENG 111A</td>
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<td>NET 110</td>
<td>Networking Concepts</td>
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<td>WEB 110</td>
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**Semester Total:** 13/12

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<tr>
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<td>BUS 110</td>
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<tr>
<td>ENG 113</td>
<td>Literature Based Research</td>
<td>3</td>
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<tr>
<td>or</td>
<td>ENG 114</td>
<td>3</td>
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<tr>
<td>WEB 115</td>
<td>Web Markup and Scripting</td>
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<td>WEB 120</td>
<td>Intro Internet Multimedia</td>
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<tr>
<td>WEB 140</td>
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*Major Elective

**Semester Total:** 14

### Summer Semester I
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**Semester Total:** 5

Programs of study
### Fall Semester II

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<td>Security Concepts</td>
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<td>WEB 210</td>
<td>Web Design</td>
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<td>WEB 230</td>
<td>Implementing Web Servers</td>
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<td>Database Driven Websites</td>
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### Spring Semester II

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<td>Operating Systems Concepts</td>
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<td>Adv Java Programming</td>
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<td>Database Applications</td>
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<td>WEB 111</td>
<td>Intro to Web Graphics</td>
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#### Total Semester Hours

- Fall Semester II: 54/55
- Spring Semester II: 41/43
- Total: 73

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### Web Technologies (D252906)

#### Diploma Program

#### Fall Semester I

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<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CIS 110</td>
<td>Introduction to Computers</td>
<td>2</td>
</tr>
<tr>
<td>CIS 115</td>
<td>Programming/Logic Concepts</td>
<td>2</td>
</tr>
<tr>
<td>DBA 110</td>
<td>Database Concepts</td>
<td>2</td>
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<tr>
<td>NET 110</td>
<td>Networking Concepts</td>
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</tr>
<tr>
<td>or</td>
<td>NET 125</td>
<td>Networking Basics</td>
</tr>
<tr>
<td>WEB 110</td>
<td>Internet/Web Fundamentals</td>
<td>2</td>
</tr>
<tr>
<td>SEC 110</td>
<td>Security Concepts</td>
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190
### Spring Semester I

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<tr>
<td>CTS</td>
<td>115</td>
<td>IS Business Concepts</td>
<td>1</td>
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<tr>
<td>or</td>
<td></td>
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<td></td>
</tr>
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<td>BUS</td>
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<td>Introduction to Business</td>
<td>3</td>
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<tr>
<td>WEB</td>
<td>115</td>
<td>Web Markup and Scripting</td>
<td>2</td>
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<tr>
<td>WEB</td>
<td>120</td>
<td>Intro Internet Multimedia</td>
<td>2</td>
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<tr>
<td>WEB</td>
<td>140</td>
<td>Web Development Tools</td>
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*Major Elective*  
2 2 3

Semester Total  
11 8 15

### Summer Semester I

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<td>Intro Interpersonal Communication</td>
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<td>ENG</td>
<td>111</td>
<td>Expository Writing</td>
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<td>ENG</td>
<td>111A</td>
<td>Expository Writing Lab</td>
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Semester Total  
6 2 7

Total Hours  
30/29 22/24 40

*Major Electives*

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<tr>
<td>BUS</td>
<td>240</td>
<td>Business Ethics</td>
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<td>DBA</td>
<td>115</td>
<td>Database Applications</td>
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<tr>
<td>WEB</td>
<td>111</td>
<td>Intro to Web Graphics</td>
<td>2</td>
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Cooperative Education (up to 4 hours)

### Web Technologies Web Design (C25290D) Certificate Program

#### Fall Semester I

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<tbody>
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<td>Introduction to Computers</td>
<td>2</td>
</tr>
<tr>
<td>WEB</td>
<td>110</td>
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</tr>
<tr>
<td>WEB</td>
<td>210</td>
<td>Web Design</td>
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Semester Total  
6 6 9

### Spring Semester II

<table>
<thead>
<tr>
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<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>WEB</td>
<td>111</td>
<td>Intro to Web Graphics</td>
<td>2</td>
</tr>
<tr>
<td>WEB</td>
<td>120</td>
<td>Intro Internet Multimedia</td>
<td>2</td>
</tr>
<tr>
<td>WEB</td>
<td>140</td>
<td>Web Development Tools</td>
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</table>

Semester Total  
6 6 9

Total Semester Hours  
12 12 18
College/University Transfer Programs

Associate in Arts     Associate in Fine Arts     Associate in Science

The Associate in Arts, Associate in Fine Arts, and Associate in Science degree programs are designed for persons who are planning to transfer to four-year colleges or universities. These programs provide opportunities to complete the first two years of general college courses with some degree of specialization. The college/university transfer programs, including core requirements, are outlined below.

Program electives may be selected from a variety of courses. Selection should be based upon the requirements of the four-year institution to which the student plans to transfer.

Courses from the college/university transfer programs at CCC&TI normally transfer to four-year institutions participating in the community college articulation agreement. Requirements may be obtained through advisors, counselors in Student Services or at http://www.northcarolina.edu/content.php/assessment/reports/studentinfo/caa.htm. However, since many institutions and academic departments have specific course requirements, it is in every student’s best interest to consult with the desired senior institution to which transfer is being considered.

Note: The Comprehensive Articulation Agreement (CAA) with the University of North Carolina system requires that a student have earned a grade of C or better in each course and have a cumulative grade point average of 2.0 when all grades are counted in the computation. Thus, in order to gain the advantages of the CAA, a student must attain a grade point average of at least 2.0.

Transfer Assured Admissions Policy

The Comprehensive Articulation Agreement (CAA) addresses the admission of community college graduates to UNC institutions and the transfer of credits between institutions within the North Carolina Community College System and institutions within the University of North Carolina.

The CAA assures admission to one of the 16 UNC institutions with the following stipulations:

- Admission is not assured to a specific campus or specific program or major.
- Students must have graduated from a North Carolina Community College with an associate of arts or associate of science degree.
- Students must meet all requirements of the Comprehensive Articulation Agreement.
- A student must have an overall GPA of at least 2.0 on a 4.0 scale, as calculated by the college from which he or she graduated, and a grade of “C” or better in all CAA courses.
• Students must be academically eligible for re-admission to the last institution attended.
• Students must meet judicial requirements of the institution to which the student applies.
• Students must meet all application requirements at the receiving institution including the submission of all required documentation by stated deadlines.

If a student is denied admission to a UNC institution, then he or she will receive a letter from that institution directing the student to the CFNC website. At the CFNC website, the student will be presented with the conditions of the Assured Admissions Program (specified above), and if these conditions are met, the student will be given information regarding space availability and contacts within the UNC system. The student should contact those institutions to get specific information about admissions and available majors.

In the rare instance that the previous steps do not result in admission to a UNC institution, then the student should contact the CFNC Resource Center at 1-866-866-CFNC.
Associate in Arts (A10100)

Associate in Arts degree candidates must complete the following general education courses and approved electives for a minimum of 65 credit hours with a program grade point average of 2.0 (“C”) or better.

Semester Hours Credit

Communication ................................................................. 7

This requirement is met by completing
A. ENG 111, 111A
B. ENG 112 or ENG 113

Humanities/Fine Arts .......................................................... 12

Four unduplicated courses from at least three subject areas are required. At least one course must be a literature course.
This requirement is met by completing A, 1 course from B and 2 unduplicated courses from two different subject areas of C below:
A. COM 231
B. ENG 231, 232, 241, 242, 261, 262
C. Take 6 credits from:
   ART 111, 114, 115, 116
   DRA 111
   ENG 231, 232, 241, 242, 261, 262
   HUM 120, 122, 130, 150, 160
   MUS 110, 112, 113, 210, 211
   PHI 210, 215, 240
   Por 111/181, 112/182
   REL 110, 211, 212, 221
   SPA 111/181, 112/182, 211/281, 212/282

Social Sciences ................................................................. 12

Four unduplicated courses from at least three subject areas are required. At least one course must be a history course.
This requirement is met by completing 1 course from A and 3 unduplicated courses from two different subject areas of B below:
A. HIS 111, 112*
B. Take 9 credits from:
   ANT 210, 220, 221
   ECO 151, 251, 252
   GEO 111, 130
   HIS 111, 112
   POL 120, 210, 220
   PSY 150, 237, 239, 241, 281
   SOC 210, 213, 220

* A history sequence is recommended.

Natural Science .............................................................. 8

This requirement is met by completing two courses, including accompanying lab work, from the following courses:
AST 151/151A, 152/152A  
BIO 110, 111, 112, 120, 130, 140/140A  
CHM 131/131A, 132, 151, 152  
GEL 111, 113  
PHY 110/110A, 151, 152, 251, 252

Math ................................................................. 6-8
   Select from:
   MAT 140/140A, MAT 151/151A, MAT 171/171A,  
   MAT 172/172A, MAT 263/263A, MAT 271, MAT 272,  
   or MAT 273  
   Students may not receive credit for the combination of MAT 263 and MAT 271.

Other Requirements
CIS 110 or CIS 115 ........................................ 3

Electives (chosen from page 202) ............................ 15-17  
Total Hours ....................................................... 65

Note: Associate in Arts students completing the general education core meet the  
requirements for the Associate in Arts Diploma (D10100)

**Associate in Fine Arts (A10200)**  
**Music and Music Education (A1020D)**

The music specialist degree program is intended to provide students with general  
education requirements for the Associate in Fine Arts, to prepare students for junior-  
level entry into college or conservatory music programs and to provide students with  
opportunities to participate in and enjoy music activities. Music specialists also will  
be required to develop a secondary performance area (class music). Approval for  
entry into the program must be secured from the director of music.

Associate in Fine Arts degree candidates must complete the following general  
education courses in addition to professional program requirements for a total of 65  
credit hours with an overall grade point average of 2.0 ("C") or better.

<table>
<thead>
<tr>
<th>Semester Hours Credit</th>
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</thead>
<tbody>
<tr>
<td>Communication ..........</td>
</tr>
<tr>
<td>This requirement is met by completing ENG 111/111A, and 113</td>
</tr>
<tr>
<td>A. ENG 111/111A</td>
</tr>
<tr>
<td>B. ENG 113</td>
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</table>

<table>
<thead>
<tr>
<th>Humanities/Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>This requirement is met by completing A and B below:</td>
</tr>
<tr>
<td>A. COM 231</td>
</tr>
<tr>
<td>B. ENG 231, ENG 232, ENG 241, ENG 242, ENG 261, or ENG 262</td>
</tr>
</tbody>
</table>
Social Sciences .............................................. 9
This requirement is met by completing A and B below:
A. HIS 111 or 112
B. Take 6 credits from:
   ANT 210, 220, 221
   ECO 151, 251, 252
   GEO 111, 130
   POL 120
   PSY 150
   SOC 210, 213, 220

Natural Science ........................................... 4
This requirement is met by completing one course with accompanying lab listed below:
   AST 151/151A
   BIO 110, 111 or BIO 140/140A
   CHM 131/131A or 151
   GEL 111
   PHY 110/110A, 151, or 251

Math ......................................................... 3
This requirement is met by completing MAT 161

Other Requirements
Professional Program Courses (listed below) ......................... 30

MUS Electives ............................................... 6

Professional Program Courses for Music Specialist AFA

Music Theory ................................................. 16
This requirement is met by completing MUS 121, 122, 221, and 222

Class Music .................................................. 2
Vocal and instrumental (wind and percussion) majors will complete MUS 151P and 152P.* Piano majors will complete MUS 151V and 152V.

* Vocal and instrumental (wind and percussion) majors must study until proficiency is attained. This may require that additional courses (MUS 251P and 252P) be taken. If piano proficiency is not attained in two semesters, MUS 251P and 252P must be two of the hours taken.

Applied Music ............................................... 8
This requirement is met by completing MUS 161, 162, 261, and 262

Ensembles .................................................... 4
This requirement is met by completing four of the following courses:
MUS 131, 132, 133, 134, 231, 232, 233, 234, 141, 142, 241, or 242
Notes:
1. Students must meet the receiving university’s foreign language and/or health physical education requirements, if applicable, prior to or after transfer to the senior institution.
2. AFA in Music students may have to pass an audition and/or have to take additional hours before attaining junior status in a Bachelor of Music degree program at the senior institution.

Visual Arts (A1020A)

The Visual Arts degree program is intended to provide students with general education requirements for the Associates Fine Arts, to prepare students for junior level entry in college art programs and to provide opportunity for artistic endeavor in the visual art field.

Associate in Fine Arts degree candidates must complete the following general education courses in addition to professional program requirements for a total of 65 credit hours with an overall grade point average of 2.0 ("C") or better.

<table>
<thead>
<tr>
<th>Semester Hours Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication ................. 7</td>
</tr>
<tr>
<td>Humanities/Fine Arts ................. 6</td>
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<tr>
<td>Social Sciences ................. 9</td>
</tr>
<tr>
<td>Natural Science ................. 4</td>
</tr>
<tr>
<td>Math ......................... 3</td>
</tr>
</tbody>
</table>

Communication
This requirement is met by completing:
A. ENG 111/111A
B. ENG 113

Humanities/Fine Arts
This requirement is met by completing A and B below:
A. COM 231
B. ENG, 231, 232, 241, 242, 261, or 262

Social Sciences
This requirement is met by completing A and B below:
A. HIS 111 or 112
B. 2 courses from 2 different subject areas below:
   ANT 210, 220, 221
   ECO 151, 251, 252
   GEO 111, 130
   PSY 150
   SOC 210, 213, 220

Natural Science
This requirement is met by completing one course with accompanying labs listed below:
AST 151/151A
BIO 110, 111 or 140/140A
CHM 131/131A or 151
GEL 111
PHY 110/110A, 151, or 251

Math
This requirement is met by completing MAT 161.
Professional Program Courses

The following courses are required (15):

- ART 114 Art History Survey 3
- ART 115 Art History Survey II 3
- ART 121 Design I 3
- ART 122 Design II 3
- ART 131 Drawing I 3

21 additional hours of the following courses are required:

- ART 116 Survey of American Art 3
- ART 132 Drawing II 3
- ART 135 Figure Drawing I 3
- ART 171 Computer Art I 3
- ART 231 Printmaking I 3
- ART 232 Printmaking II 3
- ART 240 Painting I 3
- ART 241 Painting II 3
- ART 247 Jewelry I 3
- ART 248 Jewelry II 3
- ART 264 Digital Photography I 3
- ART 265 Digital Photography II 3
- ART 271 Computer Art II 3
- ART 281 Sculpture I 3
- ART 282 Sculpture II 3
- ART 283 Ceramics I 3
- ART 284 Ceramics II 3
- ART 289 Museum Study 3

Total hours in program 65

Notes:
1. Students must meet the receiving university’s foreign language and/or health physical education requirements, if applicable, prior to or after transfer to the senior institution.
2. Graduates with the AFA in Visual Arts may have to pass a portfolio review and/or take additional hours before attaining junior status in a Bachelor of Arts or Fine Arts degree program at the senior institution.

Associate in Science (A10400)

Associate in Science degree candidates must complete the following general education courses and approved electives for a minimum of 65 credit hours with a program grade point average of 2.0 (“C”) or better.

Semester Hours Credit

Communication 7

This requirement is met by completing the following:

A. ENG 111/111A
B. ENG 112 or ENG 113
Humanities/Fine Arts ...................................................... 9

Three unduplicated courses from three subject areas are required. One must be a literature course. This requirement is met by completing A, 1 course from B and 1 course from C.

A. COM 231
B. ENG 231, 232, 241, 242, 261, 262
C. Take 3 credits from:
   ART 111, 114, 115, 116
   DRA 111
   HUM 120, 122, 123, 130, 150, 160
   MUS 110, 112, 113, 210, 211
   PHI 210, 215, 240
   Por 111/181, 112/182
   REL 110, 211, 212, 221
   SPA 111/181, 112/182, 211/281, 212/282

Social Sciences .......................................................... 9

Three unduplicated courses from three subject areas are required. One must be a history course. This requirement is met by completing 1 course from A and 2 courses in two different areas from B.

A. HIS 111, 112 *
B. Take 6 credits from:
   ANT 210, 220, 221
   ECO 151, 251, 252
   GEO 111, 130
   POL 120
   PSY 150
   SOC 210, 213, 220

Natural Science .......................................................... 8

Complete one of the following sequences:

A. BIO 111 and 112
B. CHM 151 and 152
C. PHY 151 and 152
D. PHY 251 and 252

Math ................................................................. 6-8

Select from:
   MAT 151/151A, MAT 171/171A, MAT 172/172A
   MAT 263/263A, MAT 271, MAT 272, or MAT 273
Students may not receive credit for the combination of MAT 263 and MAT 271.

Other Requirements .................................................. 24-26 hours

A minimum of 20 hours of college transfer courses in mathematics, natural science or computer science is required. The remaining courses may be selected from general education or elective courses on page 202. This requirement is met by completing A and B below.
A. Math/Science 20 hours
   Take 20 credits from:
   AST 151/AST 151A, AST 152/AST 152A, BIO 111,
   BIO 112, BIO 120, BIO 130, BIO 140/BIO 140A,
   CHM 131/CHM 131A, CHM 132, CHM 151, CHM 152,
   CHM 251, CHM 252, CIS 110, CIS 115, GEL 111, GEL 113,
   MAT 151/MAT 151A, MAT 171/MAT 171A, MAT 172/MAT 172A,
   MAT 263/MAT 263A, MAT 271, MAT 272, MAT 273,
   PHY 110/PHY 110A, PHY 151, PHY 152, PHY 251, PHY 252
B. CIS 110 or CIS 115 ............................................. 3
C. Electives (Chosen from page 202) ............................ 1-3

Total hours ................................................................. 65

Note: Associate in Science students completing the general education core meet the
requirement for the Associate in Science Diploma (D10400).
### Electives for College Transfer Programs

<table>
<thead>
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<th>Course Code</th>
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<td>MUS 151V</td>
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<td>ACC 121</td>
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<td>HEA 110</td>
<td>MUS 152G</td>
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<td>ANT 210</td>
<td>BIO 225</td>
<td>HEA 112</td>
<td>MUS 152P</td>
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<td>ANT 220</td>
<td>BIO 226</td>
<td>HEA 120</td>
<td>MUS 152V</td>
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<td>ANT 221</td>
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<td>MAT 151</td>
<td>MUS 252P</td>
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<td>MAT 151A</td>
<td>MUS 261</td>
<td>Por 112</td>
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<td>EDU 221*</td>
<td>MAT 285</td>
<td>PED 121</td>
<td>SOC 210</td>
</tr>
<tr>
<td>ART 288</td>
<td>ENG 111</td>
<td>MUS 110</td>
<td>PED 122</td>
<td>SOC 213</td>
</tr>
<tr>
<td>ART 289</td>
<td>ENG 111A</td>
<td>MUS 111</td>
<td>PED 123</td>
<td>SOC 220</td>
</tr>
<tr>
<td>AST 151</td>
<td>ENG 112</td>
<td>MUS 112</td>
<td>PED 125</td>
<td>SPA 111</td>
</tr>
<tr>
<td>AST 151A</td>
<td>ENG 113</td>
<td>MUS 113</td>
<td>PED 126</td>
<td>SPA 112</td>
</tr>
<tr>
<td>AST 152</td>
<td>ENG 114</td>
<td>MUS 121</td>
<td>PED 128</td>
<td>SPA 161</td>
</tr>
<tr>
<td>AST 152A</td>
<td>ENG 125</td>
<td>MUS 122</td>
<td>PED 129</td>
<td>SPA 181</td>
</tr>
<tr>
<td>BIO 110</td>
<td>ENG 231</td>
<td>MUS 131</td>
<td>PED 130</td>
<td>SPA 182</td>
</tr>
<tr>
<td>BIO 111</td>
<td>ENG 232</td>
<td>MUS 132</td>
<td>PED 131</td>
<td>SPA 211</td>
</tr>
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<td>BIO 112</td>
<td>ENG 241</td>
<td>MUS 133</td>
<td>PED 137</td>
<td>SPA 212</td>
</tr>
<tr>
<td>BIO 120</td>
<td>ENG 242</td>
<td>MUS 134</td>
<td>PED 138</td>
<td>SPA 281</td>
</tr>
<tr>
<td>BIO 130</td>
<td>ENG 261</td>
<td>MUS 135</td>
<td>PED 139</td>
<td>SPA 282</td>
</tr>
<tr>
<td>BIO 140</td>
<td>ENG 262</td>
<td>MUS 136</td>
<td>PED 143</td>
<td></td>
</tr>
<tr>
<td>BIO 140A</td>
<td>ENG 273</td>
<td>MUS 141</td>
<td>PED 144</td>
<td></td>
</tr>
<tr>
<td>BIO 163</td>
<td>GEL 111</td>
<td>MUS 142</td>
<td>PED 145</td>
<td></td>
</tr>
<tr>
<td>BIO 168</td>
<td>GEL 113</td>
<td>MUS 151G</td>
<td></td>
<td>*Select 4 year schools</td>
</tr>
</tbody>
</table>
Special Programs/Projects

Distance Learning at CCC&TI

Busy, working adults can benefit from a significant number of distance learning courses at CCC&TI. Distance learning, often called DL, enables students to take courses somewhere other than one of the college's two campuses. This means most of the coursework, including exams and quizzes, can be completed from home and have the same credit hours as conventional courses. Distance learning courses come in a number of forms. Almost half of the DL courses CCC&TI offers are Internet-based classes, where students use a Web browser to log in to a Web-based application, called Blackboard, to download course work and assignments, turn in assignments, participate in discussion boards with classmates and the instructor, take exams and check their grades. Hybrid courses combine the use of the Internet and/or DVDs with traditional classroom-based learning techniques. For more information about CCC&TI's Distance Learning offerings and requirements, or to learn more about Blackboard, visit www.cccti.edu/DL, or call 828-726-2707.

Admissions Policies for Distance Learning

Students who are enrolling in distance learning courses must adhere to all the admissions policies of the college. Additionally, students must meet the prerequisite requirements of individual courses through appropriate placement test scores and/or course completion as documented on official transcripts. Also, students that enroll in a Distance Learning Course must complete an online orientation on the first day of classes. Students are strongly advised to limit the number of distance learning courses for which they register, for these courses require a higher level of commitment and self-discipline than required in traditional classes. Historically, about 50 percent of students successfully complete distance learning courses whereas about 60 percent successfully complete traditional classes. However, among those students who are successful completers, distance students earn higher grades than traditional students do. Students enrolling in Internet classes must consider their level of computer competence.
Hardware Requirements for Distance Learning

In addition to strong study habits, many distance learning courses require that students have a certain degree of technological skill and have access to certain technical equipment. For an internet hybrid or telenet course, students should meet at least the list of Minimum Requirements below. However, in order to have an optimum experience, with minimal technical glitches and/or free of excessive download waiting, students should try to meet or exceed the list of Recommended Hardware Requirements. Please keep in mind that other software (i.e. word processing software or PowerPoint) may be required for a particular course. Students should check with the course instructor for a complete list.

Recommended Requirements for Online Courses (for optimum performance):

- Home access to Internet (or at least day, evening, and weekend access)
- E-mail account through CCC&TI Google Mail (free for curriculum students; go to www.cccti.edu, “Services for students,” and Google mail. See college handbook for details.)
- Same E-mail account for entire semester (If you must change addresses, notify your instructor immediately.)
- Current anti-virus software, updated weekly, at least
- Netscape Navigator or Internet Explorer, versions 6.0 or higher, loaded on computer (*AOL users, see Important Note below)

Recommended Hardware Requirements:

<table>
<thead>
<tr>
<th>PC</th>
<th>MacIntosh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pentium III/300 MHz processor</td>
<td>G3/300+ MHz processor</td>
</tr>
<tr>
<td>128+ MB memory</td>
<td>128+ MB memory</td>
</tr>
<tr>
<td>56K or faster internet connection</td>
<td>56K or faster internet connection</td>
</tr>
<tr>
<td>Windows 2000 or higher</td>
<td>MAC OS 10.2 or higher</td>
</tr>
<tr>
<td>CD-ROM drive</td>
<td>CD-ROM drive</td>
</tr>
</tbody>
</table>

Important Note for America Online (AOL) Users! If you use AOL to access the Internet, you must download Netscape Navigator or Internet Explorer (both available free of charge) and use one of these browsers to access the Internet course rather than the AOL browser. The AOL browser will not allow you access to your course. Ask your course instructor for instructions if necessary.

Technical Competencies for Internet Classes
Before enrolling in an online course, you should be able to do the following:

Basic Computer and Troubleshooting Skills
- Start up and shut down computer system and peripherals.
• Identify and use icons, windows, menus.
• Start an application and create a document.
• Name, save, retrieve, revise a document.
• Use printing options.
• Insert and eject floppy disk and CD-ROM.
• Copy documents from hard disk to floppy disk and vice versa.
• Open and work with more than one application at a time.
• Protect and care for floppy disks.
• Make backup copies of key applications and documents.
• Use self-help resources to diagnose and correct common hardware and printing problems.
• Install and upgrade an application.
• Protect against computer viruses.
• Obtain technical assistance resources from your Internet Service Provider.

Word Processing Skills
• Enter and edit text.
• Copy and move blocks of text.
• Change text format and style, set margins, line spacing, and tabs.
• Check spelling, grammar, word usage.
• Insert page numbers, page breaks, or section breaks.

Internet and E-mail Skills
• Connect to the Internet or an online service.
• Use electronic mail (e-mail): compose, send, retrieve, read, respond to, forward messages, attach files.
• Be able to send and receive e-mail attachments.
• Access and use resources on the Internet and World Wide Web.
• Obtain/maintain an account on the Internet using an Online service.
• Connect a computer to a modem and telephone line for dial-in access.
• Create and use group addresses for E-mail.
• Install and change options/preferences in a web browser (Microsoft Internet Explorer or Netscape Navigator).
Collaborative Agreements  
(Pending Institution Approval)

CCC&TI is pleased to offer additional health science programs in collaboration with neighboring institutions. CCC&TI students may transfer to the following institutions to complete the programs below:

<table>
<thead>
<tr>
<th>Program</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biotechnology</td>
<td>Asheville Buncombe Tech. CC</td>
</tr>
<tr>
<td></td>
<td>Forsyth Technical CC</td>
</tr>
<tr>
<td>Criminal Justice Technology</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Criminal Justice: Latent Evidence</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Cyber Crime Technology</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Dental Assisting</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td>Dental Hygiene</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Dietetic Technician</td>
<td>Gaston CC</td>
</tr>
<tr>
<td>Emergency Medical Science</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Health Information Technology</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Medical Assisting</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td>Medical Lab Technician</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td>Polysomnography Technology</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td>Respiratory Therapy</td>
<td>Catawba Valley CC</td>
</tr>
</tbody>
</table>

Students transferring from the following institutions may complete these programs at CCC&TI:

<table>
<thead>
<tr>
<th>Program</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Equipment Technology</td>
<td>Gaston CC</td>
</tr>
<tr>
<td></td>
<td>Forsyth Technical CC</td>
</tr>
<tr>
<td>Cardiovascular Sonography</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td>Medical Sonography</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td></td>
<td>Gaston CC</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td>Ophthalmic Medical Assistant</td>
<td>Asheville Buncombe Tech. CC</td>
</tr>
<tr>
<td></td>
<td>Gaston CC</td>
</tr>
<tr>
<td>Physical Therapist Assistant</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td></td>
<td>Mayland CCC</td>
</tr>
<tr>
<td></td>
<td>McDowell Technical CC</td>
</tr>
<tr>
<td></td>
<td>Mitchell CC</td>
</tr>
<tr>
<td>Radiography</td>
<td>Western Piedmont CC</td>
</tr>
<tr>
<td>Speech Language Pathology Asst.</td>
<td>Catawba Valley CC</td>
</tr>
<tr>
<td></td>
<td>Mitchell CC</td>
</tr>
<tr>
<td></td>
<td>Wilkes CC</td>
</tr>
<tr>
<td></td>
<td>Western Piedmont CC</td>
</tr>
</tbody>
</table>

For more information on these programs, contact Dena Holman at dnholman@cccti.edu or 828-726-2705.
## Course Descriptions

### Special Coding System
- **F**: Course will be offered Fall Semester
- **S**: Course will be offered Spring Semester
- **SS**: Course will be offered Summer Semester
- **D**: Course will be offered when sufficient students and instructor are available.

The numbers to the right of the course title represent the following: class hours, lab hours, and credit hours. For example:

**ENG 203 English Literature**  3  0  3

In order to determine contact hours, add class hours and lab hours. For example:

**ART 120 Ceramics I**  2  2  3

Two class hours plus two lab hours equal four contact hours. If no prerequisite is listed, none is required.

In addition to the listed prerequisites, all students enrolling in college-level courses must demonstrate competency by achieving satisfactory scores on either the CPT, SAT, ACT, or the relevant proficiency assessment.

<table>
<thead>
<tr>
<th>ACA</th>
<th>Academic Related</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC</td>
<td>Accounting</td>
</tr>
<tr>
<td>AER</td>
<td>Aviation Management and Career Pilot Technology</td>
</tr>
<tr>
<td>ANT</td>
<td>Anthropology</td>
</tr>
<tr>
<td>ART</td>
<td>Art</td>
</tr>
<tr>
<td>AST</td>
<td>Astronomy</td>
</tr>
<tr>
<td>ATR</td>
<td>Automation and Robotics</td>
</tr>
<tr>
<td>AUB</td>
<td>Collision Repair and Refinishing Technology</td>
</tr>
<tr>
<td>AUT</td>
<td>Automotive</td>
</tr>
<tr>
<td>BIO</td>
<td>Biology</td>
</tr>
<tr>
<td>BMT</td>
<td>Biomedical Equipment Technology</td>
</tr>
<tr>
<td>BPR</td>
<td>Blueprint Reading</td>
</tr>
<tr>
<td>BUS</td>
<td>Business</td>
</tr>
<tr>
<td>CET</td>
<td>Computer Engineering Technology</td>
</tr>
<tr>
<td>CHM</td>
<td>Chemistry</td>
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<tr>
<td>CIS</td>
<td>Information Systems</td>
</tr>
<tr>
<td>CJC</td>
<td>Criminal Justice</td>
</tr>
<tr>
<td>COE</td>
<td>Cooperative Education</td>
</tr>
<tr>
<td>COM</td>
<td>Communication</td>
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<tr>
<td>COS</td>
<td>Cosmetology</td>
</tr>
<tr>
<td></td>
<td>Computer Science</td>
</tr>
<tr>
<td></td>
<td>CTS Computer Information Technology</td>
</tr>
<tr>
<td></td>
<td>CUL Culinary Technology</td>
</tr>
<tr>
<td></td>
<td>CVS Cardiovascular Sonography</td>
</tr>
<tr>
<td></td>
<td>DBA Database Management Technology</td>
</tr>
<tr>
<td></td>
<td>DFT Drafting</td>
</tr>
<tr>
<td></td>
<td>DRA Drama/Theatre</td>
</tr>
<tr>
<td></td>
<td>ECO Economics</td>
</tr>
<tr>
<td></td>
<td>EDU Education</td>
</tr>
<tr>
<td></td>
<td>EGR Engineering</td>
</tr>
<tr>
<td></td>
<td>ELC Electrical</td>
</tr>
<tr>
<td></td>
<td>ELN Electronics</td>
</tr>
<tr>
<td></td>
<td>ENG English</td>
</tr>
<tr>
<td></td>
<td>EPT Emergency Preparedness Tech.</td>
</tr>
<tr>
<td></td>
<td>FIP Fire Protection</td>
</tr>
<tr>
<td></td>
<td>GEL Geology</td>
</tr>
<tr>
<td></td>
<td>GEO Geography</td>
</tr>
<tr>
<td></td>
<td>HEA Health</td>
</tr>
<tr>
<td></td>
<td>HIS History</td>
</tr>
<tr>
<td></td>
<td>HOR Horticulture</td>
</tr>
<tr>
<td></td>
<td>HRM Hospitality Human Resource Mgt.</td>
</tr>
<tr>
<td></td>
<td>HUM Humanities</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>HYD</td>
<td>Hydraulics</td>
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<tr>
<td>INT</td>
<td>International Business</td>
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<tr>
<td>ITN</td>
<td>Internet Technologies</td>
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<tr>
<td>LEX</td>
<td>Legal Education</td>
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<tr>
<td>LOG</td>
<td>Logistics Management</td>
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<tr>
<td>LSG</td>
<td>Landscape Gardening</td>
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<tr>
<td>MAT</td>
<td>Mathematics</td>
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<td>MEC</td>
<td>Mechanical</td>
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<td>MED</td>
<td>Medical Assisting</td>
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<tr>
<td>MKT</td>
<td>Marketing and Retailing</td>
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<tr>
<td>MNT</td>
<td>Maintenance</td>
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<td>MUS</td>
<td>Music</td>
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<td>NAS</td>
<td>Nursing Assistant</td>
</tr>
<tr>
<td>NET</td>
<td>Networking Technology</td>
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<tr>
<td>NMT</td>
<td>Nuclear Medicine</td>
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<tr>
<td>NOS</td>
<td>Networking Operating Systems</td>
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<tr>
<td>NUR</td>
<td>Nursing</td>
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<tr>
<td>OPH</td>
<td>Ophthalmic Medical Assistant</td>
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<tr>
<td>OST</td>
<td>Office Administration</td>
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<td>PED</td>
<td>Physical Education</td>
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<td>PET</td>
<td>Positron Emission Tomography</td>
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<td>PHI</td>
<td>Philosophy</td>
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<td>PHY</td>
<td>Physics</td>
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<td>POL</td>
<td>Political Science</td>
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<td>POR</td>
<td>Portuguese</td>
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<tr>
<td>PSY</td>
<td>Psychology</td>
</tr>
<tr>
<td>PTA</td>
<td>Physical Therapist Assistant</td>
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<td>RAD</td>
<td>Radiography</td>
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<tr>
<td>RED</td>
<td>Reading</td>
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<td>REL</td>
<td>Religion</td>
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<td>SEC</td>
<td>Information Systems Security</td>
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<td>SEL</td>
<td>Selected Topics</td>
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<td>Seminar</td>
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<td>SLP</td>
<td>Speech-Language Pathology Assistant</td>
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<td>SOC</td>
<td>Sociology</td>
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<td>SON</td>
<td>Medical Sonography</td>
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<td>SPA</td>
<td>Spanish</td>
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<td>TRF</td>
<td>Turfgrass</td>
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<tr>
<td>TRP</td>
<td>Truck Driver Training</td>
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<tr>
<td>WEB</td>
<td>Web Technologies</td>
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</table>
General Course Descriptions

ACA: Academic Related

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACA 090</td>
<td>Study Skills (Pass/Fail)</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>This course is intended for those who placed into credit-level course work but who are not maintaining satisfactory academic progress toward meeting program goals. Topics include study skills, note taking, learning styles and strategies, test taking, goal setting, and self-assessment skills. Upon completion, students should be able to manage their learning experiences to successfully meet educational goals. This course is also intended to serve SSS students who need assistance to become acclimated to the college environment and workload. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)</td>
<td></td>
<td></td>
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<tr>
<td>ACA 111</td>
<td>College Student Success (Pass/Fail)</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>This course introduces the college's physical, academic, and social environment and promotes the personal development essential for success. Topics include campus facilities and resources; policies, procedures, and programs; study skills; and life management issues such as health, self-esteem, motivation, goal-setting, diversity, and communication. Upon completion, students should be able to function effectively within the college environment to meet their educational objectives. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACA 122</td>
<td>College Transfer Success (Pass/Fail)</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>This course provides information and strategies necessary to develop clear academic and professional goals beyond the community college experience. Topics include the CAA, college culture, career exploration, gathering information on senior institutions, strategic planning, critical thinking, and communications skills for a successful academic transition. Upon completion, students should be able to develop an academic plan to transition successfully to senior institutions. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

ACC: Accounting

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Class</th>
<th>Lab</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 120</td>
<td>Principles of Financial Accounting</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Prerequisites: RED 090 or RED 091 and MAT 060</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course introduces business decision-making accounting information systems. Emphasis is on analyzing, summarizing, analyzing, reporting, and interpreting financial information. Upon completion, students should be able to prepare financial statements, understand the role of financial information in decision-making, and address ethical considerations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ACC 121 Principles of Managerial Accounting 3 2 4
Prerequisite: ACC 120
This course includes a greater emphasis on managerial and cost accounting skills. Emphasis is placed on managerial accounting concepts for external and internal analysis, reporting, and decision-making. Upon completion, students should be able to analyze and interpret transactions relating to managerial concepts, including product-costing systems. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (S/SS)

ACC 122 Principles of Financial Accounting II 3 0 3
Prerequisite: ACC 120
This course provides additional instruction in the financial accounting concepts and procedures introduced in ACC 120. Emphasis is placed on the analysis of specific balance sheet accounts, with in-depth instruction on the accounting principles applied to those accounts. Upon completion, students should be able to analyze data, prepare journal entries, and prepare reports in compliance with generally accepted accounting principles. (D)

ACC 129 Individual Income Taxes 2 2 3
Prerequisite: RED 080 and MAT 060
This course introduces the relevant laws governing individual income taxation. Topics include tax law, electronic research and methodologies, and the use of technology for preparation of individual tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various individual tax forms. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

ACC 130 Business Income Taxes 2 2 3
Prerequisite: ACC 129
This course introduces the relevant laws governing business and fiduciary income taxes. Topics include tax law relating to business organizations, electronic research and methodologies, and the use of technology for the preparation of business tax returns. Upon completion, students should be able to analyze basic tax scenarios, research applicable tax law, and complete various business tax forms. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

ACC 140 Payroll Accounting 1 2 2
Prerequisite: ACC 120
This course covers federal and state laws pertaining to wages, payroll taxes, payroll tax forms, and journal and general ledger transactions. Emphasis is placed on computing wages; calculating social security, income, and unemployment taxes; preparing appropriate payroll tax forms; and journalizing/posting transactions. Upon completion, students should be able to analyze data, make appropriate computations, complete forms, and prepare accounting entries using appropriate technologies. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)
ACC 149  Introduction to Accounting Spreadsheets  1  2  2  
Prerequisite:  ACC 120 and CIS 110  
This course provides a working knowledge of computer spreadsheets and their use in accounting. Topics include pre-programmed problems, model-building problems, beginning-level macros, graphics, and what-if analysis enhancements of template problems. Upon completion, students should be able to use a computer spreadsheet to complete many of the tasks required in accounting. (F/S)

ACC 150  Accounting Software Applications  1  2  2  
Prerequisites: ACC 120  
This course introduces microcomputer applications related to accounting systems. Topics include general ledger, accounts receivable, accounts payable, inventory, payroll, and correcting, adjusting, and closing entries. Upon completion, students should be able to use a computer accounting package to solve accounting problems. Instructional content for this course is available in the Virtual Learning Community (VLC). (SS)

ACC 220  Intermediate Accounting I  3 2 4  
Prerequisite: ACC 120  
This course is a continuation of the study of accounting principles with in-depth coverage of theoretical concepts and financial statements. Topics include generally accepted accounting principles and extensive analysis of financial statements. Upon completion, students should be able to demonstrate competence in the conceptual framework underlying financial accounting, including the application of financial standards. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

ACC 227  Practices in Accounting  3 0 3  
Prerequisites: ACC 220  
This course provides an advanced in-depth study of selected topics in accounting using case studies and individual and group problem solving. Topics include cash flow, financial statement analysis, individual and group problem solving, practical approaches to dealing with clients, ethics, and critical thinking. Upon completion, students should be able to demonstrate competent analytical skills and effective communication of their analysis in written and/or oral presentations. (S)

ACC 269  Audit & Assurance Services  3 0 3  
Prerequisites: ACC 220  
This course introduces selected topics pertaining to the objectives, theory and practices in engagements providing auditing and other assurance services. Topics will include planning, conducting and reporting, with emphasis on the related professional ethics and standards. Upon completion, students should be able to demonstrate an understanding of the types of professional services, the related professional standards, and engagement methodology. (S)
### AER: Aerospace and Flight Training

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>AER 110</td>
<td>Air Navigation</td>
<td>2 2 3</td>
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<tr>
<td>AER 111</td>
<td>Aviation Meteorology</td>
<td>3 0 3</td>
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<tr>
<td>AER 112</td>
<td>Aviation Laws and FARs</td>
<td>2 0 2</td>
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<tr>
<td>AER 113</td>
<td>History of Aviation</td>
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<tr>
<td>AER 114</td>
<td>Aviation Management</td>
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<tr>
<td>AER 115</td>
<td>Flight Simulator</td>
<td>0 2 1</td>
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<tr>
<td>AER 150</td>
<td>Private Pilot Flt Theory</td>
<td>2 2 3</td>
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This course covers the basic elements of air navigation, fundamentals of pilotage and dead reckoning, and the use of a plotter, computer, and aerial charts. Topics include pilotage, dead reckoning, radio navigation, LORAN, Global Positioning Systems, and the use of FAA publications. Upon completion, students should be able to interpret aeronautical charts and apply navigational principles. (F)

This course covers the atmosphere, interpretation and measurement of meteorological elements, and the effects of such on aircraft operations and performance. Topics include heat exchanges in the atmosphere; temperature, pressure, stability, clouds, air masses, fronts, and thunderstorms; and the use and interpretation of weather data. Upon completion, students should be able to analyze weather data for flight planning and safe flying. (S)

This course provides an in-depth study of the state, federal, and international regulations forming the structure of aviation law. Emphasis is placed on Federal Aviation Regulations Parts 61, 91, and 135 with additional emphasis on legal issues in aviation law. Upon completion, students should be able to apply legal principles and interpret federal air regulations. (S)

This course provides a historical survey of the efforts of manned-flight. Topics include the development of aircraft, milestones in aviation, noted pioneers, and the socioeconomic impact of flight upon modern civilization. Upon completion, students should be able to demonstrate an understanding of the advancements that aviation has accrued for society and contemporary changes in aviation. (F)

This course covers operation of a flight department on a cost-effective basis and analysis of profit and loss statements. Topics include flight operations costs, aircraft acquisition analysis and cost comparisons, costs versus revenue, and break-even points. Upon completion, students should be able to calculate cost of flight operations and apply monthly and annual budget analysis. (F)

This course covers instrument instruction and training in a FAA-approved flight simulator. Emphasis is placed on approach and navigation procedures including holding and missed approaches. Upon completion, students should be able to plan and execute an IFR flight and smoothly transition to instrument training in the aircraft. (SS)

This course covers the aeronautical knowledge required to meet the Federal Aviation Administration regulations for private pilot certification. Topics include the principles of
flight, the flight environment, basic aircraft systems and performance, basic meteorology and weather data interpretation, and FAA regulations. Upon completion, students should be able to demonstrate the competencies required for the FAA written examination for a private pilot certificate. (F)

AER 151 Flight-Private Pilot 0 3 1
This course provides the hands-on training needed to qualify for a Federal Aviation Administration private pilot certificate. Topics include flight maneuvers (ground procedures, take-offs, climbs, level flight, turns, glides, stalls, slow flight, descents, slips, landings, emergency procedures) and cross-country planning and navigation. Upon completion, students should be able to demonstrate the competencies required for the flight test practical exam for the private pilot certificate. (F)

AER 160 Instrument Flight Theory 2 2 3
This course covers the required aeronautical knowledge of the Federal Aviation Administration Regulation Instrument Ground School. Topics include a study of instruments, systems, instrument flight charts, instrument flight planning, approach procedures, and the IFR regulations. Upon completion, students should be able to demonstrate the competencies required to complete the FAA written examination for an instrument rating. (S)

AER 161 Flight-Instrument Pilot 0 6 2
Prerequisite: AER 151
This course covers instruction and training in instrument flight planning including IFR navigation, VOR, ILS, ADF, and compliance with ATC procedures. Emphasis is placed on approach and navigation procedures, including holding and missed approaches, and development of skill in executing en route and approach procedures. Upon completion, students should be able to plan and execute an IFR flight and demonstrate competencies required for the FAA instrument pilot flight exam. (S/SS)

AER 170 Commercial Flight Theory 3 0 3
This course covers advanced aircraft control, cross-country operations, and other topics required for the FAA commercial pilot written exam. Emphasis is placed on the principles of aircraft performance and operation, take-off performance, cruise performance, descent and landing performance, and weight and balance computations. Upon completion, students should be able to demonstrate commercial pilot skills and competence in the materials required for the FAA written commercial pilot examination. (F)

AER 171 Flight-Commercial Pilot 0 6 3
Prerequisite: AER 161
This course provides the hands-on training needed to qualify for a Federal Aviation Administration commercial pilot certificate. Topics include flight instruction in advanced precision maneuvers, maximum performance take-off and landings, emergency
procedures, operation of complex aircraft, aircraft performance, and range and fuel planning. Upon completion, students should be able to demonstrate competence in the areas of the flight test practical exam for the commercial pilot certificate. (F)

AER 211   Air Traffic Control  
This course provides a detailed analysis of all aspects of air traffic control. Emphasis is placed on an in-depth analysis of air traffic control, including utilization of the air traffic environment based on the pilot's and controller's perspective. Upon completion, students should be able to operate an aircraft within the national airspace system under FAA air traffic control. (S)

AER 215   Flight Safety  
This course covers the basic procedures and practices of aircraft accident prevention, accident investigation, and reporting. Topics include a comprehensive review of federal regulations pertinent to aviation safety and analysis of actual aviation accident cases and their causes. Upon completion, students should be able to demonstrate an understanding and respect for specific personal factors such as attitude, motivation, and skill related to flight safety. (S)

AER 216   Engines and Systems  
This course introduces piston and turbine aircraft engines and associated systems. Topics include aircraft hydraulic, pneumatic, electrical, air conditioning, and pressurization systems along with the theory of engine operations, including power and thrust computations. Upon completion, students should be able to apply principles of engine and systems operation. (F)

AER 218   Human Factors in Aviation  
This course analyzes interpersonal relationships in the cockpit and related psychological factors that affect pilot performance and efficiency during flight operations. Topics include cockpit management, judgment, aircraft and flight crew coordination and control, physiological factors, responsibility, and decision-making capabilities. Upon completion, students should be able to apply work-proven routines to stress management, crew responsibility, and the team concept in the cockpit. (F)

AER 280   Instructor Pilot Flight Theory  
Prerequisite: AER 170  
This course covers flight instruction and the skills and knowledge necessary to work effectively as a flight instructor. Topics include fundamentals of instruction, lesson planning, instructor regulations and endorsements, and related aeronautical knowledge. Upon completion, students should be able to demonstrate competence necessary for the Federal Aviation Administration Fundamentals of Instructing Test and the appropriate instructor written examination. (S)

AER 281   Flight-CFI  
Prerequisites: AER 171  
This course provides experience in preparation for the flight instructor practical test. Emphasis is placed on the ability to transition to right seat flight while teaching
performance maneuvers including operation of a complex aircraft. Upon completion, students should be able to demonstrate competence in right seat operation and CFI maneuvers as specified in the FAA Practical Test Standards. (S)

AER 285 Flight-Multi-Engine 0 3 1
Prerequisite: AER 171
This course provides the flight training required to obtain a multi-engine rating. Topics include multi-engine safety procedures, single-engine operations and performance, Vmc, instrument approaches (single- and multi-engine), and emergency procedures. Upon completion, students should be able to demonstrate the competencies required for the flight test practical examination for a multi-engine rating. (S)

ANT: Anthropology

ANT 210 General Anthropology 3 0 3
This course introduces the physical, archaeological, linguistic, and ethnological fields of anthropology. Topics include human origins, genetic variations, archaeology, linguistics, primatology, and contemporary cultures. Upon completion, students should be able to demonstrate an understanding of the four major fields of anthropology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

ANT 220 Cultural Anthropology 3 0 3
This course introduces the nature of human culture. Emphasis is placed on cultural theory, methods of fieldwork, and cross-cultural comparisons in the areas of ethnology, language, and the cultural past. Upon completion, students should be able to demonstrate an understanding of basic cultural processes and how cultural data are collected and analyzed. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

ANT 221 Comparative Cultures 3 0 3
This course provides an ethnographic survey of societies around the world covering their distinctive cultural characteristics and how these relate to cultural change. Emphasis is placed on the similarities and differences in social institutions such as family economics, politics, education, and religion. Upon completion, students should be able to demonstrate knowledge of a variety of cultural adaptive strategies. (D) This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

ART: Art

ART 110 Introduction to Art 2 0 2
This course is designed to introduce an awareness of art in the everyday world. Emphasis is placed on art as visual communication. Upon completion, students should be able to
demonstrate an understanding of the meanings and purposes of art. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 111  Art Appreciation  3 0 3
Prerequisite: RED 090 OR RED 091
This course introduces the origins and historical development of art. Emphasis is placed on the relationship of design principles to various art forms including but not limited to sculpture, painting, and architecture. Upon completion, students should be able to identify and analyze a variety of artistic styles, periods, and media. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

ART 114  Art History Survey I  3 0 3
Prerequisite: RED 090 OR RED 091
This course covers the development of art forms from ancient times to the Renaissance. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

ART 115  Art History Survey II  3 0 3
Prerequisite: RED 090 OR RED 091
This course covers the development of art forms from the Renaissance to the present. Emphasis is placed on content, terminology, design, and style. Upon completion, students should be able to demonstrate an historical understanding of art as a product reflective of human social development. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

ART 116  Survey of American Art  3 0 3
This course covers the development of American art forms from colonial times to the present. Emphasis is placed on architecture, painting, sculpture, graphics, and the decorative arts. Upon completion, students should be able to demonstrate understanding of the history of the American creative experience. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

ART 121  Design I  0 6 3
This course introduces the elements and principles of design as applied to two-dimensional art. Emphasis is placed on the structural elements, the principles of visual organization, and the theories of color mixing and interaction. Upon completion, students should be able to understand and use critical and analytical approaches as they apply to two-dimensional visual art. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (F)
ART 122  Design II  0 6 3
Prerequisite: ART 121
This course introduces basic studio problems in three-dimensional visual design. Emphasis is placed on the structural elements and organizational principles as applied to mass and space. Upon completion, students should be able to apply three-dimensional design concepts. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 131  Drawing I  0 6 3
This course introduces the language of drawing and the use of various drawing materials. Emphasis is placed on drawing techniques, media, and graphic principles. Upon completion, students should be able to demonstrate competence in the use of graphic form and various drawing processes. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)

ART 132  Drawing II  0 6 3
Prerequisite: ART 131
This course continues instruction in the language of drawing and the use of various materials. Emphasis is placed on experimentation in the use of drawing techniques, media, and graphic materials. Upon completion, students should be able to demonstrate increased competence in the expressive use of graphic form and techniques. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 135  Figure Drawing I  0 6 3
Prerequisite: ART 131
This course introduces rendering the human figure with various drawing materials. Emphasis is placed on the use of the visual elements, anatomy, and proportion in the representation of the draped and undraped figure. Upon completion, students should be able to demonstrate competence in drawing the human figure. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 171  Computer Art I  0 6 3
This course introduces the use of the computer as a tool for solving visual problems. Emphasis is placed on fundamentals of computer literacy and design through bit-mapped image manipulation. Upon completion, students should be able to demonstrate an understanding of paint programs, printers, and scanners to capture, manipulate, and output images. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 212  Gallery Assistantship I  0 2 1
This course covers the practical application of display techniques. Emphasis is placed on preparation of artwork for installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate basic gallery exhibition skills. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)
ART 213 Gallery Assistantship II 0 2 1
Prerequisites: ART 212
This course provides additional experience in display techniques. Emphasis is placed on preparation of artwork for exhibition, alternative methods of installation, hardware systems, and exhibition graphics. Upon completion, students should be able to demonstrate independent decision-making and exhibition expertise. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 231 Printmaking I 0 6 3
This course introduces printmaking: its history, development techniques, and processes. Emphasis is placed on basic applications with investigation into image source and development. Upon completion, students should be able to produce printed images utilizing a variety of methods. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 232 Printmaking II 0 6 3
Prerequisites: ART 231
This course includes additional methods and printmaking processes. Emphasis is placed on the printed image as related to method, source, and concept. Upon completion, students should be able to produce expressive images utilizing both traditional and innovative methods. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 240 Painting I 0 6 3
This course introduces the language of painting and the use of various painting materials. Emphasis is placed on the understanding and use of various painting techniques, media, and color principles. Upon completion, students should be able to demonstrate competence in the use of creative processes directed toward the development of expressive form. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 241 Painting II 0 6 3
Prerequisite: ART 240
This course provides a continuing investigation of the materials, processes, and techniques of painting. Emphasis is placed on the exploration of expressive content using a variety of creative processes. Upon completion, students should be able to demonstrate competence in the expanded use of form and variety. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 242 Landscape Painting 0 6 3
Prerequisite: ART 240
This course introduces and practices the skills and techniques of open-air painting. Emphasis is placed on techniques of painting summer foliage, skies and mountains, and the elements of aerial perspective. Upon completion, students should be able to complete an open-air landscape painting employing brush, knife, scumbling and glazing techniques. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)
ART 247 Jewelry I 0 6 3
This course introduces a basic understanding of the design and production of jewelry. Emphasis is placed on concepts and techniques using metals and other materials. Upon completion, students should be able to demonstrate an ability to use appropriate methods to create unique jewelry. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

ART 248 Jewelry II 0 6 3
Prerequisites: ART 247
This course is a continuation of the skills learned in ART 247. Emphasis is placed on the creation of individual designs that utilize a variety of techniques such as casting, cloisonné, and plique-a-jour. Upon completion, students should be able to create jewelry which demonstrates originality. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

ART 264 Digital Photography I 1 4 3
This course introduces digital photographic equipment, theory and processes. Emphasis is placed on camera operation, composition, computer photo manipulation and creative expression. Upon completion, students should be able to successfully expose, digitally manipulate, and print a well-conceived composition. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (S/F)

ART 265 Digital Photography II 1 4 3
Prerequisites: ART 264
This course provides exploration of the concepts and processes of photo manipulation through complex composite images, special effects, color balancing and image/text integration. Emphasis is placed on creating a personal vision and style. Upon completion, students should be able to produce well-executed images using a variety of photographic and photo manipulative approaches. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (S/F)

ART 271 Computer Art II 0 6 3
Prerequisite: ART 171
This course includes advanced computer imaging techniques. Emphasis is placed on creative applications of digital technology. Upon completion, students should be able to demonstrate command of computer systems and applications to express their personal vision. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 281 Sculpture I 0 6 3
This course provides an exploration of the creative and technical methods of sculpture with focus on the traditional processes. Emphasis is placed on developing basic skills as they pertain to three-dimensional expression in various media. Upon completion, students should be able to show competence in a variety of sculptural approaches. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)
ART 282 Sculpture II 0 6 3
Prerequisite: ART 281
This course builds on the visual and technical skills learned in ART 281. Emphasis is placed on developing original solutions to sculptural problems in a variety of media. Upon completion, students should be able to express individual ideas using the techniques and materials of sculpture. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 283 Ceramics I 0 6 3
This course provides an introduction to three-dimensional design principles using the medium of clay. Emphasis is placed on fundamentals of forming, surface design, glaze application, and firing. Upon completion, students should be able to demonstrate skills in slab and coil construction, simple wheel forms, glaze technique, and creative expression. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 284 Ceramics II 0 6 3
Prerequisite: ART 283
This course covers advanced hand building and wheel techniques. Emphasis is placed on creative expression, surface design, sculptural quality, and glaze effect. Upon completion, students should be able to demonstrate a high level of technical competence in forming and glazing with a development of three-dimensional awareness. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 285 Ceramics III 0 6 3
Prerequisite: ART 284
This course provides the opportunity for advanced self-determined work in sculptural and functional ceramics. Emphasis is placed on developing the technical awareness of clay bodies, slips, engobes, and firing procedures necessary to fulfill the student artistic goals. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 286 Ceramics IV 0 6 3
Prerequisites: ART 285
This course provides the opportunity for self-determined work in sculptural and functional ceramics. Emphasis is placed on developing the technical awareness of glaze materials, glaze formulation, and firing techniques necessary to fulfill the student’s artistic goals. Upon completion, students should be able to demonstrate knowledge of materials and techniques necessary to successfully create original projects in the clay medium. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

ART 288 Studio 0 6 3
Prerequisite: Limited to those who have completed a sequence of art courses in the proposed area of study.
This course provides the opportunity for advanced self-determined work beyond the limits of regular studio course sequences. Emphasis is placed on creative self-expression
and in-depth exploration of techniques and materials. Upon completion, students should be able to create original projects specific to media, materials and techniques. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

**ART 289  Museum Study**  
This course introduces research methods in the museum setting. Emphasis is placed on the chronology, styles, periods, context, and meaning in art. Upon completion, students should be able to demonstrate the advantage of first-hand and on-site research. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

## AST: Astronomy

**AST 151  General Astronomy I**  
3 0 3  
Prerequisite: MAT 060 and MAT 070  
Corequisite: AST 151A  
This course introduces the science of modern astronomy with a concentration on the solar system. Emphasis is placed on the history and physics of astronomy and an introduction to the solar system, including the planets, comets, and meteors. Upon completion, students should be able to demonstrate a general understanding of the solar system. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.* (F)

**AST 151A  General Astronomy I Lab**  
0 2 1  
Corequisite: AST 151  
The course is a laboratory to accompany AST 151. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 151 and which provide practical experience. Upon completion, students should be able to demonstrate a general understanding of the solar system. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.* (F/S)

**AST 152  General Astronomy II**  
3 0 3  
Prerequisite: AST 151  
Corequisite: AST 152A  
This course is a continuation of AST 151 with primary emphasis beyond the solar system. Topics include the sun, stars, galaxies, and the larger universe, including cosmology. Upon completion, students should be able to demonstrate a working knowledge of astronomy. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.* (S)

**AST 152A  General Astronomy II Lab**  
0 2 1  
Prerequisite: AST 151  
Corequisite: AST 152  
The course is a laboratory to accompany AST 152. Emphasis is placed on laboratory experiences which enhance the materials presented in AST 152 and which provide practical experience. Upon completion, students should be able to demonstrate a
working knowledge of astronomy. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science.* (S)

### ATR: Automation and Robotics

**ATR 282 Robotics and CIM**

| 3 | 2 | 4 |

This course covers robotics and CIM. Topics include application, programming, and maintenance of robotic devices and the relationship between robotics and CIM. Upon completion, students should be able to safely program, operate, and maintain robots and understand the relationship between robotics and CIM. (S)

### AUB: Collision Repair and Refinishing Technology

**AUB 111 Painting & Refinishing I**

| 2 | 6 | 4 |

This course introduces the proper procedures for using automotive refinishing equipment and materials in surface preparation and application. Topics include federal, state, and local regulations, personal safety, refinishing equipment and materials, surface preparation, masking, application techniques, and other related topics. Upon completion, students should be able to identify and use proper equipment and materials in refinishing following accepted industry standards. This is a diploma-level course. (F)

**AUB 112 Painting & Refinishing II**

| 2 | 6 | 4 |

Prerequisite: AUB 111

This course covers advanced painting techniques and technologies with an emphasis on identifying problems encountered by the refinishing technician. Topics include materials application, color matching, correction of refinishing problems, and other related topics. Upon completion, students should be able to perform spot, panel, and overall refinishing repairs and identify and correct refinish problems. This is a diploma-level course. (S)

**AUB 114 Special Finishes**

| 1 | 2 | 2 |

Prerequisite: AUB 111

This course introduces multistage finishes, custom painting, and protective coatings. Topics include base coats, advanced intermediate coats, clear coats, and other related topics. Upon completion, students should be able to identify and apply specialized finishes based on accepted industry standards. This is a diploma-level course. (S)

**AUB 121 Non-Structural Damage I**

| 1 | 4 | 3 |

This course introduces safety, tools, and the basic fundamentals of body repair. Topics include shop safety, damage analysis, tools and equipment, repair techniques, materials selection, materials usage, and other related topics. Upon completion, students should be able to identify and repair minor direct and indirect damage including removal/replacing of body panels to accepted standards. This is a diploma-level course. (F)

**AUB 122 Non-Structural Damage II**

| 2 | 6 | 4 |

Prerequisite: RED 080

This course covers safety, tools, and advanced body repair. Topics include shop safety,
damage analysis, tools and equipment, advanced repair techniques, materials selection, materials usage, movable glass, and other related topics. Upon completion, students should be able to identify and repair or replace direct and indirect damage to accepted standards including movable glass and hardware. This is a diploma-level course. (S)

AUB 131 Structural Damage I 2 4 4
This course introduces safety, equipment, structural damage analysis, and damage repairs. Topics include shop safety, design and construction, structural analysis and measurement, equipment, structural glass, repair techniques, and other related topics. Upon completion, students should be able to analyze and perform repairs to a vehicle which has received light/moderate structural damage. This is a diploma-level course. (F)

AUB 132 Structural Damage II 2 6 4
Prerequisite: AUB 131
This course provides an in-depth study of structural damage analysis and repairs to vehicles that have received moderate to heavy structural damage. Topics include shop safety, structural analysis and measurement, equipment, structural glass, advanced repair techniques, structural component replacement and alignment, and other related topics. Upon completion, students should be able to analyze and perform repairs according to industry standards. This is a diploma-level course. (S)

AUB 134 Autobody MIG Welding 1 4 3
This course covers the terms and procedures for welding the various metals found in today's autobody repair industry with an emphasis on personal/environmental safety. Topics include safety and precautionary measures, setup/operation of MIG equipment, metal identification methods, types of welds/joints, techniques, inspection methods, and other related topics. Upon completion, students should be able to demonstrate a basic knowledge of welding operations and safety procedures according to industry standards. This is a diploma-level course. (F)

AUB 136 Plastics and Adhesives 1 4 3
This course covers safety, plastic and adhesive identification, and the various repair methods of automotive plastic components. Topics include safety, identification, preparation, material selection, and the various repair procedures including refinishing. Upon completion, students should be able to identify, remove, repair, and/or replace automotive plastic components in accordance with industry standards. This is a diploma-level course. (SS)

AUB 141 Mechanical & Electrical Components I 2 2 3
This course covers the basic principles of automotive mechanical and electrical components. Topics include personal and environmental safety and suspension and steering, electrical, brake, heating and air-conditioning, cooling, drive train, and restraint systems. Upon completion, students should be able to identify system components and perform basic system diagnostic checks and/or repairs according to industry standards. This is a diploma-level course. (SS)
AUB 162  Autobody Estimating  1  2  2
This course provides a comprehensive study of autobody estimating. Topics include collision damage analysis, industry regulations, flat-rate and estimated time, and collision estimating manuals. Upon completion, students should be able to prepare and interpret a damage report. This is a diploma-level course. (SS)

AUT:  Automotive

AUT 110  Introduction to Auto Technology  2  2  3
This course covers workplace safety, hazardous material and environmental regulations, use of hand tools, service information resources, basic concepts, systems, and terms of automotive technology. Topics include familiarization with vehicle systems along with identification and proper use of various automotive hand and power tools. Upon completion, students should be able to describe safety and environmental procedures, terms associated with automobiles, identify and use basic tools and shop equipment. (F)

AUT 116  Engine Repair  2  3  3
Corequisite: AUT 110, AUT 116A
This course covers the theory, construction, inspection, diagnosis, and repair of internal combustion engines and related systems. Topics include fundamental operating principles of engines and diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 116A  Engine Repair Lab  0  3  1
Corequisites: AUT 116
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include diagnosis, inspection, adjustment, and repair of automotive engines using appropriate service information. Upon completion, students should be able to perform basic diagnosis, measurement and repair of automotive engines using appropriate tools, equipment, procedures, and service information.

AUT 123  Powertrain Diagnosis & Service  1  3  2
Corequisites: AUT 110
This course covers the diagnosis, repair and service of the vehicle powertrain and related systems. Topics include fundamental operating principles of engines and transmissions and use of proper service procedures for diagnosis, service and removal and replacement of major components. Upon completion, students should be able to perform basic service and diagnosis of the powertrain and related systems, and to perform in vehicle repairs and remove and replace components.

AUT 141  Suspension & Steering Systems  2  3  3
Corequisite: AUT 110, AUT 141A, AUT 161
This course covers principles of operation, types, and diagnosis/repair of suspension and steering systems to include steering geometry. Topics include manual and power steering
systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair various steering and suspension components, check and adjust various alignment angles, and balance wheels.

**AUT 141A Suspension & Steering Lab**

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<tr>
<th>Units</th>
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Corequisites: AUT 141

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include manual and power steering systems and standard and electronically controlled suspension and steering systems. Upon completion, students should be able to service and repair steering and suspension components, check and adjust alignment angles, repair tires, and balance wheels.

**AUT 151 Brake Systems**

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<th>Units</th>
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Corequisite: AUT 110, AUT 151A, AUT 161

This course covers principles of operation and types, diagnosis, service, and repair of brake systems. Topics include drum and disc brakes involving hydraulic, vacuum boost, hydra-boost, electrically powered boost, and anti-lock and parking brake systems. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

**AUT 151A Brakes Systems Lab**

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<th>Units</th>
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Corequisite: AUT 151

This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include drum and disc brakes involving hydraulic, vacuum-boost, hydra-boost, electrically powered boost, and anti-lock, parking brake systems and emerging brake systems technologies. Upon completion, students should be able to diagnose, service, and repair various automotive braking systems.

**AUT 161 Basic Auto Electricity**

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<th>Units</th>
<th>Hours</th>
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<td>4</td>
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</table>

Corequisite: AUT 110

This course covers basic electrical theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of batteries, starters, and alternators. Topics include Ohm's Law, circuit construction, wiring diagrams, circuit testing, and basic troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair basic wiring, battery, starting, charging, and electrical concerns.

**AUT 163 Advanced Auto Electricity**

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<tr>
<th>Units</th>
<th>Hours</th>
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<td>2</td>
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</table>

Prerequisite: AUT 161

Corequisite: AUT 163A

This course covers electronic theory, wiring diagrams, test equipment, and diagnosis, repair, and replacement of electronics, lighting, gauges, horn, wiper, accessories, and body modules. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, and troubleshooting. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.
AUT 163A Advanced Auto Electricity Lab 0 3 1  
Corequisites: AUT 163  
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include networking and module communication, circuit construction, wiring diagrams, circuit testing, troubleshooting and emerging electrical/electronic systems technologies. Upon completion, students should be able to properly use wiring diagrams, diagnose, test, and repair wiring, lighting, gauges, accessories, modules, and electronic concerns.

AUT 171 Auto Climate Control 2 4 4  
Prerequisite: AUT 161  
This course covers the theory of refrigeration and heating, electrical/electronic/pneumatic controls, and diagnosis/repair of climate control systems. Topics include diagnosis and repair of climate control components and systems, recovery/recycling of refrigerants, and safety and environmental regulations. Upon completion, students should be able to describe the operation, diagnose, and safely service climate control systems using appropriate tools, equipment, and service information. (F)

AUT 181 Engine Performance 1 2 3 3  
Prerequisite: AUT 161  
This course covers the principles, systems, and procedures required for diagnosing and restoring engine performance using electrical/electronics test equipment. Topics include procedures for diagnosis and repair of ignition, emission control, and related electronic systems. Upon completion, students should be able to describe operation of and diagnose/repair ignition/emission control systems using appropriate test equipment and service information. (S)

AUT 183 Engine Performance 2 2 6 4  
Prerequisite: AUT 181  
This course covers the principles of fuel delivery/management, exhaust/emission systems, and procedures for diagnosing and restoring engine performance using appropriate test equipment. Topics include procedures for diagnosis/repair of fuel delivery/management and exhaust/emission systems using appropriate service information. Upon completion, students should be able to describe, diagnose, and repair engine fuel delivery/management and emission control systems using appropriate service information and diagnostic equipment. (SS)

AUT 186 PC Skills for Auto Techs 2 2 3  
Corequisite: AUT 110  
This course introduces students to personal computer literacy and Internet literacy with an emphasis on the automotive service industry. Topics include service information systems, management systems, computer-based systems, and PC based diagnostic equipment. Upon completion, students should be able to access information pertaining to automotive technology and perform word processing. (SS)

AUT 212 Auto Shop Management 3 0 3  
Prerequisites: AUT 183, ENG 111, ENG 111A  
This course covers the principals of management essential to decision-making,
communication, authority, and leadership. Topics include shop supervision, shop organization, customer relations, cost effectiveness and workplace ethics. Upon completion, students should be able to describe basic automotive shop operation from a management standpoint. (F)

AUT 221 Auto Transmission/Transaxles 2 3 3
Prerequisite: RED 080, AUT 183
Corequisite: AUT 221A
This course covers operation, diagnosis, service, and repair of automatic transmissions/transaxles. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair automatic drive trains. (F)

AUT 221A Auto Transmission/Transaxles Lab 0 3 1
Prerequisite: RED 080, AUT 183
Corequisite: AUT 221
This course is an optional lab to be used as an alternative to co-op placement in meeting the NATEF standards for total hours. Topics include hydraulic, pneumatic, mechanical, and electrical/electronic operation of automatic drive trains and the use of appropriate service tools and equipment. Upon completion, students should be able to diagnose and repair automatic drive trains. (F)

AUT 231 Manual Transmission/Axles/Drivetrains 2 3 3
Prerequisite: RED 080
Corequisite: AUT 231A
This course covers the operation, diagnosis, and repair of manual transmissions/transaxles, clutches, drive shafts, axles, and final drives. Topics include theory of torque, power flow, and manual drive train service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to explain operational theory and diagnose and repair manual drive trains. (S)

AUT 231A Manual Transmission/Axles/Drivetrains Lab 0 3 1
Prerequisite: RED 080
Corequisite: AUT 231
This course is an optional lab for the program that needs to meet NATEF hour standards but does not have a co-op component in the program. Topics include manual drive train diagnosis, service and repair using appropriate service information, tools, and equipment. Upon completion, students should be able to diagnose and repair manual drive trains. (S)

AUT 285 Introduction to Alternative Fuels 2 2 3
Prerequisite: RED 080, AUT 181
This course is an overview of alternative fuels and alternative fueled vehicles. Topics include composition and use of alternative fuels, including compressed natural gas, propane, biodiesel, ethanol, electric, hydrogen, synthetic fuels, and vehicles that use...
alternative fuels. Upon completion, students should be able to identify alternative fuel vehicles, explain how each alternative fuel delivery system works, and make minor repairs. (S)

**BIO: Biology**

**BIO 090**  
**Foundations of Biology**  
Corequisites: RED 090 or RED 091  
This course introduces basic biological concepts. Topics include basic biochemistry, cell structure and function, interrelationships among organisms, scientific methodology, and other related topics. Upon completion, students should be able to demonstrate preparedness for college-level biology courses. (D)

**BIO 110**  
**Principles of Biology**  
Prerequisite: RED 090 or RED 091  
This course provides a survey of fundamental biological principles of non-science majors. Emphasis is placed on basic chemistry, cell biology, metabolism, genetics, taxonomy, evolution, ecology, diversity, and other selected topics. Upon completion, students should be able to demonstrate increased knowledge and better understanding of biology as it applies to everyday life. *Under the CAA and ICAA, this course satisfies the general education Natural Science requirement for the AA and AFA degrees. It does not satisfy the general education Natural Science requirement for the AS degree.* (D)

**BIO 111**  
**General Biology I**  
Prerequisite: RED 090 or RED 091, MAT 070  
This course introduces the principles and concepts of biology. Emphasis is placed on basic biological chemistry, cell structure and function, metabolism and energy transformation, genetics, evolution, classification, and other related topics. Upon completion, students should be able to demonstrate understanding of life at the molecular and cellular levels. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)

**BIO 112**  
**General Biology II**  
Prerequisites: BIO 111 and RED 090 or RED 091  
This course is a continuation of BIO 111. Emphasis is placed on organisms, biodiversity, plant and animal systems, ecology, and other related topics. Upon completion, students should be able to demonstrate comprehension of life at the organismal and ecological levels. *This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

**BIO 120**  
**Introductory Botany**  
Prerequisite: BIO 110 or BIO 111  
This course provides an Introduction to the classification, relationships, structure, and function of plants. Topics include reproduction and development of seed and non-seed plants, levels of organization, form and function of systems, and a survey of major taxa.
Upon completion, students should be able to demonstrate comprehension of plant form and function, including selected taxa of both seed and non-seed plants. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

BIO 130  Introductory Zoology  
Prerequisite: BIO 110 or BIO 111
This course provides an Introduction to the classification, relationships, structure, and function of major animal phyla. Emphasis is placed on levels of organization, reproduction and development, comparative systems, and a survey of selected phyla. Upon completion, students should be able to demonstrate comprehension of animal form and function including comparative systems of selected groups. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

BIO 140  Environmental Biology  
Prerequisite:  RED 090 or RED 091
Corequisite:  BIO 140A
This course introduces environmental processes and the influence of human activities upon them. Topics include ecological concepts, population growth, natural resources, and a focus on current environmental problems from scientific, social, political, and economic perspectives. Upon completion, students should be able to demonstrate an understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

BIO 140A  Environmental Biology Lab  
Prerequisite:  RED 090 or RED 091
Corequisite:  BIO 140
This course provides a laboratory component to complement BIO 140. Emphasis is placed on laboratory and field experience. Upon completion, students should be able to demonstrate a practical understanding of environmental interrelationships and of contemporary environmental issues. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (D)

BIO 161  Introduction to Human Biology  
This course provides a basic survey of human biology. Emphasis is placed on the basic structure and function of body systems and the medical terminology used to describe normal and pathological states. Upon completion, students should be able to demonstrate an understanding of normal anatomy and physiology and the appropriate use of medical terminology.
BIO 163  Basic Anatomy and Physiology  
Prerequisite: RED 090 or RED 091
This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an Introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students should be able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)

BIO 168  Anatomy and Physiology I  
Prerequisite: RED 090 or RED 091, MAT 070
This course provides a comprehensive study of the anatomy and physiology of the human body. Topics include body organization, homeostasis, cytology, histology, and the integumentary, skeletal, muscular, and nervous systems and special senses. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/SS)

BIO 169  Anatomy and Physiology II  
Prerequisites: BIO 168 and RED 090 or RED 091
This course provides a continuation of the comprehensive study of the anatomy and physiology of the human body. Topics include the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems as well as metabolism, nutrition, acid-base balance, and fluid and electrolyte balance. Upon completion, students should be able to demonstrate an in-depth understanding of principles of anatomy and physiology and their interrelationships. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

BIO 223  Field Botany  
Prerequisite: BIO 112
This course provides a field and laboratory study of local flora. Emphasis is placed on local flora classification, identification, and ecology by the use of keys and field studies. Upon completion, students should be able to use keys for classification and identification of local flora and to demonstrate an understanding of plant ecology. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

BIO 224  Local Flora Spring  
This course provides an Introduction to the identification of native plants. Emphasis is placed on spring wild flowers. Upon completion, students should be able to identify a variety of spring wild flowers and native plants. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

BIO 225  Local Flora Summer  
This course provides an Introduction to the identification of native plants. Emphasis is
placed on summer wild flowers. Upon completion, students should be able to identify a variety of summer wild flowers and native plants. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

**BIO 226 Local Flora Fall**

1 2 2

This course provides an Introduction to the identification of native plants. Emphasis is placed on fall wild flowers. Upon completion, students should be able to identify a variety of fall wild flowers and native plants. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

**BIO 275 Microbiology**

3 3 4

Prerequisites: BIO 110, BIO 111, BIO 163, or BIO 168

This course covers principles of microbiology and the impact these organisms have on man and the environment. Topics include the various groups of microorganisms, their structure, physiology, genetics, microbial pathogenicity, infectious diseases, immunology, and selected practical applications. Upon completion, students should be able to demonstrate knowledge and skills including microscopy, aseptic technique, staining, culture methods, and identification of microorganisms. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (S/SS)

### BMT: Biomedical Equipment Technology

**BMT 111 Introduction to Biomed Field**

2 0 2

This course introduces the fundamental concepts of the health care delivery system. Topics include hospital organization and structure, BMET duties and responsibilities, and the professional and social interrelationships between services. Upon completion, students should be able to demonstrate an understanding of hospital organization as related to BMET duties. (F/SS)

**BMT 112 Hospital Safety Standards**

2 2 3

Prerequisite: ELC 112 or ELC 131

This course covers national, state, and local standards pertaining to hospital safety. Topics include electrical safety, gas safety, SMDA reporting, and JCAHO and FPA compliance. Upon completion, students should be able to conduct PM and safety inspections in compliance with safety regulations. (SS)

**BMT 120 Biomedical Anatomy & Physiology**

2 2 3

Prerequisites: ELC 112 or ELC 131

This course provides a basic study of human anatomy and physiology with emphasis on biomonitoring of body systems. Topics include homeostasis; cells and tissues; and the structure, function, and monitoring of body systems. Upon completion, students should be able to demonstrate a basic understanding of the structure, function, and biomedical monitoring of human body systems. (SS)
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<th>Course Title</th>
<th>Credits</th>
<th>Program</th>
<th>Comments</th>
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<td>BMT 212</td>
<td>BMET Instrumentation I</td>
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<tr>
<td>BMT 213</td>
<td>BMET Instrumentation II</td>
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<tr>
<td>BMT 223</td>
<td>Imaging Tech/Laser Fund</td>
<td>3</td>
<td>2</td>
<td>4</td>
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<tr>
<td>BMT 225</td>
<td>Biomed Troubleshooting</td>
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**BUS: Business**

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<tr>
<td>BUS 110</td>
<td>Introduction to Business</td>
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232
BUS 115 Business Law I 3 0 3
Prerequisites: RED 080
This course introduces the ethics and legal framework of business. Emphasis is placed on contracts, negotiable instruments, Uniform Commercial Code, and the working of the court systems. Upon completion, students should be able to apply ethical issues and laws covered to select business decision-making situations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

BUS 121 Business Math 2 2 3
Prerequisites: MAT 060 and RED 090 or RED 091
This course covers fundamental mathematical operations and their application to business problems. Topics include payroll, pricing, interest and discount, commission, taxes, and other pertinent uses of mathematics in the field of business. Upon completion, students should be able to apply mathematical concepts to business. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

BUS 125 Personal Finance 3 0 3
This course provides a study of individual and family financial decisions. Emphasis is placed on building useful skills in buying, managing finances, increasing resources, and coping with current economic conditions. Upon completion, students should be able to develop a personal financial plan. (F)

BUS 137 Principles of Management 3 0 3
This course is designed to be an overview of the major functions of management. Emphasis is placed on planning, organizing, controlling, directing, and communicating. Upon completion, students should be able to work as contributing members of a team utilizing these functions of management. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

BUS 139 Entrepreneurship I 3 0 3
This course provides an Introduction to the principles of entrepreneurship. Topics include self-analysis of entrepreneurship readiness, the role of entrepreneur in economic development, legal problems, organizational structure, and sources of financing, budgeting, and cash flow. Upon completion, students should have an understanding of the entrepreneurial process and issues faced by entrepreneurs. (D)

BUS 147 Business Insurance 3 0 3
Prerequisites: RED 080
This course surveys the basic concepts of risk management. Topics include principles and applications of health, property, life, and casualty insurance. Upon completion, students should be able to evaluate different insurance needs and assist an organization in acquiring adequate insurance coverage. (D)
BUS 153       Human Resource Management       3 0 3
This course introduces the functions of personnel/human resource management within an organization. Topics include equal opportunity and the legal environment, recruitment and selection, performance appraisal, employee development, compensation planning, and employee relations. Upon completion, students should be able to anticipate and resolve human resource concerns. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

BUS 220       Purchasing                   3 0 3
This course introduces the purchasing function and explains its role in business. Topics include the legal and ethical aspects of purchasing, quality assurance, and the application of purchasing formulas and methods for cost analysis. Upon completion, students should be able to complete a purchase transaction incorporating legal, ethical, quality, and cost considerations. (D)

BUS 225       Business Finance            2 2 3
Prerequisite: ACC 120
This course provides an overview of business financial management. Emphasis is placed on financial statement analysis, time value of money, management of cash flow, risk and return, and sources of financing. Upon completion, students should be able to interpret and apply the principles of financial management. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

BUS 230       Small Business Management  3 0 3
This course introduces the challenges of entrepreneurship including the start-up and operation of a small business. Topics include market research techniques, feasibility studies, site analysis, financing alternatives, and managerial decision making. Upon completion, students should be able to develop a small business plan. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

BUS 231       Computerized Inventory      2 2 3
Prerequisites: ACC 120 and CIS 110 or CIS 111
This course provides an overview of inventory procedures as related to management decisions. Emphasis is placed on general terms, methods, techniques, and computer applications. Upon completion, students should be able to apply inventory principles and processes in the workplace. (D)

BUS 239       Bus Applications Seminar     1 2 2
Prerequisites: ACC 120, BUS 115, BUS 137, MKT 120 and either ECO 151, ECO 251 or ECO 252
This course is designed as a capstone course for Business Administration majors. Emphasis is placed on decision making in the areas of management, marketing, production, purchasing, and finance. Upon completion, students should be able to apply the techniques, processes, and vital professional skills needed in the work place. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)
BUS 240 Business Ethics 3 0 3
Prerequisite: RED 080
This course introduces contemporary and controversial ethical issues that face the business community. Topics include moral reasoning, moral dilemmas, law and morality, equity, justice and fairness, ethical standards, and moral development. Upon completion, students should be able to demonstrate an understanding of their moral responsibilities and obligations as members of the workforce and society. (F/S)

BUS 245 Entrepreneurship II 3 0 3
Prerequisite: BUS 139
This course is designed to allow the student to develop a business plan. Topics include the need for a business plan, sections of the plan, writing the plan, and how to find assistance in preparing the plan. Upon completion, students should be able to design and implement a business plan based on sound entrepreneurship principles. (D)

BUS 260 Business Communication 3 0 3
Prerequisite: ENG 111
This course is designed to develop skills in writing business communications. Emphasis is placed on business reports, correspondence, and professional presentations. Upon completion, students should be able to communicate effectively in the workplace. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

BUS 270 Professional Development 3 0 3
This course provides basic knowledge of self-improvement techniques as related to success in the professional world. Topics include positive human relations, job-seeking skills, and projecting positive self-image. Upon completion, students should be able to demonstrate competent personal and professional skills necessary to get and keep a job. (F/S)

BUS 280 REAL Small Business 4 0 4
This course introduces hands-on techniques and procedures for planning and opening a small business, including the personal qualities needed for entrepreneurship. Emphasis is placed on market research, finance, time management, and day-to-day activities of owning/operating a small business. Upon completion, students should be able to write and implement a viable business plan and seek funding. (D)

CET: Computer Engineering Technology

CET 130 Operating System Principles 2 3 3
This course introduces the concepts, usage, internals and applications of operating systems used in engineering technology. Topics include resource management, shells, schedulers, file systems, networking, software considerations and other related topics. Upon completion, students should be able to choose and evaluate an operating system for engineering applications.
CHM: Chemistry

CHM 115 Concepts in Chemistry 3 0 3
Corequisite: CHM 115A
This course introduces basic chemical concepts and their applications to daily life for non-science majors. Topics include air pollution, global warming, energy, world of polymers, water and its importance to a technological society, food, drugs, and nuclear chemistry. Upon completion, students should be able to discuss, apply, and appreciate the impact of chemistry on modern society. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

CHM 115A Concepts in Chemistry Lab 0 2 1
Corequisite: CHM 115
This course is a laboratory for CHM 115. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 115. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical concepts presented in CHM 115. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

CHM 131 Introduction to Chemistry 3 0 3
Prerequisite: RED 090 or RED 091 and MAT 060, MAT 070
Corequisite: CHM 131A
This course introduces the fundamental concepts of inorganic chemistry. Topics include measurement, matter and energy, atomic and molecular structure, nuclear chemistry, stoichiometry, chemical formulas and reactions, chemical bonding, gas laws, solutions, and acids and bases. Upon completion, students should be able to demonstrate a basic understanding of chemistry as it applies to other fields. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

CHM 131A Introduction to Chemistry Lab 0 3 1
Prerequisite: MAT 070, RED 090 or RED 091
Corequisite: CHM 131
This course is a laboratory to accompany CHM 131. Emphasis is placed on laboratory experiences that enhance materials presented in CHM 131. Upon completion, students should be able to utilize basic laboratory procedures and apply them to chemical principles presented in CHM 131. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

CHM 132 Organic and Biochemistry 3 3 4
Prerequisites: CHM 131 and CHM 131A or CHM 151
This course provides a survey of major functional classes of compounds in organic and biochemistry. Topics include structure, properties, and reactions of the major organic and biological molecules and basic principles of metabolism. Upon completion, students should be able to demonstrate an understanding of fundamental chemical concepts
needed to pursue studies in related professional fields. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

CHM 151  General Chemistry I  3 3 4
Prerequisites: MAT 060, MAT 080 and RED 090 or RED 091
This course covers fundamental principles and laws of chemistry. Topics include measurement, atomic and molecular structure, periodicity, chemical reactions, chemical bonding, stoichiometry, thermochemistry, gas laws, and solutions. Upon completion, students should be able to demonstrate an understanding of fundamental chemical laws and concepts as needed in CHM 152. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

CHM 152  General Chemistry II  3 3 4
Prerequisite: CHM 151
This course provides a continuation of the study of the fundamental principles and laws of chemistry. Topics include kinetics, equilibrium, ionic and redox equations, acid-base theory, electrochemistry, thermodynamics, Introduction to nuclear and organic chemistry, and complex ions. Upon completion, students should be able to demonstrate an understanding of chemical concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

CHM 251  Organic Chemistry I  3 3 4
Prerequisite: CHM 152
This course provides a systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of hydrocarbons, alkyl halides, alcohols, and ethers; further topics include isomerization, stereochemistry, and spectroscopy. Upon completion, students should be able to demonstrate an understanding of the fundamental concepts of covered organic topics as needed in CHM 252. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (D)

CHM 252  Organic Chemistry II  3 3 4
Prerequisite: CHM 251
This course provides continuation of the systematic study of the theories, principles, and techniques of organic chemistry. Topics include nomenclature, structure, properties, reactions, and mechanisms of aromatics, aldehydes, ketones, carboxylic acids and derivatives, amines and heterocyclics; multi-step synthesis will be emphasized. Upon completion, students should be able to demonstrate an understanding of organic concepts as needed to pursue further study in chemistry and related professional fields. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)
CIS: Information Systems

CIS 110 Introduction to Computers  2 2 3
Prerequisites: RED 090 or RED 091
This course Introduces computer concepts, including fundamental functions and operations of the computer. Topics include identification of hardware components, basic computer operations, security issues, and use of software applications. Upon completion, students should be able to demonstrate an understanding of the role and function of computers and use the computer to solve problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative). Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

CIS 111 Basic PC Literacy  1 2 2
This course provides an overview of computer concepts. Emphasis is placed on the use of personal computers and software applications for personal and fundamental workplace use. Upon completion, students should be able to demonstrate basic personal computer skills. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

CIS 113 Computer Basics  0 2 1
This course Introduces basic computer usage for non-computer majors. Emphasis is placed on developing basic personal computer skills. Upon completion, students should be able to demonstrate competence in basic computer applications. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

CIS 115 Introduction to Programming & Logic  2 3 3
Prerequisites: MAT 070, MAT 080, MAT 121, MAT 161, MAT 171, or MAT 175
This course Introduces computer programming and problem solving in a structured program logic environment. Topics include language syntax, data types, program organization, problem solving methods, algorithm design, and logic control structures. Upon completion, students should be able to manage files with operating system commands, use top-down algorithm design, and implement algorithmic solutions in a programming language. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative). Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

CJC: Criminal Justice

CJC 100 Basic Law Enforcement Training  9 30 19
This course covers the basic skills and knowledge needed for entry-level employment as a law enforcement officer in North Carolina. Topics are divided into general units of study: legal, patrol duties, law enforcement communications, investigations, practical application and sheriff-specific. Upon successful completion, the student will be able to demonstrate competence in the topics and areas required for the state comprehensive certification examination. (F/S)
CJC 111 Introduction to Criminal Justice 3 0 3
This course introduces the components and processes of the criminal justice system. Topics include history, structure, functions, and philosophy of the criminal justice system and their relationship to life in our society. Upon completion, students should be able to define and describe the major system components and their interrelationships and evaluate career options. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

CJC 112 Criminology 3 0 3
This course introduces deviant behavior as it relates to criminal activity. Topics include theories of crime causation; statistical analysis of criminal behavior; past, present, and future social control initiatives; and other related topics. Upon completion, students should be able to explain and discuss various theories of crime causation and societal response. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

CJC 113 Juvenile Justice 3 0 3
This course covers the juvenile justice system and related juvenile issues. Topics include an overview of the juvenile justice system, treatment and prevention programs, special areas and laws unique to juveniles, and other related topics. Upon completion, students should be able to identify/discuss juvenile court structure/procedures, function and jurisdiction of juvenile agencies, processing/detention of juveniles, and case disposition. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

CJC 131 Criminal Law 3 0 3
This course covers the history/evolution/principles and contemporary applications of criminal law. Topics include sources of substantive law, classification of crimes, parties to crime, elements of crimes, matters of criminal responsibility, and other related topics. Upon completion, students should be able to discuss the sources of law and identify, interpret, and apply the appropriate statutes/elements. Instructional content for this course is available in the Virtual Learning Community (VLC).

CJC 215 Organization & Administration 3 0 3
This course introduces the components and functions of organization and administration as it applies to the agencies of the criminal justice system. Topics include operations/functions of organizations; recruiting, training, and retention of personnel; funding and budgeting; communications; span of control and discretion; and other related topics. Upon completion, students should be able to identify and discuss the basic components and functions of a criminal justice organization and its administrative operations. (D)

CJC 231 Constitutional Law 3 0 3
The course covers the impact of the Constitution of the United States and its amendments on the criminal justice system. Topics include the structure of the Constitution and its amendments, court decisions pertinent to contemporary criminal
justice issues, and other related topics. Upon completion, students should be able to identify/discuss the basic structure of the United States Constitution and the rights/procedures as interpreted by the courts. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

COE: Cooperative Education

COE 111 Co-op Work Experience I 0 10 1
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S/SS)

COE 112 Co-op Work Experience I 0 20 2
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S)

COE 113 Co-op Work Experience I 0 30 3
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S)

COE 114 Co-op Work Experience I 0 40 4
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S)

COE 115 Work Experience Seminar I 1 0 1
Corequisite: COE 111, COE 112, COE 113, or COE 114
This course provides procedures necessary for the Co-op student to receive maximum benefit from his/her work experience. Emphasis is placed on the student/employer/advisor relationship and the evaluation process of the experience used to show accountability. Upon completion the student will be totally aware of the Co-op benefit and process. (F/S)

COE 121 Co-op Work Experience II 0 10 1
Prerequisite: COE 111
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom
learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. (SS)

COE 122 Co-op Work Experience II 0 20 2
Prerequisite: COE 112
This course provides work experience with a college-approved employer in an area
related to the student's program of study. Emphasis is placed on integrating classroom
learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. (F/S)

COE 123 Co-op Work Experience II 0 30 3
Prerequisite: COE 113
This course provides work experience with a college-approved employer in an area
related to the student's program of study. Emphasis is placed on integrating classroom
learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. (F/S)

COE 125 Work Experience Seminar II 1 0 1
Corequisite: COE 121, COE 122, COE 123, or COE 124
This course provides work experience with a college-approved employer in an area
related to the student's program of study. Emphasis is placed on integrating classroom
learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. (F/S)

COE 131 Co-op Work Experience III 0 10 1
Prerequisite: COE 121
This course provides work experience with a college-approved employer in an area
related to the student's program of study. Emphasis is placed on integrating classroom
learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. (F/S/SS)

COE 132 Co-op Work Experience III 0 20 2
Prerequisite: COE 122
This course provides work experience with a college-approved employer in an area
related to the student's program of study. Emphasis is placed on integrating classroom
learning with related work experience. Upon completion, students should be able to
evaluate career selection, demonstrate employability skills, and satisfactorily perform
work-related competencies. (F/S)

COE 211 Co-op Work Experience IV 0 10 1
Prerequisite: COE 131
This course provides work experience with a college-approved employer in an area
related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S)

COE 212  Co-op Work Experience IV  0 20 2
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S/SS)

COE 221  Co-op Work Experience V  0 10 1
Prerequisite: COE 211
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S)

COE 231  Co-op Work Experience VI  0 10 1
Prerequisite: COE 221
This course provides work experience with a college-approved employer in an area related to the student's program of study. Emphasis is placed on integrating classroom learning with related work experience. Upon completion, students should be able to evaluate career selection, demonstrate employability skills, and satisfactorily perform work-related competencies. (F/S)

COM: Communication

For AA, AS and AFA programs, 3 SHC in Speech/Communications may be substituted for 3 SHC in Humanities/Fine Arts. Speech/Communication may not substitute for the literature requirement.

COM 120  Introduction Interpersonal Communication  3 0 3
Prerequisite: RED 090 OR RED 091
This course introduces the practices and principles of interpersonal communication in both dyadic and group settings. Emphasis is placed on the communication process, perception, listening, self-disclosure, speech apprehension, ethics, nonverbal communication, conflict, power, and dysfunctional communication relationships. Upon completion, students should be able to demonstrate interpersonal communication skills, apply basic principles of group discussion, and manage conflict in interpersonal communication situations. Students will also prepare and deliver presentations individually and in groups. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts (Substitute). Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)
**COM 231  Public Speaking**  
Prerequisites: ENG 111  
This course provides instruction and experience in preparation and delivery of speeches within a public setting and group discussion. Emphasis is placed on research, preparation, delivery, and evaluation of informative, persuasive, and special occasion public speaking. Upon completion, students should be able to prepare and deliver well-organized speeches and participate in group discussion with appropriate audiovisual support. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts (Substitute). Instructional content for this course is available in the Virtual Learning Community (VLC).* (F/S)

**COS: Cosmetology**

**COS 111  Cosmetology Concepts I (Day Program)**  
Corequisite: COS 112  
This course introduces basic cosmetology concepts. Topics include safety, first aid, sanitation, bacteriology, anatomy, diseases and disorders, hygiene, product knowledge, chemistry, ethics, manicures, and other related topics. Upon completion, students should be able to safely and competently apply cosmetology concepts in the salon setting. (F/S)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Program Type</th>
<th>Credits</th>
<th>Prerequisites</th>
<th>Corequisites</th>
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<td>COS 111AB</td>
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<td>COS 111BB</td>
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<tr>
<td>Or</td>
<td>COS 111AC</td>
<td>Part-time (Huskins)</td>
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<td>Or</td>
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<td>Or</td>
<td>COS 111CC</td>
<td>Part-time (Huskins)</td>
<td>1</td>
<td>COS 111BC</td>
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</tbody>
</table>

**COS 112  Salon I (Day Program)**  
Corequisite: COS 111  
This course introduces basic salon services. Topics include scalp treatments, shampooing, rinsing, hair color, design, hair cutting, permanent waving, pressing, relaxing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate salon services. (F/S)

<table>
<thead>
<tr>
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<th>Corequisites</th>
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<td>COS 112BB</td>
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<td>Or</td>
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<td>Or</td>
<td>COS 112BC</td>
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<td>Or</td>
<td>COS 112CC</td>
<td>Part-time (Huskins)</td>
<td>0</td>
<td>COS 112BC</td>
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</table>

**COS 113  Cosmetology Concepts II (Day Program)**  
Prerequisites: COS 111 and COS 112  
Corequisite: COS 112  
This course covers more comprehensive cosmetology concepts. Topics include safety,
product knowledge, chemistry, manicuring, chemical restructuring, and hair coloring. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. (F/S)

<table>
<thead>
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<th>Hours</th>
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<td>COS 113BB</td>
<td>Part-time (Evening Program)</td>
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</table>

COS 114  Salon II (Day Program) 0 24 8
Prerequisite: COS 112
Corequisite: COS 113
This course provides experience in a simulated salon setting. Topics include basic skin care, manicuring, nail application, scalp treatments, shampooing, rinsing, hair color, design, hair cutting, chemical restructuring, pressing, wigs, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services. (F/S)

<table>
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<th>Hours</th>
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<tr>
<td>COS 114BB</td>
<td>Part-time (Evening Program)</td>
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<td>12</td>
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</table>

COS 115  Cosmetology Concepts III (Day Program) 4 0 4
Prerequisites: COS 111 and COS 112
Corequisite: COS 116
This course covers more comprehensive cosmetology concepts. Topics include safety, product knowledge, salon management, salesmanship, skin care, electricity/light therapy, wigs, thermal hair styling, lash and brow tinting, superfluous hair removal, and other related topics. Upon completion, students should be able to safely and competently apply these cosmetology concepts in the salon setting. (SS)

<table>
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</tr>
</thead>
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</tr>
<tr>
<td>COS 115BB</td>
<td>Part-time (Evening Program)</td>
<td>2</td>
<td>0</td>
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</tbody>
</table>

COS 116  Salon III (Day Program) 0 12 4
Prerequisite: COS 112
Corequisite: COS 115
This course provides comprehensive experience in a simulated salon setting. Emphasis is placed on intermediate-level of skin care, manicuring, scalp treatments, shampooing, hair color, design, hair cutting, chemical restructuring, pressing, and other related topics. Upon completion, students should be able to safely and competently demonstrate these salon services. (SS)

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<tr>
<td>COS 116BB</td>
<td>Part-time (Evening Program)</td>
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<td>6</td>
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</table>

COS 117  Cosmetology Concepts IV (Day Program) 2 0 2
Prerequisites: COS 111 and COS 112
Corequisite: COS 118
This course covers advanced cosmetology concepts. Topics include chemistry and hair structure, advanced cutting and design, and an overview of all cosmetology concepts in preparation for the licensing examination. Upon completion, students should be able to demonstrate an understanding of these cosmetology concepts and meet program completion requirements. (F/S)

COS 118  Salon IV (Day Program)  0 21 7  
Corequisite: COS 117  
This course provides advanced experience in a simulated salon setting. Emphasis is placed on efficient and competent delivery of all salon services in preparation for the licensing examination and employment. Upon completion, students should be able to demonstrate competence in program requirements and the areas covered on the Cosmetology Licensing Examination and meet entry-level employment requirements. (F/S)

COS 118AB Part-time (Evening Program)  0 11 4  
COS 118BB Part-time (Evening Program)  0 10 3  

COS 120  Esthetics  0 18 6  
This course covers the techniques of esthetics in a comprehensive experience in a simulated salon setting. Topics include client consultation, facials, body treatments, hair removal, make-up applications, and color analysis. Upon completion, students should be able to safely and competently demonstrate esthetic services on clients in a salon setting. (SS)

COS 121  Manicure/Nail Technology I  4 6 6  
This course covers techniques of nail technology, hand and arm massage, and recognition of nail diseases and disorders. Topics include OSHA/safety, sanitation, bacteriology, product knowledge, salesmanship, manicures, artificial applications, pedicures, massage, and other related topics. Upon completion, students should be able to safely and competently perform nail care, including manicures, pedicures, massage, decorating, and artificial applications in a salon setting. (D)

COS 222  Manicure/Nail Technology II  4 6 6  
Prerequisites: COS 121  
This course covers advanced techniques of nail technology and hand and arm massage. Topics include OSHA/safety, product knowledge, customer service, salesmanship, artificial applications, nail art, and other related topics. Upon completion, students should be able to demonstrate competence necessary for the licensing examination, including advanced nail care, artificial enhancements, and decorations. (D)

COS 251  Manicure Instructor Concepts  8 0 8  
Corequisite: COS 252  
This course introduces manicuring instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervision techniques, and assess student classroom performance. (D)
COS 252  Manicure Instructor Practicum  0 15 5
Corequisite: COS 251
This course covers supervisory and instructional skills for teaching manicuring students in a laboratory setting. Topics include demonstrations of services, supervision, student assessment, and other related topics. Upon completion, students should be able to demonstrate competence in the areas covered by the Manicuring Instructor Licensing Examination and meet program completion requirements. (D)

COS 271  Instructor Concepts I  5 0 5
Corequisite: COS 272
This course introduces the basic cosmetology instructional concepts. Topics include orientation, theories of education, unit planning, daily lesson planning, laboratory management, student assessment, record keeping, and other related topics. Upon completion, students should be able to identify theories of education, develop lesson plans, demonstrate supervisory techniques, and assess student performance in a classroom setting. This is a certificate-level course. (D)

COS 272  Instructor Practicum I  0 21 7
Corequisite: COS 271
This course covers supervisory and instructional skills for teaching entry-level cosmetology students in a laboratory setting. Topics include demonstrations of services, supervision, and entry-level student assessment. Upon completion, students should be able to demonstrate salon services and instruct and objectively assess the entry-level student. This is a certificate-level course. (D)

COS 273  Instructor Concepts II  5 0 5
Prerequisites: COS 271 and COS 272
Corequisite: COS 274
This course covers advanced cosmetology instructional concepts. Topics include practical demonstrations, lesson planning, lecture techniques, development and administration of assessment tools, record keeping, and other related topics. Upon completion, students should be able to develop lesson plans, demonstrate supervision techniques, assess student performance in a classroom setting, and keep accurate records. This is a certificate-level course. (D)

COS 274  Instructor Practicum II  0 21 7
Prerequisites: COS 271 and COS 272
Corequisite: COS 273
This course is designed to develop supervisory and instructional skills for teaching advanced cosmetology students in a laboratory setting. Topics include practical demonstrations, supervision, and advanced student assessment. Upon completion, students should be able to demonstrate competence in the areas covered by the Instructor Licensing Examination and meet program completion requirements. This is a certificate-level course. (S) (D)
CSC: Computer Science

CSC 139 Visual BASIC Programming 2 3 3
This course introduces computer programming using the Visual BASIC programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test and debug at a beginning level. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

CSC 151 JAVA Programming 2 3 3
This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug JAVA language programs. In this course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

CSC 153 C# Programming 2 3 3
This course introduces computer programming using the C# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment at the beginning level. (F)

CSC 251 Advanced JAVA Programming 2 3 3
Prerequisites: CSC 151
This course is a continuation of CSC 151 using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment. (S)

CSC 253 Advanced C# Programming 2 3 3
Prerequisites: CSC 153
This course is a continuation of CSC 153 using the C# programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion, students should be able to design, code, test, debug, and implement objects using the appropriate environment. (S)
CSC 289 Programming Capstone Project 1 4 3
Prerequisites: CTS 285
This course provides an opportunity to complete a significant programming project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, testing, presentation, and implementation. Upon completion, students should be able to complete a project from the definition phase through implementation. (S)

CTS: Computer Information Technology

CTS 115 Information Systems Business Concepts 3 0 3
The course introduces the role of IT in managing business processes and the need for business process and IT alignment. Emphasis is placed on industry need for understanding business challenges and developing/managing information systems to contribute to the decision making process based on these challenges. Upon completion, students should be able to demonstrate knowledge of the ‘hybrid business manager’ and the potential offered by new technology and systems. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)

CTS 120 Hardware/Software Support 2 3 3
Prerequisites: CIS 110 or CIS 111
This course covers the basic hardware of a personal computer, including installation, operations and interactions with software. Topics include component identification, memory-system, peripheral installation and configuration, preventive maintenance, hardware diagnostics/repair, installation and optimization of system software, commercial programs, system configuration, and device-drivers. Upon completion, students should be able to select appropriate computer equipment and software, upgrade/maintain existing equipment and software, and troubleshoot/repair non-functioning personal computers. (F)

CTS 130 Spreadsheet 2 2 3
Prerequisites: CIS 110 or CIS 111 or OST 137
This course introduces basic spreadsheet design and development. Topics include writing formulas, using functions, enhancing spreadsheets, creating charts, and printing. Upon completion, students should be able to design and print basic spreadsheets and charts. (F)

CTS 135 Integrated Software Introduction 2 4 4
Prerequisites: CIS 110 or CIS 111
This course instructs students in the Windows or Linux based program suites for word processing, spreadsheet, database, personal information manager, and presentation software. This course prepares students for introductory level skills in database, spreadsheet, and personal information manager, word processing, and presentation applications to utilize data sharing. Upon completion, students should be able to design and integrate data at an introductory level to produce documents using multiple technologies. (F)

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<th>Course Code</th>
<th>Course Title</th>
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<td>Tech Support Functions</td>
<td>2 2 3</td>
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<tr>
<td>CTS 217</td>
<td>Computer Training/Support</td>
<td>2 2 3</td>
</tr>
<tr>
<td>CTS 220</td>
<td>Advanced Hard/Software Support</td>
<td>2 3 3</td>
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<tr>
<td>CTS 230</td>
<td>Advanced Spreadsheet</td>
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<td>CTS 235</td>
<td>Integrated Software Advanced</td>
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<tr>
<td>CTS 255</td>
<td>Advanced Tech Support Functions</td>
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**CTS 155 Tech Support Functions**

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Emphasis is placed on technical support management techniques and support technologies. Upon completion, students should be able to determine the best technologies to support and solve actual technical support problems. (F)

**CTS 217 Computer Training/Support**

Prerequisites: CIS 110 or CIS 111

This course introduces computer training and support techniques. Topics include methods of adult learning, training design, delivery, and evaluation, creating documentation, and user support methods. Upon completion, students should be able to design and implement training and provide continued support for computer users. (S)

**CTS 220 Advanced Hard/Software Support**

Prerequisites: CTS 120

This course provides advanced knowledge and competencies in hardware and operating system technologies for computer technicians to support personal computers. Emphasis is placed on: configuring and upgrading; diagnosis and troubleshooting; as well as preventive maintenance of hardware and system software. Upon completion, students should be able to install, configure, diagnose, perform preventive maintenance, and maintain basic networking on personal computers. (S)

**CTS 230 Advanced Spreadsheet**

Prerequisites: CTS 130

This course covers advanced spreadsheet design and development. Topics include advanced functions and statistics, charting, macros, databases, and linking. Upon completion, students should be able to demonstrate competence in designing complex spreadsheets. (S)

**CTS 235 Integrated Software Advanced**

Prerequisites: CTS 135

This course provides strategies to perform data transfer among software programs. Emphasis is placed on data interchange among word processors, spreadsheets, presentation graphics, databases and communications products. Upon completion, students should be able to integrate data to produce documents using multiple technologies. (S)

**CTS 255 Advanced Tech Support Functions**

Prerequisites: CTS 155

This course introduces a variety of diagnostic and instructional tools that are used to evaluate the performance of technical support technologies. Topics include technical support management techniques, evaluation, and methods of deployment for technical support technologies. Upon completion, students should be able to determine the best technologies to support and solve more complex technical support problems. (S)
CTS 285  Systems Analysis & Design  3 0 3
Prerequisites: CIS 115
This course introduces established and evolving methodologies for the analysis, design, and development of an information system. Emphasis is placed on system characteristics, managing projects, prototyping, CASE/OOM tools, and systems development life cycle phases. Upon completion, students should be able to analyze a problem and design an appropriate solution using a combination of tools and techniques. (F)

CTS 289  System Support Project  1 4 3
Prerequisites: CTS 285
This course provides an opportunity to complete a significant support project with minimal instructor assistance. Emphasis is placed on written and oral communication skills, project definition, documentation, installation, testing, presentation, and user training. Upon completion, students should be able to complete a project from the definition phase through implementation. (S)

CUL:  Culinary

CUL 110  Sanitation & Safety  2 0 2
Corequisite: CUL 110A
This course introduces the basic principles of sanitation and safety relative to the hospitality industry. Topics include personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate an understanding of the content necessary for successful completion of a nationally recognized food/safety/sanitation exam. (F/S/SS)

CUL 110A  Sanitation & Safety Lab  0 2 1
Corequisite: CUL 110
This course provides a laboratory experience for enhancing student skills in the basic principles of sanitation and safety. Emphasis is placed on personal hygiene, sanitation and safety regulations, use and care of equipment, the principles of food-borne illness, and other related topics. Upon completion, students should be able to demonstrate practical applications of sanitation and safety procedures in the hospitality industry. (F/S/SS)

CUL 112  Nutrition for Foodservice  3 0 3
This course covers the principles of nutrition and its relationship to the foodservice industry. Topics include personal nutrition fundamentals, weight management, exercise, nutritional adaptation/analysis of recipes/menus, healthy cooking techniques and marketing nutrition in a foodservice operation. Upon completion, students should be able to apply basic nutritional concepts to food preparation and selection. (F)

CUL 120  Purchasing  2 0 2
This course covers purchasing for foodservice operations. Emphasis is placed on yield tests, procurement, negotiating, inventory control, product specification, purchasing
ethics, vendor relationships, food product specifications and software applications. Upon completion, students should be able to apply effective purchasing techniques based on the end-use of the product. (F)

CUL 135 Food & Beverage Service 2 0 2
Corequisite CUL 135A
This course is designed to cover the practical skills and knowledge necessary for effective food and beverage service in a variety of settings. Topics include greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate competence in human relations and the skills required in the service of foods and beverages. (S)

CUL 135A Food & Beverage Service Lab 0 2 1
Corequisite: CUL 135
This course provides a laboratory experience for enhancing student skills in effective food and beverage service. Emphasis is placed on practical experiences including greeting/service of guests, dining room set-up, profitability, menu sales and merchandising, service styles and reservations. Upon completion, students should be able to demonstrate practical applications of human relations and the skills required in the service of foods and beverages. (S)

CUL 140 Culinary Skills I 2 6 5
Prerequisites: RED 090 or RED 091 and MAT 070, CUL 110
This course introduces the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on recipe conversion, measurements, terminology, knife skills, safe food handling, cooking methods, flavorings, seasonings, stocks/sauces/soups, and other related topics. Upon completion, students should be able to exhibit the basic cooking skills used in the food service industry. (F)

CUL 150 Food Science 1 2 2
This course covers the chemical and physical changes in foods that occur with cooking, handling, and processing. Emphasis is placed on practical application of heat transfer and its effect on color/flavor/texture, emulsification, protein coagulation, leavening agents, viscosity, and gel formation. Upon completion, students should be able to demonstrate an understanding of these principles as they apply to food preparation in an experimental setting. (S)

CUL 160 Baking I 1 4 3
Corequisite: CUL 110 and CUL 160A
This course covers basic ingredients, techniques, weights and measures, baking terminology and formula calculations. Topics include yeast/chemically leavened products, laminated doughs, pastry dough batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate proper scaling and measurement techniques, and prepare and evaluate a variety of bakery products. (S)
CUL 160A  Baking I Lab  
Corequisite: CUL 110 and CUL 160  
This course provides a laboratory experience for enhancing student skills in basic baking. Emphasis is placed on the practical experiences of yeast/chemically leavened products, laminated/pastry dough, batter, pies/tarts, meringue, custard, cakes and cookies, icings, glazes and basic sauces. Upon completion, students should be able to demonstrate a basic proficiency in bakeshop applications. (S)

CUL 170  Garde Manger I  
Corequisite: CUL 110 and CUL 170A  
This course introduces basic cold food preparation techniques and pantry production. Topics include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to present a cold food display and exhibit an understanding of the cold kitchen and its related terminology. (S)

CUL 170A  Garde Manger I Lab  
Corequisite: CUL 110 and CUL 170  
This course provides a laboratory experience for enhancing student skills in basic cold food preparation techniques and pantry production. Emphasis is placed on the practical experiences that include salads, sandwiches, appetizers, dressings, basic garnishes, cheeses, cold sauces, and related food items. Upon completion, students should be able to demonstrate proficiency in the design of a cold food display. (S)

CUL 230  Global Cuisines  
Prerequisites: CUL 110 and CUL 140  
This course provides practical experience in the planning, preparation, and presentation of representative foods from a variety of world cuisines. Emphasis is placed on indigenous ingredients and customs, nutritional concerns, and cooking techniques. Upon completion, students should be able to research and execute a variety of international and domestic menus. (S)

CUL 230A  Global Cuisines Lab  
Prerequisites: CUL 110 and CUL 140  
Corequisites: CUL 230  
This course provides a laboratory experience for enhancing student skills with cuisines from around the world. Emphasis is placed on production of global cuisines based on historical and geographical influences, ingredients, customs, and cooking techniques. Upon completion, students should be able to exhibit an understanding of the culinary practices and techniques of specific countries. (S)

CUL 240  Culinary Skills II  
Prerequisite: CUL 110 and CUL 140  
Corequisite: CUL 240A  
This course is designed to further students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on meat identification/fabrication, butchery and cooking techniques/methods; appropriate
vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and quantity food preparation. Upon completion, students should be able to plan, execute, and successfully serve entrees with complementary side items. (S)

CUL 240A   Culinary Skills Lab II
Prerequisites: CUL 110 and CUL 140
Corequisite: CUL 240
This course provides a laboratory experience for furthering students' knowledge of the fundamental concepts, skills, and techniques involved in basic cookery. Emphasis is placed on practical applications of meat identification/fabrication; butchery and cooking techniques/methods; appropriate vegetable/starch accompaniments; compound sauces; plate presentation; breakfast cookery; and food preparation. Upon completion, students should be able to demonstrate a basic proficiency in the preparation of entrees and accompaniments. (S)

CUL 245   Contemporary Cuisines
Prerequisites: CUL 110 and CUL 140
Corequisite: CUL 245A
This course introduces students to current culinary trends which include a variety of preparation methods. Topics include current and developing trends such as adaptation of native/regional ingredients and preparation methods into contemporary cuisines. Upon completion, students should be able to demonstrate knowledge of a variety of contemporary cuisines. (S)

CUL 245A   Contemporary Cuisines Lab
Prerequisites: CUL 110 and CUL 140
Corequisites: CUL 245
This course provides a laboratory experience for enhancing student skills with current culinary trends including a variety of preparation methods. Emphasis is placed on current and developing trends such as adaptation of native/regional ingredients and preparation methods into contemporary cuisines. Upon completion, students should be able to demonstrate knowledge of a variety of contemporary cuisines. (S)

CUL 260   Baking II
Prerequisites: CUL 110 and CUL 160
Corequisite: CUL 260A
This course is designed to further students' knowledge in ingredients, weights and measures, baking terminology and formula calculation. Topics include classical desserts, frozen desserts, cake and torte production, decorating and icings/glazes, dessert plating and presentation. Upon completion, students should be able to demonstrate pastry preparation, plating, and dessert buffet production skills. (S)

CUL 260A   Baking II Lab
Prerequisite: CUL 110 and CUL 160
Corequisite: CUL 260
This course provides a laboratory experience for enhancing student skills in classical desserts, laminated pastry dough, cake and torte decorating. Topics include practical
experiences with classical desserts, frozen desserts, cake and torte production, decorating and icings/glazes, dessert plating and presentation. Upon completion, students should be able to perform cake-decorating techniques, produce pastry showpieces, and prepare and plate assorted pastries. (S)

**CUL 270**  
**Garde Manger II**  
1 4 3  
Prerequisite: CUL 110, CUL 140 and CUL 170  
Corequisite: CUL 270A  
This course is designed to further students’ knowledge in basic cold food preparation techniques and pantry production. Topics include pat‘es, terrines, galantines, decorative garnishing skills, carving, charcuterie, smoking, canapes, hors d‘oeuvres, and related food items. Upon completion, students should be able to design, set up, and evaluate a catering/event display to include a cold buffet with appropriate showpieces. (F)

**CUL 270A**  
**Garde Manger II Lab**  
0 3 1  
Prerequisite: CUL 110, CUL 140 and CUL 170  
Corequisite: CUL 270  
This course provides a laboratory experience for enhancing student skills in basic cold food preparation techniques and pantry production. Emphasis is placed on practical experiences with pat‘es, terrines, galantines, decorative garnishing skills, carving, charcuterie, smoking, canapes, hors d‘oeuvres, and related food items. Upon completion, students should be able to demonstrate proficiency in the design/technical applications of advanced garde manger work including classical cold buffets incorporating appropriate showpieces. (F)

**CUL 275**  
**Catering Cuisine**  
1 8 5  
Prerequisite: CUL 110, CUL 140 and CUL 240  
This course covers the sequential steps to successful catering that include sales, client needs, menu planning, purchasing, costing, event pricing, staffing and sanitation concerns. Emphasis is placed on new culinary competencies and skills specific to catering preparation, presentation, and customer service. Upon completion, students should be able to demonstrate proficiency in the successful design and execution of various types of catering events. (F)

**CUL 280**  
**Pastry & Confections**  
1 4 3  
Prerequisite: CUL 110, CUL 140 and CUL 160  
Corequisite: CUL 280A  
This course includes confections and candy, chocolate techniques, transfer sheets, pulled and blown sugar, marzipan and custom silicon molding. Emphasis is placed on showpieces, pre-set molding, stencil cutouts, pattern tracing and/or free-hand shaping. Upon completion, students should be able to design and produce centerpieces and showpieces. (F/S)

**CUL 280A**  
**Pastry and Confections Lab**  
0 3 1  
Prerequisite: CUL 110, CUL 140 and CUL 160  
Corequisite: CUL 280  
This course provides a laboratory experience for enhancing student skills in
confections/candy, chocolate techniques, transfer sheets, pulled/blown sugar, pastillage, marzipan and custom silicon molding. Emphasis is placed on practical experiences with showpieces, pre-set molding, stencil cutouts, pattern tracing and/or free-hand shaping. Upon completion, students should be able to demonstrate proficiency in the execution of plated desserts, dessert platters and showpieces. (F/S)

**CVS: Cardiovascular Sonography**

CVS 160  CVS Clinical Ed I 0 15 5  
**Prerequisite:** Enrollment in the Cardiovascular Sonography program  
**Corequisite:** CVS 163  
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (F)

CVS 161  CVS Clinical Ed II 0 24 8  
**Prerequisite:** CVS 160  
This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (S)

CVS 162  CVS Clinical Ed III 0 15 5  
**Prerequisite:** CVS 161  
This course provides continued participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (SS)

CVS 163  Echo I 3 2 4  
**Prerequisite:** Enrollment in the Cardiovascular Sonography program  
This course covers cardiac anatomy and introduces cardiac scanning techniques. Topics include normal cardiac anatomy, Doppler physics, and 2-D and M-mode imaging. Upon completion, students should be able to perform 2-D and M-mode studies. (F)

CVS 164  Echo II 3 2 4  
**Prerequisite:** CVS 163  
This course is a continuation of CVS 163 with continued study of 2-D and M-mode imaging. Emphasis is placed on continuous wave, pulsed wave, color, and power Doppler imaging of normal and abnormal cardiac conditions. Upon completion, students should be able to perform and recognize normal and abnormal cardiac studies. (S)

CVS 260  CVS Clinical Ed IV 0 24 8  
**Prerequisite:** CVS 162  
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations.
Upon completion, students should be able to image, process, and evaluate sonographic examinations. (F)

CVS 261  CVS Clinical Ed V  0  24  8
Prerequisite: CVS 260
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (S)

CVS 277  Cardiovascular Topics  2  0  2
Prerequisites: CVS 163
This course provides an overview of cardiovascular topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to sit for the registry examinations. (S)

**DBA: Database Management Technology**

DBA 110  Database Concepts  2  3  3
This course introduces database design and creation using a DBMS product. Emphasis is placed on data dictionaries, normalization, data integrity, data modeling, and creation of simple tables, queries, reports, and forms. Upon completion, students should be able to design and implement normalized database structures by creating simple database tables, queries, reports, and forms. (F)

DBA 115  Database Applications  2  2  3
Prerequisites: DBA 110
This course applies concepts learned in DBA 110 to a specific DBMS. Topics include manipulating multiple tables, advanced queries, screens and reports, linking, and command files. Upon completion, students should be able to create multiple table systems that demonstrate updates, screens, and reports representative of industry requirements. (S)

**DFT: Drafting**

DFT 111  Technical Drafting I  1  3  2
Corequisite: DFT 111A
This course introduces basic drafting skills, equipment, and applications. Topics include sketching, measurements, lettering, dimensioning, geometric construction, orthographic projections and pictorial drawings, sections, and auxiliary views. Upon completion, students should be able to understand and apply basic drawing principles and practices. (F)

DFT 111A  Technical Drafting I Lab  0  3  1
Corequisite: DFT 111
This course provides a laboratory setting to enhance basic drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 111. Upon
completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 111. (F)

**DFT 112**  
Technical Drafting II  
1 3 2  
Prerequisite: DFT 111  
Corequisite: DFT 112A  
This course provides for advanced drafting practices and procedures. Topics include detailed working drawings, hardware, fits and tolerances, assembly and sub-assembly, geometric dimensioning and tolerancing, intersections, and developments. Upon completion, students should be able to produce detailed working drawings. (S)

**DFT 112A**  
Technical Drafting II Lab  
0 3 1  
Corequisite: DFT 112  
This course provides a laboratory setting to enhance advance drafting skills. Emphasis is placed on practical experiences that enhance the topics presented in DFT 112. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in DFT 112. (S)

**DFT 151**  
CAD I  
2 3 3  
Prerequisite: DFT 151  
This course introduces CAD software as a drawing tool. Topics include drawing, editing, file management, and plotting. Upon completion, students should be able to produce and plot a CAD drawing. (F/SS)

**DFT 152**  
CAD II  
2 3 3  
Prerequisite: DFT 151  
This course introduces extended CAD applications. Emphasis is placed upon intermediate applications of CAD skills. Upon completion, students should be able to use extended CAD applications to generate and manage drawings. (S)

**DFT 153**  
CAD III  
2 3 3  
Prerequisite: DFT 111 and DFT 151  
This course introduces advanced CAD applications. Emphasis is placed upon advanced applications of CAD skills. Upon completion, students should be able to use advanced CAD applications to generate and manage data. (F)

**DFT 154**  
Introduction to Solid Modeling  
2 3 3  
This course is an Introduction to basic three-dimensional solid modeling and design software. Topics include basic design, creation, editing, rendering and analysis of solid models, and creation of multiview drawings. Upon completion, students should be able to use design techniques to create, edit, render and generate a multiview drawing. (D)

**DRA: Drama/Theatre**

**DRA 111**  
Theatre Appreciation  
3 0 3  
This course provides a study of the art, craft, and business of the theatre. Emphasis is placed on the audience’s appreciation of the work of the playwright, director, actor, designer, producer, and critic. Upon completion, students should be able to demonstrate
a vocabulary of theatre terms and to recognize the contributions of various theatre
artists. This course has been approved for transfer under the CAA and ICAA as a
general education course in Humanities/Fine Arts. (D)

ECO: Economics

ECO 151 Survey of Economics 3 0 3
Prerequisite: RED 090 or RED 091
This course introduces basic concepts of micro- and macroeconomics. Topics include
supply and demand, optimizing economic behavior, prices and wages, money, interest
rates, banking system, unemployment, inflation, taxes, government spending, and
international trade. Upon completion, students should be able to explain alternative
solutions for economic problems faced by private and government sectors. This course
has been approved for transfer under the CAA and ICAA as a general education
course in Social/Behavioral Sciences. (D)

ECO 251 Principles of Microeconomics 3 0 3
Prerequisite: RED 090 or RED 091
This course introduces economic analysis of individuals, businesses, and industry choices
in the market economy. Topics include the price mechanism, supply and demand,
optimizing economic behavior, costs and revenue, market structures, factor markets,
income distribution, market failure, and government intervention. Upon completion,
students should be able to identify and evaluate consumer and business alternatives in
order to efficiently achieve economic objectives. This course has been approved for
transfer under the CAA and ICAA as a general education course in Social/Behavioral
Sciences. Instructional content for this course is available in the Virtual Learning
Community (VLC). (F/S/SS)

ECO 252 Principles of Macroeconomics 3 0 3
Prerequisite: RED 090 or RED 091
This course introduces economic analysis of aggregate employment, income, and prices.
Topics include major schools of economic thought; aggregate supply and demand;
economic measures, fluctuations, and growth; money and banking; stabilization
techniques; and international trade. Upon completion, students should be able to
evaluate national economic components, conditions, and alternatives for achieving
socioeconomic goals. This course has been approved for transfer under the CAA and
ICAA as a general education course in Social/Behavioral Sciences. Instructional
content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

EDU: Education

EDU 119 Introduction to Early Childhood Education 4 0 4
This course covers the foundations of the education profession, the diverse educational
settings for young children, professionalism and planning developmentally appropriate
programs for all children. Topics include historical foundations, program types, career
options, professionalism and creating inclusive environments and curriculum responsive
to the needs of all children and families. Upon completion, students should be able to
design career plans and develop schedules, environments and activity plans appropriate for all children. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)

**EDU 131 Child, Family, and Community**
- Prerequisite: ENG 080 and RED 080
- This course covers the development of partnerships between culturally and linguistically diverse families, children, schools and communities. Emphasis is placed on developing skills and identifying benefits for establishing, supporting, and maintaining respectful, collaborative relationships between diverse families, programs/schools, and community agencies/resources. Upon completion, students should be able to explain appropriate relationships between families, educators, and professionals that enhance development and educational experiences of all children. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F/S)

**EDU 144 Child Development I**
- Prerequisite: ENG 080, RED 080, RED 090 or RED 091
- This course includes the theories of child development, needs, milestones, and factors that influence development, from conception through approximately 36 months. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. *Instructional content for this course is available in the Virtual Learning Community (VLC).* This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. (F)

**EDU 145 Child Development II**
- Prerequisite: ENG 080, RED 080, RED 090 or RED 091
- This course includes the theories of child development, needs, milestones, and factors that influence development, from preschool through middle childhood. Emphasis is placed on developmental sequences in physical/motor, emotional/social, cognitive, and language domains and the impact of multiple influences on development and learning. Upon completion, students should be able to compare/contrast typical/atypical developmental characteristics, explain environmental factors that impact development, and identify strategies for enhancing development. *Instructional content for this course is available in the Virtual Learning Community (VLC).* This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. (S)

**EDU 146 Child Guidance**
- Prerequisite: ENG 080 and RED 080
- This course introduces principles and practical techniques including the design of learning environments for providing developmentally appropriate guidance for all children, including those at risk. Emphasis is placed on observation skills, cultural influences, underlying causes of behavior, appropriate expectations, development of self-control and the role of communication and guidance. Upon completion, students should
be able to demonstrate direct/indirect strategies for preventing problem behaviors, teaching appropriate/acceptable behaviors, negotiation, setting limits and recognizing at risk behaviors. Instructional content for this course is available in the Virtual Learning Community (VLC). This course has been approved for transfer under the CAA as a premajor and/or elective course requirement. (F/S)

EDU 151 Creative Activities 3 0 3
Prerequisite: ENG 080 and RED 080
This course covers planning, creation and adaptation of developmentally supportive learning environments with attention to curriculum, interactions, teaching practices and learning materials. Emphasis is placed on creating and adapting integrated, meaningful, challenging and engaging developmentally supportive learning experiences in art, music, movement and dramatics for all children. Upon completion, students should be able to create, adapt, implement and evaluate developmentally supportive learning materials, experiences and environments. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

EDU 153 Health, Safety, & Nutrition 3 0 3
Prerequisite: ENG 080 and RED 080
This course covers promoting and maintaining the health and well-being of all children. Topics include health and nutritional guidelines, common childhood illnesses, maintaining safe and healthy learning environments, recognition and reporting of abuse and neglect and state regulations. Upon completion, students should be able to demonstrate knowledge of health, safety, and nutritional needs, safe learning environments, and adhere to state regulations. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

EDU 184 Early Child Introduction Practicum 1 3 2
Prerequisite: ENG 080, RED 080, and EDU 119
This course introduces students to early childhood settings and applying skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on observing children and assisting in the implementation of developmentally appropriate activities/environments for all children; and modeling reflective/professional practices. Upon completion, students should be able to demonstrate developmentally appropriate interactions with children and ethical/professional behaviors as indicated by assignments and onsite faculty visits. (S)

EDU 216 Foundations of Education 4 0 4
Prerequisite: RED 090 or RED 091 and ENG 090 or ENG 091
This course introduces the American educational system and the teaching profession. Topics include historical and philosophical foundations of education, contemporary educational, structural, legal, and financial issues, and experiences in public school classrooms. Upon completion, students should be able to relate classroom observations to the roles of teachers and schools and the process of teacher education. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement at select institutions. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)
EDU 221  Children with Exceptionalities  3  0  3  
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, EDU 144, and EDU 145  
This course introduces children with exceptionalities, their families, support services,  
inclusive/diverse settings, and educational/family plans based on the foundations of child  
development. Emphasis is placed on the characteristics of exceptionalities, observation  
and assessment of children, strategies for adapting the learning environment, and  
identification of community resources. Upon completion, students should be able to  
recognize diverse abilities, describe the referral process, and depict collaboration with  
families/professionals to plan/implement, and promote best practice. This course has  
been approved for transfer under the CAA and ICAA as a premajor and/or elective  
course requirement at select institutions. Instructional content for this course is  
available in the Virtual Learning Community (VLC). (SS)

EDU 234  Infants, Toddlers, & Twos  3  0  3  
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, and EDU 119  
This course covers the unique needs and rapid changes that occur in the first three years  
of life and the inter-related factors that influence development. Emphasis is placed on  
recognizing and supporting developmental milestones through purposeful strategies,  
responsive care routines and identifying elements of quality, inclusive early care and  
education. Upon completion, students should be able to demonstrate respectful  
relationships that provide a foundation for healthy infant/toddler/twos development,  
plan/select activities/materials, and partner with diverse families. (S)

EDU 235  School-Age Development & Programming  3  0  3  
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091  
This course includes developmentally appropriate practices in group settings for school-  
age children. Emphasis is placed on principles of development, environmental planning,  
and positive guidance techniques. Upon completion, students should be able to discuss  
developmental principles for all children ages five to twelve and plan and implement  
developmentally-appropriate activities. (S)

EDU 251  Exploration Activities  3  0  3  
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, and MAT 060  
This course covers discovery experiences in science, math, and social studies. Emphasis is  
placed on developing concepts for each area and encouraging young children to explore,  
discover, and construct concepts. Upon completion, students should be able to discuss  
the discovery approach to teaching, explain major concepts in each area, and plan  
appropriate experiences for children. (S)

EDU 259  Curriculum Planning  3  0  3  
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, and EDU 119  
This course is designed to focus on curriculum planning for three to five year olds.  
Topics include philosophy, curriculum models, indoor and outdoor environments,  
scheduling, authentic assessment, and planning developmentally appropriate experiences.  
Upon completion, students should be able to evaluate children's development, critique  
curriculum, plan for individual and group needs, and assess and create quality  
environments. (F)
EDU 261 Early Childhood Administration I 3 0 3
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, and MAT 060
Corequisite: EDU 119
This course introduces principles of basic programming and staffing, budgeting/financial management and marketing, and rules and regulations of diverse early childhood programs. Topics include program structure and philosophy, standards of NC child care programs, finance, funding resources, and staff and organizational management. Upon completion, students should be able to develop components of program/personnel handbooks, a program budget, and demonstrate knowledge of fundamental marketing strategies and NC standards. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

EDU 262 Early Childhood Administration II 3 0 3
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, and EDU 261
Corequisite: EDU 119
This course focuses on advocacy/leadership, public relations/community outreach and program quality/evaluation for diverse early childhood programs. Topics include program evaluation/accreditation, involvement in early childhood professional organizations, leadership/mentoring, family, volunteer and community involvement and early childhood advocacy. Upon completion, students should be able to define and evaluate all components of early childhood programs, develop strategies for advocacy and integrate community into programs. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

EDU 271 Educational Technology 2 2 3
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091
This course introduces the use of technology to enhance teaching and learning in all educational settings. Topics include technology concepts, instructional strategies, materials and adaptive technology for children with exceptionalities, facilitation of assessment/evaluation, and ethical issues surrounding the use of technology. Upon completion, students should be able to apply technology enhanced instructional strategies, use a variety of technology resources and demonstrate appropriate technology skills in educational environments. (F)

EDU 280 Language & Literacy Experiences 3 0 3
Prerequisite: ENG 090 or ENG 091 and RED 090 or RED 091
This course is designed to expand students’ understanding of children’s language and literacy development and provides strategies for enhancing language/literacy experiences in an enriched environment. Topics include selection of diverse literature and interactive media, the integration of literacy concepts throughout the curriculum, appropriate observations/assessments and inclusive practices. Upon completion, students should be able to select, plan, implement and evaluate developmentally appropriate and diverse language/literacy experiences. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

EDU 284 Early Child Capstone Practicum 1 9 4
Prerequisite: ENG 090 or ENG 091, RED 090 or RED 091, EDU 119, EDU 144, EDU 145, EDU 146, EDU 151, EDU 153, EDU 184, EDU 259
Corequisites: EDU 280 and EDU 251
This course is designed to allow students to apply skills in a three star (minimum) or NAEYC accredited or equivalent, quality early childhood environment. Emphasis is placed on designing, implementing and evaluating developmentally appropriate activities and environments for all children; supporting/involving families; and modeling reflective and professional practices. Upon completion, students should be able to demonstrate developmentally appropriate plans/assessments, appropriate guidance techniques and ethical/professional behaviors as indicated by assignments and onsite faculty visits. (S)

EGR: Engineering

EGR 285 Design Project 0 4 2
This course provides the opportunity to design an instructor-approved project using previously acquired skills. Emphasis is placed on selection, proposal, design, testing, and documentation of the approved project. Upon completion, students should be able to present and demonstrate projects. (D)

ELC: Electrical

ELC 112 DC/AC Electricity 3 6 5
This course introduces the fundamental concepts of and computations related to DC/AC electricity. Emphasis is placed on DC/AC circuits, components, operation of test equipment; and other related topics. Upon completion, students should be able to construct, verify, troubleshoot, and repair DC/AC circuits. (F)

ELC 113 Basic Wiring I 2 6 4
This course introduces the care/usage of tools and materials used in electrical installations and the requirements of the National Electrical Code. Topics include NEC, electrical safety, and electrical blueprint reading; planning, layout; and installation of electrical distribution equipment; lighting; over current protection; conductors; branch circuits; and conduits. Upon completion, students should be able to properly install conduits, wiring, and electrical distribution equipment associated with basic electrical installations. (F)

ELC 114 Basic Wiring II 2 6 4
Prerequisite: ELC 113
This course provides instruction in the application of electrical tools, materials, and test equipment associated with electrical installations. Topics include the NEC; safety; electrical blueprints; planning, layout, and installation of equipment and conduits; and wiring devices such as panels and overcurrent devices. Upon completion, students should be able to properly install equipment and conduit associated with electrical installations. (S)

ELC 115 Industrial Wiring 2 6 4
This course covers layout, planning, and installation of wiring systems in industrial facilities. Emphasis is placed on industrial wiring methods and materials. Upon completion, students should be able to install industrial systems and equipment. (F)
ELC 117 Motors and Controls 2 6 4
Prerequisite: ELC 112 or ELC 131
This course introduces the fundamental concepts of motors and motor controls. Topics include ladder diagrams, pilot devices, contractors, motor starters, motors, and other control devices. Upon completion, students should be able to properly select, connect, and troubleshoot motors and control circuits. (SS)

ELC 118 National Electrical Code 1 2 2
This course covers the use of the current National Electrical Code. Topics include the NEC history, wiring methods, overcurrent protection, materials, and other related topics. Upon completion, students should be able to effectively use the NEC. (F)

ELC 121 Electrical Estimating 1 2 2
This course covers the principles involved in estimating electrical projects. Topics include take-offs of materials and equipment, labor, overhead, and profit. Upon completion, students should be able to estimate simple electrical projects. (S)

ELC 125 Diagrams and Schematics 1 2 2
This course covers the interpretation of electrical diagrams, schematics, and drawings common to electrical applications. Emphasis is placed on reading and interpreting electrical diagrams and schematics. Upon completion, students should be able to read and interpret electrical diagrams and schematics. (F)

ELC 127 Software for Technicians 1 3 2
This course introduces computer software which can be used to solve electrical/electronics problems. Topics include electrical/electronics calculations, applications, and controls. Upon completion, students should be able to utilize a personal computer for electrical/electronics-related applications. (F)

ELC 128 Introduction to Programmable Logic Controller 2 3 3
This course introduces the programmable logic controller (PLC) and its associated applications. Topics include ladder logic diagrams, input/output modules, power supplies, surge protection, selection/installation of controllers, and interfacing of controllers with equipment. Upon completion, students should be able to install PLCs and create simple programs. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

ELC 131 DC/AC Circuit Analysis 4 3 5
This course introduces DC and AC electricity with an emphasis on circuit analysis, measurements, and operation of test equipment. Topics include DC and AC principles, circuit analysis laws and theorems, components, test equipment operation, circuit simulation software, and other related topics. Upon completion, students should be able to interpret circuit schematics; design, construct, verify, and analyze DC/AC circuits; and properly use test equipment. (F)

ELC 135 Electrical Machines 2 2 3
Prerequisites: ELC 112 and ELC 131
This course covers magnetic circuits, transformers, DC/AC generators, and a review of the three-phase circuit fundamentals including power factor. Topics include magnetic terms and calculations, transformer calculations based on primary or secondary equivalent circuits, and generator regulation and efficiency calculations. Upon completion, students should be able to perform regulation and efficiency calculations for DC/AC single- and three-phase transformer and generator circuits. (SS)

**ELN: Electronics**

**ELN 131  Semiconductor Applications**  
3 3 4  
Corequisites: ELC 112 or ELC 131  
This course introduces the characteristics and applications of semiconductor devices and circuits. Emphasis is placed on analysis, selection, biasing, and applications. Upon completion, students should be able to construct, analyze, verify, and troubleshoot discrete component circuits using appropriate techniques and test equipment. (S)

**ELN 132  Linear IC Applications**  
3 3 4  
Prerequisite: ELN 131 or BMT 113  
This course introduces the characteristics and applications of linear integrated circuits. Topics include op-amp circuits, waveform generators, active filters, IC voltage regulators, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot linear integrated circuits using appropriate techniques and test equipment. (F)

**ELN 133  Digital Electronics**  
3 3 4  
This course covers combinational and sequential logic circuits. Topics include number systems, Boolean algebra, logic families, MSI and LSI circuits, AC/DC conversion, and other related topics. Upon completion, students should be able to construct, analyze, verify, and troubleshoot digital circuits using appropriate techniques and test equipment. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

**ELN 133A  Digital Fundamentals Lab**  
0 3 1  
Corequisites: ELN 133  
This course is a laboratory to accompany ELN 133. Emphasis is placed on laboratory experiences which enhance the materials presented in ELN 133 and which provide practical experience. Upon completion students should be able to demonstrate a general understanding of digital fundamentals.

**ELN 231  Industrial Controls**  
2 3 3  
Prerequisite: ELC 112 or ELC 131  
This course introduces the fundamental concepts of control of rotating machinery and associated peripheral devices. Topics include rotating machine theory, ladder logic, electromechanical and solid state relays, motor controls, pilot devices, three-phase power systems, and other related topics. Upon completion, students should be able to interpret schematics and demonstrate an understanding of electromechanical and electronic control of rotating machinery. (SS)(S)
ELN 232  Introduction to Microprocessors  3  3  4  
Prerequisite: ELN 133  
This course introduces microprocessor architecture and microcomputer systems including memory and input/output interfacing. Topics include low-level language programming, bus architecture, I/O systems, memory systems, interrupts, and other related topics. Upon completion, students should be able to interpret, analyze, verify, and troubleshoot fundamental microprocessor circuits and programs using appropriate techniques and test equipment. (F) 

ELN 233  Microprocessor Systems  3  3  4  
Prerequisite: ELN 232  
This course covers the application and design of microprocessor control systems. Topics include control and interfacing of systems using AD/DA, serial/parallel I/O, communication protocols, and other related applications. Upon completion, students should be able to design, construct, program, verify, analyze, and troubleshoot fundamental microprocessor interface and control circuits using related equipment. (S) 

ELN 237  Local Area Networks  2  3  3  
Prerequisite: CIS 110 or CIS 111 or ELC 127  
This course introduces the fundamentals of local area networks and their operation in business and computer environments. Topics include the characteristics of network topologies, system hardware (repeaters, bridges, routers, gateways), system configuration, and installation and administration of the LAN. Upon completion, students should be able to install, maintain, and manage a local area network. (S) 

ELN 275  Troubleshooting  1  3  2  
Corequisite: ELN 131  
This course covers techniques of analyzing and repairing failures in electronic equipment. Topics include safety, signal tracing, use of service manuals, and specific troubleshooting methods for analog, digital, and other electronics-based circuits and systems. Upon completion, students should be able to logically diagnose and isolate faults and perform necessary repairs to meet manufacturers’ specifications. (SS) 

ENG: English

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. See “Admissions” for more information. Students should begin developmental course work at the appropriate level indicated by the college’s placement test.

ENG 075  Reading and Language Essentials  5  0  5  
Prerequisite: Appropriate score on either the reading or English placement test. This course uses whole language to develop proficiency in basic reading and writing. Emphasis is placed on increasing vocabulary, developing comprehension skills, and improving grammar. Upon completion, students should be able to understand and create grammatically and syntactically correct sentences. This course integrates ENG 070 and RED 070. This course does not satisfy the developmental reading and writing prerequisite for ENG 111 and ENG 111A. (F)
ENG 080  Writing Foundations 3 2 4
Prerequisite: English Placement or completion of ENG 075
This course introduces the writing process and stresses effective sentences. Emphasis is placed on applying the conventions of written English, reflecting standard usage and mechanics in structuring a variety of sentences. Upon completion, students should be able to write correct sentences and a unified, coherent paragraph. *This course does not satisfy the developmental reading and writing prerequisite for ENG 111 or ENG 111A.* (F/S)

ENG 090  Composition Strategies 3 0 3
Prerequisites: ENG 080
Corequisite: ENG 090A
This course provides practice in the writing process and stresses effective paragraphs. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. *This course satisfies the developmental reading and writing prerequisite for ENG 111 and ENG 111A.* (F/S/SS)

ENG 090A  Composition Strategies Lab 0 2 1
Prerequisite: ENG 080
Corequisite: ENG 090
This writing lab is designed to practice the skills introduced in ENG 090. Emphasis is placed on learning and applying the conventions of standard written English in developing paragraphs within the essay. Upon completion, students should be able to compose a variety of paragraphs and a unified, coherent essay. (F/S/SS)

ENG 091  Fast Track Composition Strategies 1 0 1
Prerequisites: ENG 080
This course provides an intensive review of selected ENG 090-level writing skills. Topics include the following writing skills: composing coherent paragraphs and writing effective essays. Upon completion, students should be able to write coherent paragraphs and effective essays. (D)

ENG 102  Applied Communications II 3 0 3
Prerequisite: RED 080, ENG 080
This course is designed to enhance writing and speaking skills for the workplace. Emphasis is placed on generating short writings such as job application documents, memoranda, and reports and developing interpersonal communication skills with employees and the public. Upon completion, students should be able to prepare effective, short, and job-related written and oral communications. This is a diploma-level course. (F)

ENG 111  Expository Writing 3 0 3
Prerequisites: ENG 090 or ENG 091 and RED 090 or RED 091
Corequisite: ENG 111A
This course is the required first course in a series of two designed to develop the ability to produce clear expository prose. Emphasis is placed on the writing process including audience analysis, topic selection, thesis support and development, editing, and revision. Upon completion, students should be able to produce unified, coherent, well-developed
essays using standard written English. This course also introduces students to the use of documentation and culminates in an argumentative research paper. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

ENG 111A Expository Writing Lab 0 2 1
Prerequisites: ENG 090 or ENG 091, RED 090 or RED 091
Corequisite: ENG 111
This writing laboratory is designed to apply the skills introduced in ENG 111. Emphasis is placed on the editing and revision components of the writing process. Upon completion, students should be able to apply those skills in the production of final drafts in ENG 111. (F/S/SS)

ENG 112 Argument-Based Research 3 0 3
Prerequisites: ENG 111 with at least a C
This course, the second in a series of two, introduces research techniques, documentation styles, and argumentative strategies. Emphasis is placed on analyzing information and ideas and incorporating research findings into documented argumentative essays and research projects. Upon completion, students should be able to summarize, paraphrase, interpret, and synthesize information from primary and secondary sources using standard research format and style. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

ENG 113 Literature-Based Research 3 0 3
Prerequisites: ENG 111 with at least a C
This course, the second in a series of two, expands the concepts developed in ENG 111 by focusing on writing that involves literature-based research and documentation. Emphasis is placed on critical reading and thinking and the analysis and interpretation of prose, poetry, and drama: plot, characterization, theme, cultural context, etc. Upon completion, students should be able to construct mechanically-sound, documented essays and research papers that analyze and respond to literary works. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

ENG 114 Prof Research & Reporting 3 0 3
Prerequisites: ENG 111 with at least a C
This course, the second in a series of two, is designed to teach professional communication skills. Emphasis is placed on research, listening, critical reading and thinking, analysis, interpretation, and design used in oral and written presentations. Upon completion, students should be able to work individually and collaboratively to produce well-designed business and professional written and oral presentations. This course has been approved for transfer under the CAA and ICAA as a general education course in English Composition. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)
ENG 125  Creative Writing I  3  0  3
Prerequisites: ENG 111 with at least a C
This course is designed to provide students with the opportunity to practice the art of
creative writing. Emphasis is placed on writing, fiction, poetry, and sketches. Upon
completion, students should be able to craft and critique their own writing and critique
the writing of others. This course has been approved for transfer under the CAA and
ICAA as a general education course in English Composition. Instructional content for
this course is available in the Virtual Learning Community (VLC). (D)

ENG 231  American Literature I  3  0  3
Prerequisites: ENG 112, ENG 113, or ENG 114
This course covers selected works in American literature from its beginnings to 1865.
Emphasis is placed on historical background, cultural context, and literary analysis of
selected prose, poetry, and drama. Upon completion, students should be able to interpret,
analyze, and respond to literary works in their historical and cultural contexts. This
course has been approved for transfer under the CAA and ICAA as a general
education course in Humanities/Fine Arts. Instructional content for this course is
available in the Virtual Learning Community (VLC). (F)

ENG 232  American Literature II  3  0  3
Prerequisites: ENG 112, ENG 113, or ENG 114
This course covers selected works in American literature from 1865 to the present.
Emphasis is placed on historical background, cultural context, and literary analysis of
selected prose, poetry, and drama. Upon completion, students should be able to interpret,
analyze, and respond to literary works in their historical and cultural contexts. This
course has been approved for transfer under the CAA and ICAA as a general
education course in Humanities/Fine Arts. Instructional content for this course is
available in the Virtual Learning Community (VLC). (S)

ENG 241  British Literature I  3  0  3
Prerequisites: ENG 112, ENG 113, or ENG 114
This course covers selected works in British literature from its beginnings to the
Romantic Period. Emphasis is placed on historical background, cultural context, and
literary analysis of selected prose, poetry, and drama. Upon completion, students should
be able to interpret, analyze, and respond to literary works in their historical and cultural
contexts. This course has been approved for transfer under the CAA and ICAA as a general
education course in English Composition. Instructional content for this course is
available in the Virtual Learning Community (VLC). (F)

ENG 242  British Literature II  3  0  3
Prerequisites: ENG 112, ENG 113, or ENG 114
This course covers selected works in British literature from the Romantic Period to the
present. Emphasis is placed on historical background, cultural context, and literary
analysis of selected prose, poetry, and drama. Upon completion, students should be able
to interpret, analyze, and respond to literary works in their historical and cultural
contexts. This course has been approved for transfer under the CAA and ICAA as a
general education course in Humanities/Fine Arts. Instructional content for this course
is available in the Virtual Learning Community (VLC). (S)
ENG 261    World Literature I
Prerequisites: ENG 112, ENG 113, or ENG 114
This course Introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from their literary beginnings through the seventeenth century. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC).* (D)

ENG 262    World Literature II
Prerequisites: ENG 112, ENG 113, or ENG 114
This course Introduces selected works from the Pacific, Asia, Africa, Europe, and the Americas from the eighteenth century to the present. Emphasis is placed on historical background, cultural context, and literary analysis of selected prose, poetry, and drama. Upon completion, students should be able to interpret, analyze, and respond to selected works. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC).* (D)

ENG 273    African-American Literature
Prerequisites: ENG 112, ENG 113, or ENG 114
This course provides a survey of the development of African-American literature from its beginnings to the present. Emphasis is placed on historical and cultural context, themes, literary traditions, and backgrounds of the authors. Upon completion, students should be able to interpret, analyze, and respond to selected texts. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC).* (D)

EPT: Emergency Preparedness Technology

EPT 120    Sociology of Disaster
Prerequisites: ENG 112, ENG 113, or ENG 114
This course is designed to overview sociological disaster research, disaster systems, and alternative research approaches. Topics include human and organizational behaviors, long-term disaster impact on communities, disaster warning, and evacuation considerations. Upon completion, students should be able to assess and predict the impact of disaster-related human behavior. (SS)

EPT 124    EM Services Law & Ethics
Prerequisites: ENG 112, ENG 113, or ENG 114
This course covers federal and state laws that affect emergency service personnel in the event of a natural disaster or terrorist incident. Topics include initial response and long-term management strategies, with an emphasis on legal and ethical considerations and coordination between local, state, and federal agencies. Upon completion, students should have an understanding of the role of private industry, government agencies, public policies, and federal/state declarations of disasters in emergency situations. (F)
EPT 130 Mitigation & Preparedness 3 0 3
This course introduces the mitigation and preparation techniques and methods necessary to minimize the impact of natural, technological, and man-made disasters. Topics include hazard identification and mapping, design and construction applications, financial incentives, insurance, structural controls, preparation, planning, assessment, implementation, and exercises. Upon completion students should be able to develop a mitigation and preparedness plan. (S)

EPT 150 Incident Management 3 0 3
This course introduces the National Incident Management System (NIMS). Topics include integrating command and control systems, maintaining communication within command and control systems, and using NIMS procedures. Upon completion, students should be able to demonstrate knowledge of key concepts necessary for operating within the National Incident Management System. (F)

EPT 210 Response and Recovery 3 0 3
This course introduces the basic concepts, operational procedures, and authorities involved in response and recovery efforts to major disasters. Topics include federal, state, and local roles and responsibilities in major disaster, response, and recovery work, with an emphasis on governmental coordination. Upon completion, students should be able to implement a disaster response plan and assess the needs of those involved in a major disaster. (S)

EPT 220 Terrorism and Emergency Management 3 0 3
This course covers preparing for, responding to, and safely mitigating terrorism incidents. Topics include the history of terrorism, scene hazards, evidence preservation, risk assessment, roles and responsibilities, explosive recognition, and terrorism planning. Upon completion, students should be able to recognize the threat of terrorism and operate within the emergency management framework at a terrorism incident. (SS)

EPT 225 Hazard Analysis/Risk Assess 3 0 3
This course covers the probability and frequency of hazards, level of hazard exposure, and the effect or cost, both direct and indirect, of this exposure. Topics include identifying and characterizing hazards, evaluating hazard severity and frequency, estimating risks, and determining potential societal and economic effects. Upon completion, students should be able to identify the potential hazards and risks within a community. (F)

EPT 230 Emergency Planning 3 0 3
This course covers the rationale for and methods related to a comprehensive approach to emergency planning. Topics include the emergency planning process, command arrangement, coordination, budgetary issues, environmental contamination issues, and public policy concerns. Upon completion, students should be able to develop an emergency plan for a community. (F)

EPT 260 Business Continuity 3 0 3
This course covers emergency preparedness techniques necessary to maintain business continuity. Topics include critical processes, planning, risk assessment, impact analysis,
mitigation strategies, response, recovery and resumption activities. Upon completion, students should be able to demonstrate a working knowledge of the partnership between business and emergency response. (S)

EPT 275 Emergency OPS Center Management 3 0 3
This course provides students with the knowledge and skills to effectively manage and operate an EOC during crisis situations. Topics include properly locating and designing an EOC, staffing, training and briefing EOC personnel, and how to operate an EOC. Upon completion, students should be able to demonstrate how to set up and operate an effective emergency operations center.

FIP: Fire Protection

FIP 120 Introduction to Fire Protection 3 0 3
This course provides an overview of the history, development, methods, systems, and regulations as they apply to the fire protection field. Topics include history, evolution, statistics, suppression, organizations, careers, curriculum, and other related topics. Upon completion, students should be able to demonstrate a broad understanding of the fire protection field.

FIP 136 Inspections & Codes 3 0 3
This course covers the fundamentals of fire and building codes and procedures to conduct an inspection. Topics include review of fire and building codes, writing inspection reports, identifying hazards, plan reviews, site sketches, and other related topics. Upon completion, students should be able to conduct a fire code compliance inspection and produce a written report, meeting NFPA 1021. (D)

FIP 152 Fire Protection Law 3 0 3
This course covers fire protection law. Topics include legal terms, contracts, liability, review of case histories, and other related topics. Upon completion, students should be able to discuss laws, codes, and ordinances as they relate to fire protection. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

FIP 164 OSHA Standards 3 0 3
This course covers public and private sector OSHA work site requirements. Emphasis is placed on accident prevention and reporting, personal safety, machine operation, and hazardous material handling. Upon completion, students should be able to analyze and interpret specific OSHA regulations and write workplace policies designed to achieve compliance. (D)

FIP 176 HazMat: Operations 4 0 4
This course is designed to increase first responder awareness of the type, nature, physiological effects of, and defensive techniques for mitigation of HazMat incidents. Topics include recognition, identification, regulations and standards, zoning, resource usage, defensive operations, and other related topics. Upon completion, students should be able to recognize and identify the presence of hazardous materials and use proper defensive techniques for incident mitigation. (D)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Hours</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>FIP 228</td>
<td>Local Government Finance</td>
<td>3 0 3</td>
<td></td>
<td>This course introduces local governmental financial principles and practices. Topics include budget preparation and justification, revenue policies, statutory requirements, taxation, audits, and the economic climate. Upon completion, students should be able to comprehend the importance of finance as it applies to the operation of a department. (SS)</td>
</tr>
<tr>
<td>FIP 230</td>
<td>Chemistry of Hazardous Material I</td>
<td>5 0 5</td>
<td></td>
<td>This course covers the evaluation of hazardous materials. Topics include use of the periodic table, hydrocarbon derivatives, placards and labels, parameters of combustion, and spill and leak mitigation. Upon completion, students should be able to demonstrate knowledge of the chemical behavior of hazardous materials. (D)</td>
</tr>
<tr>
<td>FIP 236</td>
<td>Emergency Management</td>
<td>3 0 3</td>
<td></td>
<td>This course covers the four phases of emergency management: mitigation, preparedness, response, and recovery. Topics include organizing for emergency management, coordinating for community resources, public sector liability, and the roles of government agencies at all levels. Upon completion, students should be able to demonstrate knowledge of comprehensive emergency management and the integrated emergency management system. (F)</td>
</tr>
<tr>
<td>FIP 240</td>
<td>Fire Service Supervision</td>
<td>3 0 3</td>
<td></td>
<td>This course covers supervisory skills and practices in the fire protection field. Topics include the supervisor’s job, supervision skills, the changing work environment, managing change, organizing for results, discipline and grievances, and safety. Upon completion, students should be able to demonstrate an understanding of the roles and responsibilities of the effective fire service supervisor, meeting elements of NFPA 1021. (D)</td>
</tr>
<tr>
<td>FIP 256</td>
<td>Municipal Public Relations</td>
<td>3 0 3</td>
<td></td>
<td>This course is a general survey of municipal public relations and their effect on the governmental process. Topics include principles of public relations, press releases, press conferences, public information officers, image surveys, and the effects of perceived service on fire protection delivery. Upon completion, students should be able to manage the public relations functions of a fire service organization, which meets the elements of NFPA 1021 and Fire Officer I and II. (F)</td>
</tr>
<tr>
<td>FIP 276</td>
<td>Managing Fire Services</td>
<td>3 0 3</td>
<td></td>
<td>This course provides an overview of fire department operative services. Topics include finance, staffing, equipment, code enforcement, management information, specialized services, legal issues, planning, and other related topics. Upon completion, students should be able to understand concepts and apply fire department management and operations principles, meeting NFPA 1021. (D)</td>
</tr>
</tbody>
</table>
GEL: Geology

GEL 111  Introductory Geology  3  2  4
Prerequisites: RED 090 or RED 091
This course introduces basic landforms and geological processes. Topics include rocks, minerals, volcanoes, fluvial processes, geological history, plate tectonics, glaciers, and coastal dynamics. Upon completion, students should be able to describe basic geological processes that shape the earth. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (F)

GEL 113  Historical Geology  3  2  4
Prerequisites: GEL 111
This course covers the geological history of the earth and its life forms. Emphasis is placed on the study of rock strata, fossil groups, and geological time. Upon completion, students should be able to identify major fossil groups and associated rock strata and approximate ages of geological formations. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (S)

GEO: Geography

GEO 111  World Regional Geography  3  0  3
Prerequisite: RED 090 or RED 091
This course introduces the regional concept which emphasizes the spatial association of people and their environment. Emphasis is placed on the physical, cultural, and economic systems that interact to produce the distinct regions of the earth. Upon completion, students should be able to describe variations in physical and cultural features of a region and demonstrate an understanding of their functional relationships. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

GEO 130  General Physical Geography  3  0  3
This course introduces both the basic physical components that help shape the earth and the study of minerals, rocks, and evolution of landforms. Emphasis is placed on the geographic grid, cartography, weather, climate, mineral composition, fluvial processes, and erosion and deposition. Upon completion, students should be able to identify these components and processes and explain how they interact. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. (D)

HEA: Health

HEA 110  Personal Health/Wellness  3  0  3
This course provides an introduction to basic personal health and wellness. Emphasis is placed on current health issues such as nutrition, mental health, and fitness. Upon completion, students should be able to demonstrate an understanding of the factors
necessary to the maintenance of health and wellness. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
<th>Transfer Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEA 112</td>
<td>First Aid and CPR</td>
<td>1 2</td>
<td>This course introduces the basics of emergency first aid treatment. Topics include rescue breathing, CPR, first aid for choking and bleeding, and other first aid procedures. Upon completion, students should be able to demonstrate skills in providing emergency care for the sick and injured until medical help can be obtained. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)</td>
<td></td>
</tr>
<tr>
<td>HEA 120</td>
<td>Community Health</td>
<td>3 0</td>
<td>This course provides information about contemporary community health and school hygiene issues. Topics include health education and current information about health trends. Upon completion, students should be able to recognize and devise strategies to prevent today's community health problems. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)</td>
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**HIS: History**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
<th>Description</th>
<th>Transfer Approval</th>
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</thead>
<tbody>
<tr>
<td>HIS 111</td>
<td>World Civilizations I</td>
<td>3 0</td>
<td>This course introduces world history from the dawn of civilization to the early modern era. Topics include Eurasian, African, American, and Greco-Roman civilizations and Christian, Islamic and Byzantine cultures. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in pre-modern world civilizations. This course ends with the conclusion of the Thirty Years' War in 1648. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. (F/S)</td>
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<tr>
<td>HIS 112</td>
<td>World Civilizations II</td>
<td>3 0</td>
<td>This course introduces world history from the early modern era to the present. Topics include the cultures of Africa, Europe, India, China, Japan, and the Americas. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in modern world civilizations. This course begins with the end of the Thirty Years' War in 1648. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. (F/S)</td>
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<tr>
<td>HIS 131</td>
<td>American History I</td>
<td>3 0</td>
<td>This course is a survey of American history from pre-history through the Civil War era. Topics include the migrations to the Americas, the colonial and revolutionary periods, the development of the Republic, and the Civil War. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in early</td>
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American history. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

HIS 132 American History II 3 0 3
Prerequisite: ENG 090 or ENG 091 and RED 090 or RED 091
This course is a survey of American history from the Civil War era to the present. Topics include industrialization, immigration, the Great Depression, the major American wars, the Cold War, and social conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in American history since the Civil War. This course begins with the end of Reconstruction. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

HIS 167 The Vietnam War 3 0 3
Prerequisites: RED 090 or RED 091
This course covers the American political and military involvement in Vietnam from 1944 to 1975. Topics include the French colonial policy, Vietnamese nationalism, the war with France, American involvement, and resolution of the conflict. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments that influenced the Vietnam War. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

HIS 211 Ancient History 3 0 3
Prerequisites: RED 090 or RED 091
This course traces the development of the cultural, intellectual, and political foundations of western civilization. Topics include the civilizations of the Near East, the classical Greek and Hellenistic eras, the Roman world, Judaism, and Christianity. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the ancient world. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

HIS 221 African-American History 3 0 3
Prerequisites: RED 090 or RED 091
This course covers African-American history from the Colonial period to the present. Topics include African origins, the slave trade, the Civil War, Reconstruction, the Jim Crow era, the civil rights movement, and contributions of African Americans. Upon completion, students should be able to analyze significant political, socioeconomic, and cultural developments in the history of African Americans. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)
HOR: Horticulture

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>HOR 112</td>
<td>Landscape Design I</td>
<td>2 3 3</td>
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<tr>
<td>Prerequisite:</td>
<td>RED 080</td>
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<tr>
<td>This course covers landscape principles and practices for residential and commercial sites. Emphasis is placed on drafting, site analysis, and common elements of good design, plant material selection, and proper plant utilization. Upon completion, students should be able to read, plan, and draft a landscape design. (F)</td>
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<tbody>
<tr>
<td>HOR 114</td>
<td>Landscape Construction</td>
<td>2 2 3</td>
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<tr>
<td>Prerequisite:</td>
<td>MAT 060 and MAT 070</td>
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<tr>
<td>This course introduces the design and fabrication of landscape structures/features. Emphasis is placed on safety, tool identification and use, material selection, construction techniques, and fabrication. Upon completion, students should be able to design and construct common landscape structures/features. (S)</td>
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<tbody>
<tr>
<td>HOR 118</td>
<td>Equipment Operation &amp; Maintenance</td>
<td>1 3 2</td>
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<tr>
<td>This course covers the proper operation and maintenance of selected equipment used in horticulture. Emphasis is placed on the maintenance, minor repairs, safety devices, and actual operation of selected equipment. Upon completion, students should be able to design a maintenance schedule, service equipment, and demonstrate safe operation of selected equipment.</td>
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<tr>
<td>HOR 134</td>
<td>Greenhouse Operations</td>
<td>2 2 3</td>
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<tr>
<td>This course covers the principles and procedures involved in the operation and maintenance of greenhouse facilities. Emphasis is placed on the operation of greenhouse systems, including the environmental control, record keeping, scheduling, and production practices. Upon completion, students should be able to demonstrate the ability to operate greenhouse systems and facilities to produce greenhouse crops. (S)</td>
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<tr>
<td>HOR 160</td>
<td>Plant Materials I</td>
<td>2 2 3</td>
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<tr>
<td>Prerequisite:</td>
<td>RED 080</td>
<td></td>
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<tr>
<td>This course covers identification, culture, characteristics, and use of plants. Emphasis is placed on nomenclature, identification, growth requirements, cultural requirements, soil preferences, and landscape applications. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials. Instructional content for this course is available in the Virtual Learning Community (VLC).</td>
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<tr>
<td>HOR 162</td>
<td>Applied Plant Science</td>
<td>2 2 3</td>
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<tr>
<td>Prerequisites:</td>
<td>RED 090 or RED 091</td>
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<tr>
<td>This course introduces the basic concepts of botany as they apply to horticulture. Topics include nomenclature, physiology, morphology, and anatomy as they apply to plant culture. Upon completion, students should be able to apply the basic principles of botany to horticulture. (S)</td>
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HOR 164  Horticulture Pest Management  
This course covers the identification and control of plant pests including insects, diseases, and weeds. Topics include pest identification and chemical regulations, safety, and pesticide application. Upon completion, students should be able to meet the requirements for North Carolina Commercial Pesticide Ground Applicators License. (SS)

HOR 166  Soils & Fertilizers  
Prerequisite: RED 090 or RED 091  
This course covers the physical and chemical properties of soils and soil fertility and management. Topics include soil formation, classification, physical and chemical properties, testing, fertilizer application, and other amendments. Upon completion, students should be able to analyze, evaluate, and properly amend soils/media. (D)

HOR 168  Plant Propagation  
Prerequisite: RED 080  
This course is a study of sexual and asexual reproduction of plants. Emphasis is placed on seed propagation, grafting, stem and root propagation, micro-propagation, and other propagation techniques. Upon completion, students should be able to successfully propagate ornamental plants. (D)

HOR 213  Landscape Design II  
Prerequisite: MAT 060, MAT 070, RED 090 or RED 091, and HOR 112  
This course covers residential and commercial landscape design, cost analysis, and installation. Emphasis is placed on job cost estimates, installation of the landscape design, and maintenance techniques. Upon completion, students should be able to read landscape design blueprints, develop cost estimates, and implement the design. (D)

HOR 215  Landscape Irrigation  
Prerequisite: MAT 060 and MAT 070  
This course introduces basic irrigation design, layout, and installation. Topics include site analysis, components of irrigation systems, safety, types of irrigation systems, and installation techniques. Upon completion, students should be able to design and install basic landscape irrigation systems. (D)

HOR 225  Nursery Production  
Prerequisite: MAT 060, MAT 070, and RED 090 or RED 091  
This course covers all aspects of nursery crop production. Emphasis is placed on field production and covers soils, nutrition, irrigation, pest control, and harvesting. Upon completion, students should be able to produce a marketable nursery crop. (D)

HOR 245  Horticultural Specialty Crops  
This course introduces the techniques and requirements for the production of horticultural crops of special or local interest. Topics include development of a local market, proper varietal selection, cultural practices, site selection, and harvesting and marketing practices. Upon completion, students should be able to choose, grow, and market a horticultural crop of special or local interest.
HOR 255  Interiorscapes  1  2  2
This course covers plant selection, design, and management for interior settings. Topics include tropical plant identification, cultural requirements, insect and disease identification and control, and design and management requirements for interior plants. Upon completion, students should be able to design, install, and manage plants in interior settings.

HOR 257  Arboriculture Practices  1  3  2
Prerequisite: HOR 160 or LSG 111
This course covers the culture and maintenance of trees and shrubs. Topics include fertilization, pruning, approved climbing techniques, students should be able to properly prune trees and shrubs and perform arboricultural practices.

HOR 260  Plant Materials II  2  2  3
Prerequisite: RED 080
This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, culture requirements and landscape uses. Upon completion, students should be able to demonstrate knowledge of the proper selection and utilization of plant materials.

HOR 265  Advanced Plant Materials  1  2  2
Prerequisite: RED 090 or RED 091
This course covers important landscape plants. Emphasis is placed on identification, plant nomenclature, growth characteristics, culture requirements, and landscape uses. Upon completion, students should be able to correctly select plants for specific landscape uses.

HOR 266  Micropropagation  3  0  3
Prerequisites: HOR 162 and HOR 168
This course provides an introduction to the science of micropropagation. Emphasis will be placed on the propagation of plant material in vitro. Upon completion, students should be able to demonstrate an understanding of the principles and practices of micropropagation. (D)

HOR 266A  Micropropagation Lab Techniques  2  4  4
Corequisites: HOR 266
This course provides hands-on experience in micropropagation. Emphasis will be placed on basic lab techniques and procedures, including lab safety, accurate measuring, sterile technique, and plant production methods. Upon completion, students should be able to utilize micropropagation to propagate a variety of plant species. (D)

HRM: Hospitality Human Resource Management

HRM 245  Human Resource Management-Hospitality  3  0  3
This course introduces a systematic approach to human resource management in the hospitality industry. Topics include training/development, staffing, selection, hiring, recruitment, evaluation, benefit administration, employee relations, labor
regulations/laws, discipline, motivation, productivity, shift management, contract employees and organizational culture. Upon completion, students should be able to apply human resource management skills for the hospitality industry. (S)

HUM: Humanities

HUM 120 Cultural Studies 3 0 3
This course introduces the distinctive features of a particular culture. Topics include art, history, music, literature, politics, philosophy, and religion. Upon completion, students should be able to appreciate the unique character of the study culture. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

HUM 122 Southern Culture 3 0 3
Prerequisite: RED 090 or RED 091
This course explores the major qualities that make the South a distinct region. Topics include music, politics, literature, art, religion, race relations, and the role of social class in historical and contemporary contexts. Upon completion, students should be able to identify the characteristics that distinguish Southern culture. Special emphasis will be placed on applying these topics to the history, economic development, and culture of Southern Appalachia. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (F/S)

HUM 123 Appalachian Culture 3 0 3
This course provides an interdisciplinary study of the unique features of Appalachian culture. Topics include historical, political, sociological, psychological, and artistic features which distinguish this region. Upon completion, students should be able to demonstrate a broad-based awareness and appreciation of Appalachian culture. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (F/S)

HUM 130 Myth in Human Culture 3 0 3
Prerequisite: RED 090 or RED 091
This course provides an in-depth study of myths and legends. Topics include the varied sources of myths and their influence on the individual and society within diverse cultural contexts. Upon completion, students should be able to demonstrate a general familiarity with myths and a broad-based understanding of the influence of myths and legends on modern culture. The course also explores the ways in which myth, ritual, and individual psychological transformation work to shape personal identity in modern life. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

HUM 150 American Women’s Studies 3 0 3
Prerequisite: RED 090 or RED 091
This course provides an inter-disciplinary study of the history, literature, and social roles of American women from Colonial times to the present. Emphasis is placed on women’s roles as reflected in American language usage, education, law, the workplace, and
mainstream culture. Upon completion, students should be able to identify and analyze the roles of women as reflected in various cultural forms. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

HUM 160 Introduction to Film  
2 2 3  
This course introduces the fundamental elements of film artistry and production. Topics include film styles, history, and production techniques, as well as the social values reflected in film art. Upon completion, students should be able to critically analyze the elements covered in relation to selected films. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC).

HUM 170 The Holocaust  
3 0 3  
This course provides a survey of the destruction of European Jewry by the Nazis during World War II. Topics include the anti-Semitic ideology, bureaucratic structures, and varying conditions of European occupation and domination under the Third Reich. Upon completion, students should be able to demonstrate an understanding of the historical, social, religious, political, and economic factors which cumulatively resulted in the Holocaust. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

HYD: Hydraulics

HYD 110 Hydraulics/Pneumatics I  
2 3 3  
This course introduces the basic components and functions of hydraulic and pneumatic systems. Topics include standard symbols, pumps, control valves, control assemblies, actuators, FRL, maintenance procedures, and switching and control devices. Upon completion, students should be able to understand the operation of a fluid power system, including design, application, and troubleshooting. (SS)

INT: International Business

INT 110 International Business  
3 0 3  
This course provides an overview of the environment, concepts, and basic differences involved in international business. Topics include forms of foreign involvement, international trade theory, governmental influences on trade and strategies, international organizations, multinational corporations, personnel management, and international marketing. Upon completion, students should be able to describe the foundation of international business. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

INT 230 International Law  
3 0 3  
Prerequisite: BUS 115  
This course is designed to develop an understanding of the different theories on
international law and their effect on international trade. Emphasis is placed on concepts of contracts, international transactions, major organizations in international trade, establishment of treaties, economic areas, and US laws affecting international trade. Upon completion, students should be able to apply theories and concepts to international trade and transactions.

**ISC: Industrial Science**

**ISC 112 Industrial Safety**
2 0 2
This course introduces the principles of industrial safety. Emphasis is placed on industrial safety, OSHA, and environmental regulations. Upon completion, students should be able to demonstrate knowledge of a safe working environment and OSHA compliance. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

**ISC 131 Quality Management**
3 0 3
This course provides a study and analysis of the aspects and implications of quality management that lead to customer satisfaction through continuous quality improvement. Topics include Total Quality Management, ISO 9000, organizing for quality, supplier/vendor relationships, and the role of leadership in quality management. Upon completion, students should be able to demonstrate an understanding of quality management concepts and techniques. (SS)

**ISC 132 Manufacturing Quality Control**
2 3 3
This course introduces quality concepts and techniques used in industry. Topics include elementary statistics and probability, process control, process capability, and quality improvement tools. Upon completion, students should be able to demonstrate an understanding of the concepts and principles of quality and apply them to the work environment. (S)

**ISC 135 Principles of Industrial Management**
3 0 3
This course covers the managerial principles and practices required for organizations to succeed in modern industry. Topics include the functions and roles of all levels of management, organization design, and planning and control of manufacturing operations. Upon completion, students should be able to demonstrate an understanding of management principles and integrate these principles into job situations. (F)

**LEX: Legal Education**

**LEX 110 Introduction to Paralegal Study**
2 0 2
This course introduces the paralegal profession and the legal system, and an emphasis is placed on the role of professional and legal ethics. Topics include regulations, ethics, case analysis, legal reasoning, career opportunities, professional organizations, terminology and other related topics. Upon completion, students should be able to explain the role of a paralegal and identify the skills, knowledge, and ethics required of paralegals. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)
LEX 120 Legal Research/Writing I 2 2 3
Prerequisite: ENG 090 or ENG 091 and RED 090 or RED 091
This course introduces the techniques of legal research and writing. Emphasis is placed on locating, analyzing, applying, and updating sources of law; effective legal writing, including proper citation; and the use of electronic research methods. Upon completion, students should be able to perform legal research and writing assignments using techniques covered in the course. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

LEX 130 Civil Injuries 3 0 3
Prerequisite: ENG 080 and RED 080
This course covers traditional tort concepts and the evolving body of individual rights created by statute. Topics include intentional and non-intentional torts with emphasis on negligence, strict liability, civil rights, workplace and environmental liability, remedies, and damages. Upon completion, students should be able to recognize, explain, and evaluate elements of civil injuries and related defenses. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)

LEX 140 Civil Litigations I 3 0 3
This course introduces the structure of the legal system and the rules governing civil litigation. Topics include jurisdiction, state and federal rules of civil procedure and evidence. Upon completion, students should be able to assist an attorney in the preparation of pleadings and motions. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

LEX 150 Commercial Law 2 2 3
Prerequisite: ENG 080 and RED 080
This course covers legally enforceable agreements, forms of organization, and selected portions of the Uniform Commercial Code. Topics include drafting and enforcement of contracts, leases, and related documents and selection and implementation of business organization forms, sales, and commercial papers. Upon completion, students should be able to apply the elements of a contract, prepare various business documents, and understand the role of commercial paper. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)

LEX 160 Criminal Law & Procedure 2 2 3
This course introduces substantive criminal law and procedural rights of the accused. Topics include elements of state/federal crimes, defenses, constitutional issues, pre-trial and trial process, and other related topics. Upon completion, students should be able to explain elements of specific crimes and assist an attorney in preparing a criminal case. (F)

LEX 210 Real Property I 3 0 3
Prerequisite: ENG 080 and RED 080
This course introduces the study of real property law. Topics include the distinction between real and personal property, various estates, mechanics of conveyance and encumbrance, recordation, special proceedings, and other related topics. Upon completion, students should be able to identify estates, forms of deeds, requirements for
recording, and procedures to enforce rights to real property. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)

**LEX 211 Real Property II** 1 4 3
Prerequisite: LEX 210
This course continues the study of real property law relating to title examination and preparation of closing documents. Topics include use of courthouse and other public records in title examination and preparation of documents required in real estate transactions and closings. Upon completion, students should be able to plot/draft a description, perform complete title examination, draft closing documents including title insurance forms, and prepare disbursement reconciliation. (S)

**LEX 240 Family Law** 3 0 3
Prerequisite: ENG 080 and RED 080
This course covers laws governing domestic relations. Topics include marriage, separation, divorce, child custody, support, property division, adoption, domestic violence, and other related topics. Upon completion, students should be able to interview clients, gather information, and draft documents related to family law. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

**LEX 250 Wills, Estates, and Trusts** 2 2 3
Prerequisite: ENG 080 and RED 080
This course covers various types of wills, trusts, probate, estate administration, and intestacy. Topics include types of wills and execution requirements, caveats and dissents, intestate succession, inventories and accountings, distribution and settlement, and other related topics. Upon completion, students should be able to draft simple wills, prepare estate forms, understand administration of estates including taxation, and explain terms regarding trusts. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

**LOG: Logistics**

**LOG 110 Introduction to Logistics** 3 0 3
This course provides an overview of logistics. Topics include traffic management, warehousing, inventory control, material handling, global logistics, and the movement and storage of goods from raw materials sources to end consumers. Upon completion, students should be able to identify the different segments of logistics and use the terminology of the industry. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F/S)

**LOG 120 Global Logistics** 3 0 3
Prerequisites: LOG 110
This course examines logistics operations, processes, and modes of transportation in an interdependent world economy. Emphasis is placed on freight forwarding operations, analyzing and selecting transportation modes, and processing of import/export documentation. Upon completion, students should be able to arrange and coordinate the transportation of products globally. *This course is a unique concentration requirement*
of the Logistics Management concentration in the Business Administration program. (S)

LOG 210  Fleet Management  
Prerequisites: LOG 110
This course covers the management of transportation, fleet operations, and safety. Emphasis is placed on DOT safety regulations in the hiring, training, and supervision of drivers in transportation. Upon completion, students should be able to write a safety program for drivers involved in interstate commerce following D.O.T. regulations. (S)

LOG 220  Logistics Management  
Prerequisites: LOG 110
This course covers the management of the movement and storage of goods and analysis of total costs involved. Emphasis is placed on the monitoring of inventory using automated systems, managing the storage function, warehousing, and distribution. Upon completion, students should be able to describe warehousing and facility layouts, identify material handling methods, and apply inventory control procedures. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program. (F)

LOG 230  Transportation Management  
Prerequisites: LOG 110
This course covers the function of shippers and carriers in the transportation industry. Emphasis is placed on negotiating price and service requirements in the movement of goods, identifying areas of carrier liability, and the methods for processing claims. Upon completion, students should be able to compare common carriers and company operated transportation for service and cost, interpret pricing structures, and determine carrier liability. This course is a unique concentration requirement of the Logistics Management concentration in the Business Administration program. (F)

LSG: Landscape Gardening

LSG 111  Basic Landscape Technique  
This course introduces basic principles essential to landscape gardening. Topics include soils, propagation, watering, fertilizing, pruning, pest control, and planting. Upon completion, students should be able to perform basic gardening techniques essential to maintaining a landscape. (F)

LSG 121  Fall Gardening Lab  
This course provides basic hands-on experience in fall gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, and turf maintenance. Upon completion, students should be able to perform various techniques essential to maintaining the fall landscape. (F)

LSG 122  Spring Gardening Lab  
This course provides familiarization with basic gardening techniques by performing practical hands-on exercises required for the spring season. Emphasis is placed on
pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, and landscape construction. Upon completion, students should be able to satisfactorily perform various practices essential to maintaining the landscape in the spring season. (S)

**LSG 123 Summer Gardening Lab**

This course provides basic hands-on experience in summer gardening techniques. Emphasis is placed on pruning, irrigation, planting, fertilizing, pest control, equipment operation, turf maintenance, landscape construction, and maintaining fruits and vegetables. Upon completion, students should be able to perform various techniques essential to maintaining the summer landscape. (SS)

**LSG 231 Landscape Supervision**

Prerequisites: ENG 080, MAT 060, MAT 070, RED 080, LSG 123, and HOR 260

This course provides experience in planning, implementing, and supervising various landscape management projects. Emphasis is placed on supervisory skills, organizing, and scheduling. Upon completion, students should be able to supervise employees in various landscape management jobs.

**LSG 232 Garden Management**

Prerequisites: ENG 080, MAT 060, MAT 070, RED 080, LSG 123, and HOR 260

This course covers the implementation of knowledge gained in previous landscape gardening courses. Emphasis is placed on scheduling, designing, renovation, and plant management. Upon completion, students should be able to collate the material learned in the Landscape Gardening curriculum and apply it to various landscape gardening situations. (SS)

**MAT: Mathematics**

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. See “Admissions” for more information. Students should begin developmental course work at the appropriate level indicated by that college's placement test.

**MAT 050 Basic Math Skills**

This course is designed to strengthen basic math skills. Topics include properties, rounding, estimating, comparing, converting, and computing whole numbers, fractions, and decimals. Upon completion students should be able to perform basic computations and solve relevant mathematical problems. (F/S)

**MAT 051 Fast Track Basic Math**

This course is designed to offer a fast-paced review of basic arithmetic skills for students who have previously mastered these skills. Topics include all arithmetic operations on whole numbers, fractions, decimals and percents. Upon completion, students should be able to demonstrate mastery of basic computational skills, as well as their application to relevant mathematical problems. (D)
MAT 060  Essential Mathematics  
Prerequisite: MAT 050 or MAT 051  
This course is a comprehensive study of mathematical skills which should provide a strong mathematical foundation to pursue further study. Topics include principles and applications of decimals, fractions, percents, ratio and proportion, order of operations, geometry, measurement, and elements of algebra and statistics. Upon completion, students should be able to perform basic computations and solve relevant, multi-step mathematical problems using technology where appropriate. (F/S/SS)  

MAT 070  Introductory Algebra  
Prerequisites: MAT 060  
Corequisite: RED 080  
This course establishes a foundation in algebraic concepts and problem solving. Topics include signed numbers, exponents, order of operations, simplifying expressions, solving linear equations and inequalities, graphing, formulas, polynomials, factoring, and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F/S/SS)  

MAT 080  Intermediate Algebra  
Prerequisites: MAT 060 and MAT 070  
Corequisite: RED 080  
This course continues the study of algebraic concepts with emphasis on applications. Topics include factoring; rational expressions; rational exponents; rational, radical, and quadratic equations; systems of equations; inequalities; graphing; functions; variations; complex numbers; and elements of geometry. Upon completion, students should be able to apply the above concepts in problem solving using appropriate technology. (F/S/SS)  

MAT 101  Applied Mathematics I  
Prerequisites: MAT 060  
This course is a comprehensive review of arithmetic with basic algebra designed to meet the needs of certificate and diploma programs. Topics include arithmetic and geometric skills used in measurement, ratio and proportion, exponents and roots, applications of percent, linear equations, formulas, and statistics. Upon completion, students should be able to solve practical problems in their specific areas of study. This course is intended for certificate and diploma programs. (S)  

MAT 115  Mathematical Models  
Prerequisites: MAT 060, MAT 070, and RED 090 or RED 091  
This course develops the ability to utilize mathematical skills and technology to solve problems at a level found in non-mathematics-intensive programs. Topics include applications to percent, ratio and proportion, formulas, statistics, functional notation, linear functions and their graphs, probability, sampling techniques, scatter plots, and modeling. Upon completion, students should be able to solve practical problems, reason and communicate with mathematics, and work confidently, collaboratively, and independently. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (F/S/SS)
MAT 121 Algebra/Trigonometry I 2 2 3
Prerequisites: MAT 060, MAT 070, and RED 090 or RED 091
This course provides an integrated approach to technology and the skills required to manipulate, display, and interpret mathematical functions and formulas used in problem solving. Topics include simplification, evaluation, and solving of algebraic, and radical functions; complex numbers; right triangle trigonometry; systems of equations; and the use of technology. Upon completion, students should be able to demonstrate an understanding of the use of mathematics and technology to solve problems and analyze and communicate results. (F)

MAT 140 Survey of Mathematics 3 0 3
Prerequisites: MAT 060 and MAT 070
Corequisites: MAT 140A
This course provides an introduction in a non-technical setting to selected topics in mathematics. Topics may include, but are not limited to, sets, logic, probability, statistics, matrices, mathematical systems, geometry, topology, mathematics of finance, and modeling. Upon completion, students should be able to understand a variety of mathematical applications, think logically, and be able to work collaboratively and independently. Under the CAA and ICAA, this course satisfies the general education Mathematics requirement for the AA and AFA degrees. It does not satisfy the general education Mathematics requirement for the AS degree. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

MAT 140A Survey of Mathematics Lab 0 2 1
Prerequisites: MAT 060 and MAT 070
Corequisites: MAT 140
This course is a laboratory for MAT 140. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

MAT 151 Statistics I 3 0 3
Prerequisites: MAT 060 and MAT 080 or MAT 140
Corequisite: MAT 151A
This course provides a project-based approach to the study of basic probability, descriptive and inferential statistics, and decision making. Emphasis is placed on measures of central tendency and dispersion, correlation, regression, discrete and continuous probability distributions, quality control, population parameter estimation, and hypothesis testing. Upon completion, students should be able to describe important characteristics of a set of data and draw inferences about a population from sample data. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics (Quantitative). Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)
MAT 151A  Statistics I Lab  
Prerequisite: MAT 060 and MAT 080 or MAT 140  
Corequisite: MAT 151  
This course is a laboratory for MAT 151. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S/SS)*

MAT 161  College Algebra  
Prerequisite: MAT 060 and MAT 080  
This course provides an integrated technological approach to algebraic topics used in problem solving. Emphasis is placed on applications involving equations and inequalities; polynomial, rational, exponential and logarithmic functions; and graphing and data analysis/modeling. Upon completion, students should be able to choose an appropriate model to fit a data and use the model for analysis and prediction. *Under the CAA and ICAA, this course satisfies the general education Mathematics requirement for the AA and AFA degrees. It does not satisfy the general education Mathematics requirement for the AS degree. Instructional content for this course is available in the Virtual Learning Community (VLC).*

MAT 171  Precalculus Algebra  
Prerequisites: MAT 060 and MAT 080  
Corequisite: MAT 171A  
This is the first of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on equations and inequalities, functions (linear, polynomial, rational) systems of equations and inequalities, and parametric equations. Upon completion, students should be able to solve practical problems and use appropriate models for analysis and predictions. *This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics. (F/S/SS)*

MAT 171A  Precalculus Algebra Lab  
Prerequisites: MAT 060 and MAT 080  
Corequisite: MAT 171  
This course is a laboratory for MAT 171. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S/SS)*

MAT 172  Precalculus Trigonometry  
Prerequisites: MAT 171  
Corequisite: MAT 172A  
This is the second of two courses designed to emphasize topics which are fundamental to the study of calculus. Emphasis is placed on properties and applications of transcendental functions and their graphs, right and oblique triangle trigonometry, conic sections, vectors, and polar coordinates. Upon completion, students should be able to
solve practical problems and use appropriate models for analysis and prediction. *This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.* (F/S)

**MAT 172A Precalculus Trigonometry Lab**

Prerequisites: MAT 171  
Corequisite: MAT 172  
This course is a laboratory for MAT 172. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)

**MAT 263 Brief Calculus**

Prerequisite: MAT 161 or MAT 171  
Corequisite: MAT 263A  
This course introduces concepts of differentiation and integration and their applications to solving problems; the course is designed for students needing one semester of calculus. Topics include functions, graphing, differentiation, and integration with emphasis on applications drawn from business, economics, and biological and behavioral sciences. Upon completion, students should be able to demonstrate an understanding of the use of basic calculus and technology to solve problems and to analyze and communicate results. *This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics.* (D)

**MAT 263A Brief Calculus Lab**

Prerequisite: MAT 161 or MAT 171  
Corequisite: MAT 263  
This course is a laboratory for MAT 263. Emphasis is placed on experiences that enhance the materials presented in the class. Upon completion, students should be able to solve problems, apply critical thinking, work in teams, and communicate effectively. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

**MAT 271 Calculus I**

Prerequisite: MAT 172 or department chair’s permission  
This course covers in depth the differential calculus portion of a three-course calculus sequence. Topics include limits, continuity, derivatives, and integrals of algebraic and transcendental functions of one variable, with applications. Upon completion, students should be able to apply differentiation and integration techniques to algebraic and transcendental functions. *This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics. Instructional content for this course is available in the Virtual Learning Community (VLC).* (F)

**MAT 272 Calculus II**

Prerequisite: MAT 271  
This course provides a rigorous treatment of integration and is the second calculus course in a three-course sequence. Topics include applications of definite integrals,
techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates, and differential equations. Upon completion, students should be able to use integration and approximation techniques to solve application problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

MAT 273 Calculus III  
Prerequisite: MAT 272  
This course covers the calculus of several variables and is the third calculus course in a three-course sequence. Topics include functions of several variables, partial derivatives, multiple integrals, solid analytical geometry, vector-valued functions, and line and surface integrals. Upon completion, students should be able to solve problems involving vectors and functions of several variables. This course has been approved for transfer under the CAA and ICAA as a general education course in Mathematics. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

MAT 280 Linear Algebra  
Prerequisite: MAT 271  
This course provides a study of linear algebra topics with emphasis on the development of both abstract concepts and applications. Topics include vectors, systems of equations, matrices, determinants, vector spaces, linear transformations in two or three dimensions, eigenvectors, eigenvalues, diagonalization and orthogonality. Upon completion, students should be able to demonstrate both an understanding of the theoretical concepts and appropriate use of linear algebra models to solve application problems. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MAT 285 Differential Equations  
Prerequisite: MAT 272  
This course provides an introduction to ordinary differential equations with an emphasis on applications. Topics include first-order, linear higher-order, and systems of differential equations; numerical methods; series solutions; eigenvalues and eigenvectors; Laplace transforms; and Fourier series. Upon completion, students should be able to use differential equations to model physical phenomena, solve the equations, and use the solutions to analyze the phenomena. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

MEC: Mechanical

MEC 111 Machine Processes I  
Prerequisite: MAT 272  
This course introduces shop safety, hand tools, machine processes, measuring instruments, and the operation of machine shop equipment. Topics include use and care of tools, safety, measuring tools, and the basic setup and operation of common machine tools. Upon completion, students should be able to safely machine simple parts to specified tolerances. (F)
MEC 161 Manufacturing Processes I  3  0  3  
Corequisite: MEC 161A  
This course provides the fundamental principles of value-added processing of materials into usable forms for the customer. Topics include material properties and traditional and non-traditional manufacturing processes. Upon completion, students should be able to specify appropriate manufacturing processing for common engineering materials. (S)

MEC 161A Manufacturing Processes I Lab  0  3  1  
Corequisites: MEC 161  
This course is a laboratory for MEC 161. Emphasis is placed on experiences that enhance the materials presented in MEC 161. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in MEC 161.

MEC 172 Introduction to Metallurgy  2  2  3  
This course covers the production, properties, testing, classification, microstructure, and heat-treating effects of ferrous and non-ferrous metals. Topics include the iron-carbon phase diagram, ITT diagram, ANSI code, quenching, senescing, and other processes concerning metallurgical transformations. Upon completion, students should be able to understand the iron-carbon phase diagram, ITT diagram, microstructure images, and other phenomena concerning the behavior of metals. (S)

MEC 231 Computer Aided Manufacturing I  1  4  3  
This course introduces computer-aided design/ manufacturing (CAD/CAM) applications and concepts. Topics include software, programming, data transfer and verification, and equipment setup. Upon completion, students should be able to produce parts using CAD/CAM applications. (SS)

MEC 250 Statics & Strength of Materials  4  3  5  
Prerequisite: PHY 110 and PHY 110A, PHY 131 or PHY 151  
This course covers the concepts and principles of statics and stress analysis. Topics include systems of forces on structures in equilibrium and analysis of stresses and strains on these components. Upon completion, students should be able to analyze forces and the results stresses and strains on structural components. (S)

MED: Medical Assisting

MED 121 Medical Terminology I  3  0  3  
Prerequisite: RED 090 or RED 091  
This course introduces prefixes, suffixes, and word roots used in the language of medicine. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)
MED 122 Medical Terminology II 3 0 3
Prerequisite: MED 121
This course is the second in a series of medical terminology courses. Topics include medical vocabulary and the terms that relate to the anatomy, physiology, pathological conditions, and treatment of selected systems. Upon completion, students should be able to pronounce, spell, and define medical terms as related to selected body systems and their pathological disorders. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

MED 130 Administrative Office Procedures I 1 2 2
This course introduces medical office administrative procedures. Topics include appointment processing, written and oral communications, medical records, patient orientation, and safety. Upon completion, students should be able to perform basic administrative skills within the medical environment. (F)

MED 232 Medical Insurance Coding 1 3 2
This course is designed to develop coding skills. Emphasis is placed on advanced diagnostic and procedural coding in the outpatient facility. Upon completion, students should be able to demonstrate proficiency in coding for reimbursement. (S)

MKT: Marketing and Retailing

MKT 120 Principles of Marketing 3 0 3
Prerequisite: RED 080
This course introduces principles and problems of marketing goods and services. Topics include promotion, placement, and pricing strategies for products. Upon completion, students should be able to apply marketing principles in organizational decision making. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

MKT 220 Advertising and Sales Promotion 3 0 3
Prerequisite: RED 080
This course covers the elements of advertising and sales promotion in the business environment. Topics include advertising and sales promotion appeals, selection of media, use of advertising and sales promotion as a marketing tool, and means of testing effectiveness. Upon completion, students should be able to demonstrate an understanding of the concepts covered through application. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

MKT 223 Customer Service 3 0 3
This course stresses the importance of customer relations in the business world. Emphasis is placed on learning how to respond to complex customer requirements and to efficiently handle stressful situations. Upon completion, students should be able to demonstrate the ability to handle customer relations. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)
MUS: Music

MUS 110  Music Appreciation  3  0  3
This course is a basic survey of the music of the Western world. Emphasis is placed on the elements of music, terminology, composers, form, and style within a historical perspective. Upon completion, students should be able to demonstrate skills in basic listening and understanding of the art of music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

MUS 111  Fundamentals of Music  3  0  3
This course is an introductory course for students with little or no music background. Emphasis is placed on music notation, rhythmic patterns, scales, key signatures, intervals, and chords. Upon completion, students should be able to demonstrate an understanding of the rudiments of music. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 112  Introduction to Jazz  3  0  3
This course introduces the origins and musical components of jazz and the contributions of its major artists. Emphasis is placed on the development of discriminating listening habits, as well as the investigation of the styles and structural forms of the jazz idiom. Upon completion, students should be able to demonstrate skills in listening and understanding this form of American music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

MUS 113  American Music  3  0  3
This course introduces various musical styles, influences, and composers of the United States from pre-Colonial times to the present. Emphasis is placed on the broad variety of music particular to American culture. Upon completion, students should be able to demonstrate skills in basic listening and understanding of American music. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (F/S)

MUS 121  Music Theory I  3  2  4
Prerequisite: Permission of the instructor.
This course provides an in-depth introduction to melody, rhythm, and harmony. Emphasis is placed on fundamental melodic, rhythmic, and harmonic analysis, introduction to part writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. Students must have permission of music director before registering. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)

MUS 122  Music Theory II  3  2  4
Prerequisite: MUS 121
This course is a continuation of studies begun in MUS 121. Emphasis is placed on
advanced melodic, rhythmic, and harmonic analysis and continued studies in partwriting, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (S)

MUS 131 Chorus I 0 2 1
This course provides an opportunity to gain experience singing in a chorus. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

MUS 132 Chorus II 0 2 1
Prerequisite: MUS 131
This course provides a continuation of studies begun in MUS 131. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

MUS 133 Band I 0 2 1
This course provides an opportunity for those who play a band instrument to gain experience playing in an ensemble. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. Student must provide instrument. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 134 Band II 0 2 1
Prerequisite: MUS 133
This course is a continuation of MUS 133. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. Student must provide instrument. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 135 Jazz Ensemble I 0 2 1
This course provides an opportunity for those who play an appropriate instrument to gain experience playing in a jazz ensemble. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)
MUS 136 Jazz Ensemble II 0 2 1
Prerequisites: MUS 135
This course is a continuation of MUS 135. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 141 Ensemble I 0 2 1
This course provides an opportunity to perform in any combination of instrumental, vocal, or keyboard groups of two or more. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. Student must provide instrument. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 142 Ensemble II 0 2 1
Prerequisite: MUS 141
This course is a continuation of MUS 141. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 151G Class Music I: Guitar 0 2 1
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Students must provide instruments. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

MUS 151P Class Music I: Piano 0 2 1
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

MUS 151V Class Music I: Voice 0 2 1
This course provides group instruction in skills and techniques of the particular instrument or voice for those with little or no previous experience. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and
repertoire through performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 152G  Class Music II: Guitar 0 2 1
Prerequisite: MUS 151G
This course is a continuation of MUS 151G. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Students must provide instrument. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 152P  Class Music II: Piano 0 2 1
Prerequisite: MUS 151P
This course is a continuation of MUS 151P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a pre-major and/or elective course requirement. (F/S)

MUS 152V  Class Music II: Voice 0 2 1
Prerequisite: MUS 151V
This course is a continuation of MUS 151V. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 161  Applied Music I 1 2 2
Prerequisite: Permission of the instructor
This course provides individual instruction in the skills and techniques of the particular instrument or voice. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Additional fees and instructor permission are required. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

*Note: The areas of study include piano (P), voice (V), brass (B), woodwind (W), guitar (G), strings (S), organ (O), and percussion (D) (F/S).

MUS 162  Applied Music II 1 2 2
Prerequisite: MUS 161
This course is a continuation of MUS 161. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Additional fees are required. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.

*Note: The areas of study include piano (P), voice (V), brass (B), woodwind (W), guitar (G), percussion (D), strings (S), and organ (O). (F/S)
MUS 210  History of Rock Music  3  0  3
This course is a survey of Rock music from the early 1950's to the present. Emphasis is placed on musical groups, soloists, and styles related to the evolution of this idiom and on related historical and social events. Upon completion, students should be able to identify specific styles and to explain the influence of selected performers within their respective eras. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 211  History of Country Music  3  0  3
This course introduces the varied origins of country music and the commercialization of this art form. Emphasis is placed on historical, sociocultural, and stylistic factors related to country music and musicians. Upon completion, students should be able to identify specific styles and explain the influence of pop culture on the development of country music. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 217  Elementary Conducting  1  2  2
Prerequisite: MUS 111
This course introduces the basic patterns and skills for conducting instrumental and vocal groups. Emphasis is placed on conducting beat patterns, expressive gestures, fermatas, accents, tempos, and rehearsal techniques. Upon completion, students should be able to demonstrate the above skills by conducting vocal and/or instrumental groups. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 221  Music Theory III  3  2  4
Prerequisite: MUS 122
This course is a continuation of MUS 122. Emphasis is placed on altered and chromatic harmony, common practice era compositional techniques and forms, and continued studies in part-writing, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 222  Music Theory IV  3  2  4
Prerequisite: MUS 221
This course is a continuation of studies begun in MUS 221. Emphasis is placed on continued study of common practice era compositional techniques and forms, 20th century practices, ear-training, and sight-singing. Upon completion, students should be able to demonstrate proficiency in the recognition and application of the above. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

MUS 231  Chorus III  0  2  1
Prerequisite: MUS 132
This course is a continuation of MUS 132. Emphasis is placed on vocal techniques and the study and performance of a variety of styles and periods of choral literature. Upon
completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)*

**MUS 232**  
**Chorus IV**  
Prerequisite: MUS 231  
This course is a continuation of MUS 231. Emphasis is placed on vocal techniques and the study of styles and periods of choral literature. Upon completion, students should be able to demonstrate skills needed to participate in choral singing leading to performance. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)*

**MUS 233**  
**Band III**  
Prerequisite: MUS 134  
This course is a continuation of MUS 134. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *Students must provide instrument. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)*

**MUS 234**  
**Band IV**  
Prerequisite: MUS 233  
This course is a continuation of MUS 233. Emphasis is placed on band techniques and the study and performance of a variety of styles and periods of band literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *Students must provide instrument. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)*

**MUS 235**  
**Jazz Ensemble III**  
Prerequisites: MUS 136  
This course is a continuation of MUS 136. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)*

**MUS 236**  
**Jazz Ensemble IV**  
Prerequisites: MUS 235  
This course is a continuation of MUS 235. Emphasis is placed on jazz ensemble techniques and the study and performance of a variety of styles and periods of jazz literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)*
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<td>Ensemble III</td>
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<td>Prerequisite: MUS 142</td>
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<td>This course is a continuation of MUS 142. Emphasis is placed on the development of performance skills and the study of a variety of styles and periods of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. Students must provide instrument. <em>This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</em> (D)</td>
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<td>This course is a continuation of MUS 241. Emphasis is placed on the development of performance skills and the study of styles of ensemble literature. Upon completion, students should be able to demonstrate skills needed to participate in ensemble playing leading to performance. Students must provide instrument. <em>This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</em> (D)</td>
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<td>MUS 251P</td>
<td>Class Music III: Piano</td>
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<td>Prerequisite: MUS 152P</td>
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<td>This course is a continuation of MUS 152P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Note: The following courses are available: piano, guitar and voice. <em>This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</em> (F/S)</td>
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<tr>
<td>MUS 252P</td>
<td>Class Music IV: Piano</td>
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<td>Prerequisite: MUS 251P</td>
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<td>This course is a continuation of MUS 251P. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Note: The following courses are available: piano, guitar and voice. <em>This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</em> (F/S)</td>
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<td>MUS 261</td>
<td>Applied Music III</td>
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<td>Prerequisite: MUS 162</td>
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<td>This course is a continuation of MUS 162. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Additional fees are required. Note: The areas of study include piano (P), voice (V), brass (B), woodwind (W), guitar (G), percussion (D), strings (S), and organ (O). <em>This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.</em> (F/S)</td>
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MUS 262 Applied Music IV 1 2 2
Prerequisite: MUS 261
This course is a continuation of MUS 261. Emphasis is placed on techniques and styles and the exploration and study of appropriate literature. Upon completion, students should be able to demonstrate proficiency in the studied skills and repertoire through performance. Additional fees are required. Note: areas of study include piano (P), voice (V), brass (B), woodwind (W), guitar (G), percussion (D), strings (S), and organ (O). This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

NAS: Nursing Assistant

NAS 101 Nursing Assistant I 3 7 6
Prerequisite: RED 090 or RED 091
This course introduces basic nursing skills required to provide personal care for patients, residents, or clients in a health care setting. Topics include communications, safety, patients’ rights, personal care, vital signs, elimination, nutrition, emergencies, rehabilitation, and mental health. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant I with the North Carolina Nurse Aide I Registry. This is a certificate level course. (F/S)

NAS 102 Nursing Assistant II 3 8 6
Prerequisite: NAS101; current listing as CNA I with NC Nurse Aide Registry
This course provides training in selected advanced nursing assistant procedures. Emphasis is placed on sterile techniques, respiratory procedures, catheterizations, wound and trach care, irrigations, and ostomy care. Upon completion, students should be able to demonstrate skills necessary to qualify as a Nursing Assistant II with the North Carolina Board of Nursing. This is a certificate level course. (S)

NAS 103 Home Health Care 2 0 2
Prerequisite: NAS101; current listing as CNA I with NC Nurse Aide Registry
Corequisite: NAS 102
This course covers basic health issues that affect clients in the home setting. Emphasis is placed on home safety, recognizing significant changes in the client’s condition, family dynamics, and use of home health care equipment. Upon completion, students should be able to identify care for clients at home. This is a certificate level course. (S)

NAS 106 Geriatrics 2 3 3
This course is designed to cover health issues that affect the aging client. Emphasis is placed on social, physical, and psychological problems experienced by elderly people. Upon completion, students should be able to understand and provide care for the aging population. This is a certificate-level course. (S)
NET: Networking Technology

NET 110 Networking Concepts 2 2 3
This course introduces students to the networking field. Topics include network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, sub-netting, and TCP/IP Protocols.
Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

NET 113 Home Automation Systems 2 2 3
This course covers the design, installation, testing, troubleshooting, and customer service of a fully automated home. Emphasis is placed on a structured wiring system that integrates the home phone, TV, home theater, audio, video, computer network, lighting, security systems, and automation systems into a pre-wired, remote controlled system. Upon completion, students should be able to design, install, and maintain home automation systems. (SS)

NET 125 Networking Basics 1 4 3
This course introduces the networking field. Emphasis is placed on network terminology and protocols, local-area networks, wide-area networks, OSI model, cabling, router programming, Ethernet, IP addressing, and network standards. Upon completion, students should be able to perform tasks related to networking mathematics, terminology, and models, media, Ethernet, sub-netting, and TCP/IP Protocols. (F)

NET 126 Routing Basics 1 4 3
Prerequisites: NET 125
This course focuses on initial router configuration, router software management, routing protocol configuration, TCP/IP, and access control lists (ACLs). Emphasis will be placed on the fundamentals of router configuration, managing router software, routing protocol, and access lists. Upon completion, students should have an understanding of routers and their role in WANs, router configuration, routing protocols, TCP/IP, troubleshooting, and ACLs. (S)

NET 175 Wireless Technology 2 2 3
Prerequisites: NET 110 or NET 125
This course introduces the student to wireless technology and interoperability with different communication protocols. Topics include Wireless Application Protocol (WAP), Wireless Mark-up language (WML), link manager, service discovery protocol, transport layer and frequency band. Upon completion, students should be able to discuss in written and oral form protocols and procedures required for different wireless applications. (F/S)

NET 225 Routing & Switching I 1 4 3
Prerequisites: NET 126
This course focuses on advanced IP addressing techniques, intermediate routing
protocols, command-line interface configuration of switches, Ethernet switching, VLANs, STP, and VTP. Emphasis will be placed on application and demonstration of skills acquired in pre-requisite courses. Upon completion, students should be able to perform tasks related to VLSM, routing protocols, switching concepts and configuration, STP, VLANs, and VTP. (F)

NET 226 Routing & Switching II 1 4 3
Prerequisites: NET 225
This course introduces WAN theory and design, WAN technology, PPP, Frame Relay, ISDN, and additional case studies. Topics include network congestion problems, TCP/IP transport and network layer protocols, advanced routing and switching configuration, ISDN protocols, PPP encapsulation operations on a router. Upon completion, students should be able to provide solutions for network routing problems, identify ISDN protocols, and describe the Spanning Tree protocol. (S)

NET 240 Network Design 3 0 3
Prerequisites: NET 110 or NET 125
This course covers the principles of the design of LANs and WANs. Topics include network architecture, transmission systems, traffic management, bandwidth requirements, Internet working devices, redundancy, and broad-band versus base-band systems. Upon completion, students should be able to design a network to meet specified business and technical requirements. (S)

NET 289 Networking Project 1 4 3
Corequisites: NET 226
This course provides an opportunity to complete a significant networking project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete a project from the definition phase through implementation. (S)

NMT: Nuclear Medicine

NMT 110 Introduction to Nuclear Medicine 2 0 2
Prerequisite: Accepted or Alternate in the Nuclear Medicine Program
This course provides a comprehensive introduction to the field of nuclear medicine. Topics include overview of school, program, and profession; medical terminology and ethics; medical legal issues; general patient care and radiation safety practices; and departmental organization. Upon completion, students should be able to utilize various learning resources and demonstrate understanding of radiation safety standards and ethical, professional conduct. (F)

NMT 126 Nuclear Physics 2 0 2
Prerequisite: NMT 110
This course introduces the fundamental principles of the physics that underlie nuclear medicine. Topics include atomic structure, electromagnetic and particulate radiation, decay schemes, production of radionuclides with emphasis on radionuclide generators,
and decay calculations. Upon completion, students should be able to demonstrate an understanding of the physical concepts covered in the course. (Sp)

NMT 132  Overview-Clinical Nuclear Medicine  
Prerequisite: NMT 110  
This course is designed to familiarize students with the clinical practice of nuclear medicine. Emphasis is placed on the routine clinical procedures, radiopharmaceuticals and dosage, equipment manipulation, and basic patient care. Upon completion, students should be able to demonstrate integration of the principles covered in the classroom with the clinical experience. (SS)

NMT 134  Nuclear Pharmacy  
Prerequisite: NMT 110  
This course covers the formulation and application of radiopharmaceuticals. Topics include the preparation, handling, disposition, and quality control of clinically useful radiopharmaceuticals. Upon completion, students should be able to discuss the appropriate use and disposition of radiopharmaceuticals currently used in clinical nuclear medicine. (SS)

NMT 211  NMT Clinical Practice I  
Prerequisite: NMT 132  
This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclide. Upon completion, students should be able to demonstrate performance of the procedures covered in the course. (F)

NMT 212  Procedures for Nuclear Medicine I  
Prerequisite: NMT 132  
This course begins the in-depth study of clinical procedures performed by nuclear medicine technologists. Emphasis is placed on dose administration, use of instrumentation, computer applications, and normal and abnormal presentation. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures presented in the course. (F)

NMT 214  Radiobiology  
Prerequisite: NMT 132  
This course covers the principles of radiation biology. Emphasis is placed on a system's sensitivity to radiation, radiation pathology, and the biological effects of radiation. Upon completion, students should be able to demonstrate an understanding of the effects of radiation in nuclear medicine. (F)

NMT 215  Non-Imaging Instruments.  
Prerequisite: NMT 132  
This course covers the proper operation of various types of non-imaging equipment used in nuclear medicine. Emphasis is placed on principles of radiation detection, quality control procedures, various counting problems, and machine-specific operating
procedures. Upon completion, students should be able to demonstrate the proper use of the devices discussed in the course. (F)

NMT 218   Computers in Nuclear Medicine  
Prerequisite: NMT 132  
This course provides a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Topics include number systems, major system components, input/output devices, and acquisition and processing of nuclear medicine images. Upon completion, students should be able to demonstrate an understanding of the concepts presented. (F)

NMT 221   NMT Clinical Practice II  
Prerequisite: NMT 132  
This course is one of two courses designed to provide clinical practice in nuclear medicine. Topics include radiation protection, radiopharmaceutical use, patient care, imaging procedures, non-imaging procedures, administrative procedures, and the therapeutic use of radionuclides. Upon completion, students should be able to demonstrate performance of the procedures covered in this course. (S)

NMT 222   Procedures for Nuclear Medicine II  
Prerequisite: NMT 132  
This course concludes the in-depth study of clinical procedures performed in nuclear medicine. Topics include method of dose administration, data acquisition parameters, computer use, and data patterns consistent with normal and described pathological states. Upon completion, students should be able to demonstrate an understanding of the principles related to the procedures discussed in the course. (S)

NMT 225   Imaging Instrumentation  
Prerequisite: NMT 132  
This course covers the operations of various imaging equipment used in nuclear medicine. Emphasis is placed on planar and SPECT gamma cameras. Upon completion, students should be able to safely operate and evaluate performance characteristics of the equipment discussed in the course. (S)

NMT 289   Nuclear Medicine Technology Topics  
Prerequisite: NMT 211  
Corequisite: NMT 222  
This course covers professional practice in nuclear medicine. Emphasis is placed on the procedures vital to a clinical nuclear medicine staff technologist. Upon completion, students should be able to demonstrate a comprehensive knowledge of nuclear medicine and be prepared for the comprehensive examination. (S)

NOS: Networking Operating Systems

NOS 110   Operating System Concepts  
Prerequisites: CIS 110  
This course introduces students to a broad range of operating system concepts, including
installation and maintenance. Emphasis is placed on operating system concepts, management, maintenance, and resources required. Upon completion of this course, students will have an understanding of OS concepts, installation, management, maintenance, using a variety of operating systems. (S)

NOS 120 Linux/UNIX Single User 2 2 3
Prerequisites: NOS 110
This course develops the necessary skills for students to develop both GUI and command line skills for using and customizing a Linux workstation. Topics include Linux file system and access permissions, GNOME Interface, VI editor, X Window System expression pattern matching, I/O redirection, network and printing utilities. Upon completion, students should be able to customize and use Linux systems for command line requirements and desktop productivity roles. (F)

NOS 130 Windows Single User 2 2 3
Prerequisites: NOS 110
This course introduces operating system concepts for single-user systems. Topics include hardware management, file and memory management, system configuration/optimization, and utilities. Upon completion, students should be able to perform operating systems functions at the support level in a single-user environment. (F)

NOS 220 Linux/UNIX Administration I 2 2 3
Prerequisites: NOS 120
This course introduces the Linux file system, group administration, and system hardware controls. Topics include installation, creation and maintaining file systems, NIS client and DHCP client configuration, NFS, SMB/Samba, Configure X, Gnome, KDE, basic memory, processes, and security. Upon completion, students should be able to perform system administration tasks including installation, configuring and attaching a new Linux workstation to an existing network. (S)

NOS 230 Windows Administration I 2 2 3
Prerequisites: NOS 130
This course covers the installation and administration of a Windows Server network operating system. Topics include managing and maintaining physical and logical devices, access to resources, the server environment, managing users, computers, and groups, and Managing/Implementing Disaster Recovery. Upon completion, students should be able to manage and maintain a Windows Server environment. (S)

NUR: Nursing

NUR 111 Introduction to Health Concepts 4 12 8
Prerequisites: Enrollment in Associate Degree Nursing Program
This course introduces the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts within each domain including medication administration, assessment, nutrition, ethics, interdisciplinary teams, informatics, evidence-based practice, individual-centered care, and quality improvement. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. (F)
NUR 112  Health-Illness Concepts  
Prerequisites: NUR 111  
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of acid-base, metabolism, cellular regulation, oxygenation, infection, stress/coping, health-wellness-illness, communication, caring interventions, managing care, safety, quality improvement, and informatics. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. (S)  

NUR 113  Family Health Concepts  
Prerequisites: NUR 111, NUR 112, NUR 211  
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of oxygenation, sexuality, reproduction, grief/loss, mood/affect, behaviors, development, family, health-wellness-illness, communication, caring interventions, managing care, safety, and advocacy. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. (SS)  

NUR 114  Holistic Health Concepts  
Prerequisites: NUR 111, NUR 112, NUR 113, NUR 211  
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, inflammation, sensory perception, stress/coping, mood/affect, cognition, self, violence, health-wellness-illness, professional behaviors, caring interventions, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. (F)  

NUR 211  Health Care Concepts  
Prerequisites: NUR 111  
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of cellular regulation, perfusion, infection, immunity, mobility, comfort, behaviors, health-wellness-illness, clinical decision-making, caring interventions, managing care, and safety. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. (S)  

NUR 212  Health System Concepts  
Prerequisites: NUR 111, NUR 112, NUR 113, NUR 211  
This course is designed to further develop the concepts within the three domains of the individual, healthcare, and nursing. Emphasis is placed on the concepts of grief/loss, violence, health-wellness-illness, collaboration, managing care, safety, advocacy, legal issues, policy, healthcare systems, ethics, accountability, and evidence-based practice. Upon completion, students should be able to provide safe nursing care incorporating the concepts identified in this course. (F)  

NUR 213  Complex Health Concepts  
Prerequisites: NUR 111, NUR 112, NUR 113, NUR 114, NUR 211, and NUR 212  
This course is designed to assimilate the concepts within the three domains of the
individual, healthcare, and nursing. Emphasis is placed on the concepts of fluid/electrolytes, metabolism, perfusion, mobility, stress/coping, violence, health-wellness-illness, professional behaviors, caring interventions, managing care, healthcare systems, and quality improvement. Upon completion, students should be able to demonstrate the knowledge, skills, and attitudes necessary to provide quality, individualized, entry level nursing care. (S)

**OPH: Ophthalmic Medical Assistant**

**OPH 103**  Introduction to Diseases of Eye  
Prerequisites: OPH 150 and OPH 151  
Corequisite: OPH 105, OPH 106, and OPH 109  
This course introduces the fundamentals of common external and internal diseases of the eye and orbital region. Topics include common patient complaints, what constitutes an ocular emergency, triage procedure and common conditions and disorders. Upon completion, the student should be able to identify most common ocular diseases and determine appropriate emergency management of acute ocular problems. (F)

**OPH 104**  Basic Ophthalmic Pharmacology  
Prerequisites: OPH 103  
Corequisite: OPH 107, OPH 108, and OPH 110  
This course introduces and compares drug delivery systems. Topics include topical and oral medications, use and abuse of drugs, irrigating solutions, and format for prescription writing. Upon completion, the students should be able to administer and record topical and oral medications at the physician’s direction. (S)

**OPH 105**  Ophthalmic Clinical Procedures I  
Prerequisites: OPH 150 and OPH 151  
Corequisite: OPH 103, OPH 106, and OPH 109  
This course introduces basic clinical procedures for the ophthalmic practice. Topics include telephone triage and basic procedures commonly used in the preliminary examination of patients. Upon completion, the student should be able to perform basic administrative tasks, assist with minor office surgery, and perform procedures commonly used in patient examinations. (F)

**OPH 106**  Ophthalmic Medical Assistant Practicum I  
Prerequisites: OPH 150 and OPH 151  
Corequisite: OPH 103, OPH 105, and OPH 109  
This course introduces ophthalmic patient-care procedures. Topics include interpersonal skills with patients, work and legal ethics, confidentiality, clinical appearance, and performance. Upon completion, the student will be able to determine equipment and instruments associated with patient examination, observation of examination techniques, assigned examination lanes to maintain, basic procedures for information gathering in an examination. (F)
OPH 107  Ophthalmic Clinical Procedures II  1  2  2  
Prerequisite: OPH 103  
Corequisite: OPH 104, OPH 108, and OPH 110  
This course introduces more advanced clinical procedures for the ophthalmic practice. Topics include coding and testing associated with the treatment of glaucoma, cataracts and refractive errors. Upon completion, the student should understand coding for ophthalmic procedures and perform automated perimetry, A scan biometry, keratometry and pachymetry. (S) 

OPH 108  Ophthalmic Patient Care  2  0  2  
Prerequisite: OPH 103  
Corequisite: OPH 104, OPH 107, and OPH 110  
This course is an overview of the care of the ophthalmic patient. Topics include systemic diseases in the eye, review of first aid, emergency equipment and supplies, infection control, identification of minor surgical equipment, and aseptic technique. Upon completion, the student should be able to apply these principles in interactions with patients. (S) 

OPH 109  Ophthalmic Optics and Basic Refractometry  2  0  2  
Prerequisite: OPH 150  
Corequisite: OPH 103, OPH 105, OPH 106  
This course introduces basic theoretical and clinical optics. Topics include interaction of light and lenses, refractive states of the eye, and principles of retinoscopy and refractometry. Upon completion, the student will be able to demonstrate physical and geometric optics, and basic refractometry techniques. (F) 

OPH 110  Practicum II  0  27  9  
Prerequisite: OPH 103  
Corequisite: OPH 104, OPH 107, and OPH 108  
This course provides additional clinical experience in ophthalmic patient care procedures. Topics include interpersonal skills with patients, work and legal ethics, confidentiality, appearance, and performance. Upon completion, the student will be able to demonstrate basic skills in patient care and examination techniques. Actual patient examination by student is performed under supervision. (S) 

OPH 150  Introduction to Ophthalmic Medical Assistant  2  0  2  
Prerequisite: Entry into program  
Corequisite: OPH 151  
This course introduces the role, scope, and duties of the ophthalmic assistant. Topics include medical ethics, duties of assistant, medical history, basic medical terminology and an overview of human anatomy and physiology. Upon completion, students should demonstrate knowledge of medical history-taking, preliminary patient examination, basic ophthalmic equipment, and office efficiency. (SS) 

OPH 151  Ocular Anatomy & Physiology  2  0  2  
Prerequisite: Entry into program  
Corequisite: OPH 150  
This course studies the normal anatomy and physiology of eye and orbit. Topics include
structures of the eye, functioning process of the eye and correct medical terminology of the structures and functions of the eye. Upon completion, the student should be able to demonstrate a basic understanding and fundamental principles of anatomy and physiology of the eye. (SS)

OST: Office Administration Technology

OST 122 Office Computations 1 2 2
This course introduces the keypad and the touch method using the electronic calculator. Topics include mathematical functions in business applications. Upon completion, students should be able to use the electronic calculator to solve a wide variety of problems commonly encountered in business. (SS)

OST 130 Comprehensive Keyboarding 2 2 3
This course is designed to develop keyboarding skills and introductory document formatting. Emphasis is placed on keyboarding techniques and formatting basic business documents. Upon completion, students should be able to create documents in an ever-changing workplace. (F)

OST 134 Text Entry and Formatting 2 2 3
Prerequisite: OST 130 or keyboarding proficiency
This course is designed to provide the skills needed to increase speed, improve accuracy, and format documents. Topics include letters, memos, tables, and business reports. Upon completion, students should be able to produce mailable documents and key timed writings at speeds commensurate with employability. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

OST 136 Word Processing 2 2 3
This course is designed to introduce word processing concepts and applications. Topics include preparation of a variety of documents and mastery of specialized software functions. Upon completion, students should be able to work effectively in a computerized word processing environment. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

OST 148 Medical Coding Billing & Insurance 3 0 3
This course introduces fundamentals of medical coding, billing, and insurance. Emphasis is placed on the medical billing cycle to include third party payers, coding concepts, and form preparation. Upon completion, students should be able to explain the life cycle of and accurately complete a medical insurance claim. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

OST 149 Medical Legal Issues 3 0 3
This course introduces the complex legal, moral, and ethical issues involved in providing health-care services. Emphasis is placed on the legal requirements of medical practices; the relationship of physician, patient, and office personnel; professional liabilities; and medical practice liability. Upon completion, students should be able to demonstrate a working knowledge of current medical law and accepted ethical behavior. Instructional

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content for this course is available in the Virtual Learning Community (VLC). (F)

OST 153 Office Finance Solutions 1 2 2
This course introduces basic bookkeeping concepts. Topics include entering data in accounts payable and receivable, keeping petty cash records, maintaining inventory, reconciling bank statements, running payroll, and generating simple financial reports. Upon completion, students should be able to demonstrate competence in the entry and manipulation of data to provide financial solutions for the office. (F)

OST 164 Text Editing Applications 3 0 3
Prerequisite: RED 080
This course provides a comprehensive study of editing skills needed in the workplace. Emphasis is placed on grammar, punctuation, sentence structure, proofreading, and editing. Upon completion, students should be able to use reference materials to compose and edit text. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

OST 184 Records Management 2 2 3
This course includes the creation, maintenance, protection, security, and disposition of records stored in a variety of media forms. Topics include alphabetic, geographic, subject, and numeric filing methods. Upon completion, students should be able to set up and maintain a records management system. Instructional content for this course is available in the Virtual Learning Community (VLC). (SS)

OST 201 Medical Transcription I 3 2 4
Prerequisites: OST 136
Corequisite: MED 122 and OST 164
This course introduces dictating equipment and typical medical dictation. Emphasis is placed on efficient use of equipment, dictionaries, PDRs, and other reference materials. Upon completion, students should be able to efficiently operate dictating equipment and to accurately transcribe a variety of medical documents in a specified time. This course is intended for diploma programs. (F)

OST 236 Advanced Word/Information Procedures 2 2 3
Prerequisite: OST 136
This course develops proficiency in the utilization of advanced word/information processing functions. Emphasis is placed on advanced word processing features. Upon completion, students should be able to produce a variety of complex business documents. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

OST 243 Medical Office Simulation 2 2 3
Prerequisites: OST 148
This course introduces medical systems used to process information in the automated office. Topics include traditional and electronic information resources, storing and retrieving information, and the billing cycle. Upon completion, students should be able to use the computer accurately to schedule, bill, update, and make corrections. This
course is a unique concentration requirement in the Medical Office Systems Technology concentration in the Office Systems Technology program. (S)

OST 286  Professional Development  3 0 3
This course covers the personal competencies and qualities needed to project a professional image in the office. Topics include interpersonal skills, health lifestyles, appearance, attitude, personal and professional growth, multicultural awareness, and professional etiquette. Upon completion, students should be able to demonstrate these attributes in the classroom, office, and society. Instructional content for this course is available in the Virtual Learning Community (VLC). (S)

OST 289  Administrative Office Management  2 2 3
Prerequisites: OST 164 and either OST 134 or OST 136
This course is designed to be a capstone course for the office professional and provides a working knowledge of modern office procedures. Emphasis is placed on scheduling, telephone procedures, travel arrangements, event planning, office design, and ergonomics. Upon completion, students should be able to adapt in an office environment. (S/SS)

PED: Physical Education

PED 110  Fit and Well for Life  1 2 2
This course is designed to investigate and apply the basic concepts and principles of lifetime physical fitness and other health-related factors. Emphasis is placed on wellness through the study of nutrition, weight control, stress management, and consumer facts on exercise and fitness. Upon completion, students should be able to plan a personal, lifelong fitness program based on individual needs, abilities, and interests. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 111  Physical Fitness I  0 3 1
This course provides an individualized approach to physical fitness utilizing the five major components. Emphasis is placed on the scientific basis for setting up and engaging in personalized physical fitness programs. Upon completion, students should be able to set up and implement an individualized physical fitness program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 112  Physical Fitness II  0 3 1
Prerequisite: PED 111
This course is an intermediate-level fitness class. Topics include specific exercises contributing to fitness and the role exercise plays in developing body systems. Upon completion, students should be able to implement and evaluate an individualized physical fitness program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)
PED 113  Aerobics I  0  3  1
This course introduces a program of cardiovascular fitness involving continuous, rhythmic exercise. Emphasis is placed on developing cardiovascular efficiency, strength, and flexibility and on safety precautions. Upon completion, students should be able to select and implement a rhythmic aerobic exercise program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 114  Aerobics II  0  3  1
Prerequisite: PED 113
This course provides a continuation of a program of cardiovascular fitness involving rhythmic exercise. Emphasis is placed on a wide variety of aerobic activities which include cardiovascular efficiency, strength, and flexibility. Upon completion, students should be able to participate in and design a rhythmic aerobic exercise routine. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 115  Step Aerobics I  0  3  1
This course introduces the fundamentals of step aerobics. Emphasis is placed on basic stepping up and down on an adjustable platform; cardiovascular fitness; and upper body, floor, and abdominal exercises. Upon completion, students should be able to participate in basic step aerobics. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 116  Step Aerobics II  0  3  1
Prerequisite: PED 115
This course provides a continuation of step aerobics. Emphasis is placed on a wide variety of choreographed step patterns; cardiovascular fitness; and upper body, abdominal, and floor exercises. Upon completion, students should be able to participate in and design a step aerobics routine. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 117  Weight Training I  0  3  1
This course introduces the basics of weight training. Emphasis is placed on developing muscular strength, muscular endurance, and muscle tone. Upon completion, students should be able to establish and implement a personal weight training program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 118  Weight Training II  0  3  1
Prerequisite: PED 117
This course covers advanced levels of weight training. Emphasis is placed on meeting individual training goals and addressing weight training needs and interests. Upon completion, students should be able to establish and implement an individualized advanced weight training program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)
PED 120 Walking for Fitness 0 3 1
This course introduces fitness through walking. Emphasis is placed on stretching, conditioning exercises, proper clothing, fluid needs, and injury prevention. Upon completion, students should be able to participate in a recreational walking program. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 121 Walk, Jog, Run 0 3 1
This course covers the basic concepts involved in safely and effectively improving cardiovascular fitness. Emphasis is placed on walking, jogging, or running as a means of achieving fitness. Upon completion, students should be able to understand and appreciate the benefits derived from these activities. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 122 Yoga I 0 2 1
This course introduces the basic discipline of yoga. Topics include proper breathing, relaxation techniques, and correct body positions. Upon completion, students should be able to demonstrate the procedures of yoga. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 123 Yoga II 0 2 1
Prerequisite: PED 122
This course introduces more detailed aspects of the discipline of yoga. Topics include breathing and physical postures, relaxation, and mental concentration. Upon completion, students should be able to demonstrate advanced procedures of yoga. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 125 Self-Defense-Beginning 0 2 1
This course is designed to aid students in developing rudimentary skills in self-defense. Emphasis is placed on stances, blocks, punches, and kicks as well as non-physical means of self-defense. Upon completion, students should be able to demonstrate basic self-defense techniques of a physical and non-physical nature. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 126 Self-Defense-Intermediate 0 2 1
Prerequisite: PED 125
This course is designed to aid students in building on the techniques and skills developed in PED 125. Emphasis is placed on the appropriate psychological and physiological responses to various encounters. Upon completion, students should be able to demonstrate intermediate skills in self-defense stances, blocks, punches and kick combinations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.
PED 128 Golf-Beginning 0 2 1
This course emphasizes the fundamentals of golf. Topics include the proper grips, stance, alignment, swings for the short and long game, putting, and the rules and etiquette of golf. Upon completion, students should be able to perform the basic golf shots and demonstrate a knowledge of the rules and etiquette of golf. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (S)

PED 129 Golf-Intermediate 0 2 1
Prerequisite: PED 128
This course covers the more advanced phases of golf. Emphasis is placed on refining the fundamental skills and learning more advanced phases of the games such as club selection, trouble shots, and course management. Upon completion, students should be able demonstrate the knowledge and ability to play a recreational round of golf. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (S)

PED 130 Tennis-Beginning 0 2 1
This course emphasizes the fundamentals of tennis. Topics include basic strokes, rules, etiquette, and court play. Upon completion, students should be able to play recreational tennis. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 131 Tennis-Intermediate 0 2 1
Prerequisite: PED 130
This course emphasizes the refinement of playing skills. Topics include continuing the development of fundamentals, learning advanced serves, and strokes and pace and strategies in singles and doubles play. Upon completion, students should be able to play competitive tennis. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 137 Badminton 0 2 1
This course covers the fundamentals of badminton. Emphasis is placed on the basics of serving, clears, drops, drives, smashes, and the rules and strategies of singles and doubles. Upon completion, students should be able to apply these skills in playing situations. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F/S)

PED 138 Archery 0 2 1
This course introduces basic archery safety and skills. Topics include proper techniques of stance, bracing, drawing, and releasing as well as terminology and scoring. Upon completion, students should be able to participate safely in target archery. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (F)
PED 139  Bowling-Beginning  0  2  1
This course introduces the fundamentals of bowling. Emphasis is placed on ball selection, grips, stance, and delivery along with rules and etiquette. Upon completion, students should be able to participate in recreational bowling. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F)

PED 143  Volleyball-Beginning  0  2  1
This course covers the fundamentals of volleyball. Emphasis is placed on the basics of serving, passing, setting, spiking, blocking, and the rules and etiquette of volleyball. Upon completion, students should be able to participate in recreational volleyball. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F)

PED 144  Volleyball-Intermediate  0  2  1
Prerequisite: PED 143
This course covers more advanced volleyball techniques. Emphasis is placed on refining skills and developing more advanced strategies and techniques. Upon completion, students should be able to participate in competitive volleyball. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)

PED 145  Basketball-Beginning  0  2  1
This course covers the fundamentals of basketball. Emphasis is placed on skill development, knowledge of the rules, and basic game strategy. Upon completion, students should be able to participate in recreational basketball. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F)

PED 147  Soccer  0  2  1
This course introduces the basics of soccer. Emphasis is placed on rules, strategies, and fundamental skills. Upon completion, students should be able to participate in recreational soccer. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F)

PED 170  Backpacking  0  2  1
This course covers the proper techniques for establishing a campsite, navigating in the wilderness, and planning for an overnight trip. Topics include planning for meals, proper use of maps and compass, and packing and dressing for extended periods in the outdoors. Upon completion, students should be able to identify quality backpacking equipment, identify the principles of no-trace camping, and successfully complete a backpacking experience. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)

PED 175  Horseback Riding I  0  2  1
This course introduces beginning and non-riders to recreational horseback riding. Topics include riding skills, equipment, handling of horses, mounting, care of the horse, and coordinated horse-rider balance. Upon completion, students should be able to
demonstrate riding, safety, and horse management skills. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)

**PED 176**  
**Horseback Riding II**  
Prerequisite: PED 175  
This course is designed to give advanced riding experiences in a variety of specialized situations. Emphasis is placed on the development of skills such as jumping, rodeo games, and trail riding. Upon completion, students should be able to demonstrate control and management of the horse and perform various riding techniques. *This course has been approved for transfer under the CAA and ICAA as a pre-major and/or elective course requirement.* (F/S)

**PED 181**  
**Snow Skiing-Beginning**  
Prerequisite: PED 181  
This course introduces the fundamentals of snow skiing. Topics include basic techniques, safety, and equipment involved in snow skiing. Upon completion, students should be able to ski a down slope, enter and exit a ski lift, and perform basic maneuvers on skis. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (S)

**PED 182**  
**Snow Skiing Intermediate**  
Prerequisite: PED 181  
This course is designed to further develop snow skiing skills. Topics include selection and care of equipment, parallel skiing and turns, christies, advanced jumps, trail skiing, and slalom racing. Upon completion, students should be able to ski on varying terrains and snow conditions with control and safety. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (S)

**PED 187**  
**Social Dance-Beginning**  
Prerequisite: PED 187  
This course introduces the fundamentals of popular social dances. Emphasis is placed on basic social dance techniques, dances, and a brief history of social dance. Upon completion, students should be able to demonstrate specific dance skills and perform some dances. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)

**PED 188**  
**Social Dance-Intermediate**  
Prerequisite: PED 187  
This course covers advanced fundamentals of social dancing. Topics include rhythm, appearance, and routine sequence. Upon completion, students should be able to perform more difficult steps and types of dances. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)

**PED 211**  
**New Games**  
Prerequisite: PED 187  
This course includes explanation, demonstration, and participation in games that provide an alternative to traditional sports. Emphasis is placed on playing for pleasure rather than for competitive purposes. Upon completion, students should be able to participate and lead others in participating in non-competitive games. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (F/S)
approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

PED 212 Snowboarding - Beginning 0 2 1
This course is designed to develop the basic knowledge and skills of snowboarding. Topics include equipment, conditioning exercises, terminology, safety, rules, fundamental skills, and use of lifts. Upon completion, students should be able to snowboard downhill, enter and exit a ski lift and perform basic maneuvers on a board. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (S)

PET: Positron Emission Tomography

PET 235 Cross-Sectional Anatomy 3 0 3
This course covers the cross-sectional anatomy of Positron Emission Tomography. Topics include all relevant cross-sectional anatomy related to PET imaging with an emphasis placed on oncology, neurology and cardiology. Upon completion, students should be able to demonstrate competence in identifying cross-sectional anatomy related to PET procedures through computerized exams and projects.

PHI: Philosophy

PHI 210 History of Philosophy 3 0 3
Prerequisite: ENG 111
This course introduces fundamental philosophical issues through an historical perspective. Emphasis is placed on such figures as Plato, Aristotle, Lao-Tzu, Confucius, Augustine, Aquinas, Descartes, Locke, Kant, Wollstonecraft, Nietzsche, and Sartre. Upon completion, students should be able to identify and distinguish among the key positions of the philosophers studied. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

PHI 215 Philosophical Issues 3 0 3
Prerequisite: ENG 111
This course introduces fundamental issues in philosophy considering the views of classical and contemporary philosophers. Emphasis is placed on knowledge and belief, appearance and reality, determinism and free will, faith and reason, and justice and inequality. Upon completion, students should be able to identify, analyze, and critique the philosophical components of an issue. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

PHI 240 Introduction to Ethics 3 0 3
Prerequisite: ENG 111
This course introduces theories about the nature and foundations of moral judgments and applications to contemporary moral issues. Emphasis is placed on utilitarianism, rule-based ethics, existentialism, relativism versus objectivism, and egoism. Upon completion, students should be able to apply various ethical theories to individual moral
issues such as euthanasia, abortion, crime and punishment, and justice. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

**PHY: Physics**

**PHY 101**  
Fundamentals of Physics I  
Prerequisite: MAT 060 and MAT 070  
This course introduces fundamental physical concepts with emphasis on applications. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to demonstrate an understanding of the principles studied as applied to their specific programs. This course is intended for certificate and diploma programs. (D)

**PHY 110**  
Conceptual Physics  
Prerequisites: MAT 060, MAT 080, or MAT 121 and RED 090 or RED 091  
Corequisite: PHY 110A  
This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Topics include basic concepts of motion, forces, energy, heat, electricity, magnetism, and the structure of matter and the universe. Upon completion, students should be able to describe examples and applications of the principles studied. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

**PHY 110A**  
Conceptual Physics Lab  
Corequisite: PHY 110  
This course is a laboratory for PHY 110. Emphasis is placed on laboratory experiences that enhance materials presented in PHY 110. Upon completion, students should be able to apply the laboratory experiences to the concepts presented in PHY 110. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (F)

**PHY 131**  
Physics-Mechanics  
Prerequisite: MAT 121, MAT 161 or MAT 171  
This algebra/trigonometry-based course introduces fundamental physical concepts as applied to engineering technology fields. Topics include systems of units, problem-solving methods, graphical analysis, vectors, motion, forces, Newton's laws of motion, work, energy, power, momentum, and properties of matter. Upon completion, students should be able to apply the principles studied to applications in engineering technology fields. (F/S)

**PHY 151**  
College Physics I  
Prerequisite: MAT 161 or 171  
This course uses algebra- and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and
measurement, vectors, linear kinematics and dynamics, energy, power, momentum, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

**PHY 152 College Physics II**

Prerequisite: PHY 151

This course uses algebra and trigonometry-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (D)

**PHY 251 General Physics I**

Prerequisite: MAT 271
Corequisite: MAT 272

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include units and measurement, vector operations, linear kinematics and dynamics, energy, power, momentum, rotational mechanics, periodic motion, fluid mechanics, and heat. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

**PHY 252 General Physics II**

Prerequisites: MAT 272 and PHY 251

This course uses calculus-based mathematical models to introduce the fundamental concepts that describe the physical world. Topics include electrostatic forces, electric fields, electric potentials, direct-current circuits, magnetostatic forces, magnetic fields, electromagnetic induction, alternating-current circuits, and light. Upon completion, students should be able to demonstrate an understanding of the principles involved and display analytical problem-solving ability for the topics covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Natural Science. (S)

**POL: Political Science**

**POL 120 American Government**

Prerequisite: RED 090 or RED 091

This course is a study of the origins, development, structure, and functions of American national government. Topics include the constitutional framework, federalism, the three
branches of government including the bureaucracy, civil rights and liberties, political participation and behavior, and policy formation. Upon completion, students should be able to demonstrate an understanding of the basic concepts and participatory processes of the American political system. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

POL 210  Comparative Government 3 0 3
Prerequisite: ENG 090 or ENG 091 and RED 090 or RED 091
This course provides a cross-national perspective on the government and politics of contemporary nations such as Great Britain, France, Germany, and Russia. Topics include each country's historical uniqueness, key institutions, attitudes and ideologies, patterns of interaction, and current political problems. Upon completion, students should be able to identify and compare various nations' governmental structures, processes, ideologies, and capacity to resolve major problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

POL 220  International Relations 3 0 3
Prerequisite: ENG 090 or ENG 091 and RED 090 or RED 091
This course provides a study of the effects of ideologies, trade, armaments, and alliances on relations among nationstates. Emphasis is placed on regional and global cooperation and conflict, economic development, trade, nongovernmental organizations, and international institutions such as the World Court and UN. Upon completion, students should be able to identify and discuss major international relationships, institutions, and problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

POR:  Portuguese

POR 111  Elementary Portuguese I 3 0 3
Corequisite: POR 181
This course introduces the fundamental elements of the Portuguese language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Portuguese and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

POR 112  Elementary Portuguese II 3 0 3
Prerequisites: POR 111
Corequisite: POR 182
This course is a continuation of POR 111 focusing on the fundamental elements of the Portuguese language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Portuguese and demonstrate further cultural awareness. This course...
has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

POR 181 Portuguese Lab I 0 2 1
Corequisite: POR 111
This course provides an opportunity to enhance acquisition of the fundamental elements of the Portuguese language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Portuguese and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

POR 182 Portuguese Lab 2 0 2 1
Prerequisite: POR 181
Corequisite: POR 112
This course provides an opportunity to enhance acquisition of the fundamental elements of the Portuguese language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Portuguese and demonstrate cultural awareness. This course has been approved to satisfy the Comprehensive Articulation Agreement for transferability as a premajor and/or elective course requirement. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

PSY: Psychology

PSY 101 Applied Psychology 3 0 3
This course introduces the basic principles of psychology as they apply to daily life. Topics include perception, emotions, motivation, adjustment, behavior management, communication, and related topics that promote growth and development on the job and in one's personal life. Upon completion, students should be able to apply the principles learned in this class to everyday living. This course is intended for certificate and diploma programs. (S)

PSY 131 Psychology of Dreams 3 0 3
This course covers the physiology of sleeping and dreaming and the major psychological approaches to the interpretation of dreams. Topics include historical and cultural perspectives on dreams, sleep disorders, and an examination of traditional and contemporary approaches to dreams and their meaning. Upon completion, students should be able to demonstrate a basic understanding of the psychological implications of sleeping and dreaming. (D)

PSY 150 General Psychology 3 0 3
Prerequisite: RED 090 or RED 091
This course provides an overview of the scientific study of human behavior. Topics
include history, methodology, biopsychology, sensation, perception, learning, motivation, cognition, abnormal behavior, personality theory, social psychology, and other relevant topics. Upon completion, students should be able to demonstrate a basic knowledge of the science of psychology. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S/SS)

PSY 237  Social Psychology  3 0 3  
Prerequisites: PSY 150 or SOC 210  
This course introduces the study of individual behavior within social contexts. Topics include affiliation, attitude formation and change, conformity, altruism, aggression, attribution, interpersonal attraction, and group behavior. Upon completion, students should be able to demonstrate an understanding of the basic principles of social influences on behavior. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. (F)

PSY 239  Psychology of Personality  3 0 3  
Prerequisites: PSY 150  
This course covers major personality theories and personality research methods. Topics include psychoanalytic, behavioristic, social learning, cognitive, humanistic, and trait theories including supporting research. Upon completion, students should be able to compare and contrast traditional and contemporary approaches to the understanding of individual differences in human behavior. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences.

PSY 241  Developmental Psychology  3 0 3  
Prerequisites: PSY 150  
This course is a study of human growth and development. Emphasis is placed on major theories and perspectives as they relate to the physical, cognitive, and psychosocial aspects of development from conception to death. Upon completion, students should be able to demonstrate knowledge of development across the life span. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

PSY 265  Behavioral Modification  3 0 3  
Prerequisites: PSY 150  
This course is an applied study of factors influencing human behavior and strategies for behavioral change. Emphasis is placed on cognitive-behavioral theory, behavioral assessment, practical applications of conditioning techniques, and maintenance of adaptive behavior patterns. Upon completion, students should be able to implement basic learning principles to effect behavioral changes in self and others. (D)

PSY 281  Abnormal Psychology  3 0 3  
Prerequisites: PSY 150  
This course provides an examination of the various psychological disorders, as well as theoretical, clinical, and experimental perspectives of the study of psychopathology.
Emphasis is placed on terminology, classification, etiology, assessment, and treatment of the major disorders. Upon completion, students should be able to distinguish between normal and abnormal behavior patterns as well as demonstrate knowledge of etiology, symptoms, and therapeutic techniques. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (SS)

PTA: Physical Therapist Assistant

PTA 110  Introduction to Physical Therapy  
Prerequisite: Enrollment in the Physical Therapist Assistant program  
This course introduces the field of physical therapy including the history and standards of practice for the physical therapist assistant and basic treatment techniques. Emphasis is placed on ethical and legal considerations, universal precautions, vital signs, documentation, basic patient preparation and treatment skills, and architectural barrier screening. Upon completion, students should be able to explain the role of the physical therapist assistant and demonstrate competence in basic techniques of patient care. (F)

PTA 125  Gross & Functional Anatomy  
Prerequisite: PTA 110  
Corequisite: PTA 135, PTA 165, PTA 222  
This course provides an in-depth, clinically oriented survey of gross and functional anatomy. Emphasis is placed on musculoskeletal and nervous systems and clinical biomechanics, including goniometry, basic manual muscle testing, and components of normal gait. Upon completion, students should be able to identify specific anatomical structures and describe, observe, and measure musculoskeletal posture and function. (S)

PTA 135  Pathology  
Prerequisite: PTA 110  
Corequisite: PTA 125, PTA 165, PTA 222  
This course introduces principles of pathology, processes of and normal responses to injury and disease, and changes related to aging. Emphasis is placed upon conditions most commonly treated in physical therapy. Upon completion, students should be able to discuss basic pathological processes and identify etiology, signs, symptoms, complications, treatment options, and prognoses of specific orthopedic conditions. (S)

PTA 145  Therapeutic Procedures  
Prerequisites: PTA 125, PTA 135, PTA 165, PTA 222  
Corequisite: PTA 152  
This course provides a detailed study of specific treatment procedures and the physiological principles and techniques involved. Emphasis is placed on the correct application of superficial heat and cold, massage and soft tissue mobilization, ultrasound, diathermy, traction, and electrical stimulation. Upon completion, students should be able to demonstrate competence in the application of these modalities and explain the indications, contraindications, effects, and precautions for each. (SS)
PTA 152  PTA Prevention and Wellness  1  2  2
Prerequisites: PTA 110, PTA 125, PTA 135, PTA 165, PTA 222
Corequisite: PTA 145
This course is designed to investigate and apply, under the supervision of a therapist, the basic concepts and principles of lifetime wellness and prevention. Emphasis is placed on improving overall health through the study of nutrition, weight control, stress management, and exercise including conditioning, strength, and flexibility. Upon completion, the students should be able to develop, implement, and maintain an individualized personal wellness program. (SS)

PTA 165  PTA Clinical I  0  9  3
Prerequisite: PTA 110
Corequisite: PTA 125, PTA 135, PTA 222
This course provides the opportunity to gain clinical experience and apply academic skills and knowledge to patient care. Emphasis is placed on performing patient care skills, observation and measurement, and professional and patient interaction. Upon completion, students should be able to demonstrate safe and effective clinical practice as measured by a standardized performance evaluation. (S)

PTA 185  PTA Clinical II  0  9  3
Prerequisite: PTA 145
Corequisite: PTA 215, PTA 225, PTA 245
This course provides the opportunity to gain clinical experience and apply academic skills and knowledge to patient care. Emphasis is placed on performing patient care skills, observation and measurement, and professional and patient interaction. Upon completion, students should be able to demonstrate safe and effective clinical practice as measured by a standardized performance evaluation. (F)

PTA 212  Health Care/Resources  2  0  2
Prerequisites: PTA 185, PTA 215, PTA 225, PTA 245
Corequisite: PTA 235, PTA 255, PTA 270
This course provides an overview of various aspects of health care delivery systems and the interrelationships of health care team members. Topics include health agencies and their functions, health care team member roles, management, and other health care issues. Upon completion, students should be able to discuss the functions of health organizations and team members and aspects of health care affecting physical therapy delivery. (S)

PTA 215  Therapeutic Exercise  2  3  3
Prerequisite: PTA 145
Corequisite: PTA 185, PTA 225, PTA 245
This course introduces basic concepts of strengthening, endurance, and flexibility exercise and balance, gait, and posture training. Emphasis is placed on applying techniques to the treatment of orthopedic conditions. Upon completion, students should be able to safely and effectively execute basic exercise programs and balance, gait, and posture training. (F)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Prerequisites</th>
<th>Corequisites</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PTA 222</td>
<td>Professional Interactions</td>
<td>2</td>
<td>Prerequisite: PTA 110</td>
<td>Corequisite: PTA 125, PTA 135, PTA 165</td>
<td>This course is designed to assist in the development of effective interpersonal skills in the physical therapist assistant setting. Topics include reactions to disability, the grieving process, method of communication, motivation, health promotion, disease prevention, and aging. Upon completion, students should be able to discuss and demonstrate methods for achieving effective interaction with patients, families, the public, and other health care providers. (S)</td>
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<tr>
<td>PTA 225</td>
<td>Introduction to Rehabilitation</td>
<td>3</td>
<td>Prerequisite: PTA 145</td>
<td>Corequisite: PTA 185, PTA 215, PTA 245</td>
<td>This course covers cardiovascular, pulmonary, and integumentary conditions, as well as causes and treatment of amputations. Emphasis is placed upon pathological processes as well as comprehensive treatment of the various conditions studied. Upon completion, students should be able to discuss etiology, signs, symptoms, complications, and prognoses of various conditions and implement components of a comprehensive treatment program. (F)</td>
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<tr>
<td>PTA 235</td>
<td>Neurological Rehabilitation</td>
<td>3</td>
<td>Prerequisites: PTA 185, PTA 215, PTA 245</td>
<td>Corequisite: PTA 225, PTA 212, PTA 270</td>
<td>This course covers neurological and neuromuscular conditions experienced throughout the life span. Topics include the pathology of selected conditions and the methods and rationales of various treatment approaches. Upon completion, students should be able to discuss etiology, signs, symptoms, complications, and prognoses of various conditions and implement components of a comprehensive treatment program. (S)</td>
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<td>PTA 245</td>
<td>PTA Clinical III</td>
<td>0</td>
<td>Prerequisite: PTA 145</td>
<td>Corequisite: PTA 185, PTA 215, PTA 225</td>
<td>This course provides the opportunity to gain clinical experience and apply academic skills and knowledge to patient care. Emphasis is placed on performing patient care skills, observation and measurement, and professional and patient interaction. Upon completion, students should be able to demonstrate safe and effective clinical practice as measured by a standardized performance evaluation. (F)</td>
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<tr>
<td>PTA 255</td>
<td>PTA Clinical IV</td>
<td>0</td>
<td>Prerequisites: PTA 185, PTA 215, PTA 225, PTA 245</td>
<td>Corequisite: PTA 235, PTA 212, PTA 270</td>
<td>This course provides the opportunity to gain clinical experience and apply academic skills and knowledge to patient care. Emphasis is placed on performing patient care skills, observation and measurement, and professional and patient interaction. Upon completion, students should be able to demonstrate safe and effective clinical practice as measured by a standardized performance evaluation. (S)</td>
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</table>
PTA 270  Physical Therapy Topics  
Prerequisites:  PTA 185, PTA 215, PTA 225, PTA 245  
Corequisite:  PTA 255, PTA 235, PTA 212  
This course covers the physical therapist assistant profession in preparation for the state licensure exam. Topics include developing time management skills and practicing for the competence examinations. Upon completion, students should be able to identify individual academic strengths and weaknesses and utilize this information to continue self-study for the licensure exam. (S)

RAD:  Radiography

RAD 110  Radiography Introduction & Patient Care  
Prerequisite:  Enrollment in Radiography program  
Corequisite:  RAD 111 and RAD 151  
This course provides an overview of the radiography profession and student responsibilities. Emphasis is placed on basic principles of patient care, radiation protection, technical factors, and medical terminology. Upon completion, students should be able to demonstrate basic skills in these areas. (F)

RAD 111  RAD Procedures I  
Prerequisite:  Enrollment in the Radiography program  
Corequisite:  RAD 110 and RAD 151  
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the chest, abdomen, extremities, spine, and pelvis. Upon completion, students should be able to demonstrate competence in these areas. (F)

RAD 112  RAD Procedures II  
Prerequisites:  RAD 110, RAD 111, and RAD 151  
Corequisite:  RAD 121 and RAD 161  
This course provides the knowledge and skills necessary to perform standard radiographic procedures. Emphasis is placed on radiography of the skull, bony thorax, and gastrointestinal, biliary, and urinary systems. Upon completion, students should be able to demonstrate competence in these areas. (S)

RAD 121  Radiographic Imaging I  
Prerequisites:  RAD 110, RAD 111, and RAD 151  
This course provides the principles of conventional film-screen radiography. Emphasis is placed on the factors that impact density, contrast, recorded detail, and distortion. Upon completion, students should be able to demonstrate an understanding of conventional film-screen radiographic imaging. (S)

RAD 122  Radiographic Imaging II  
Prerequisites:  RAD 112, RAD 121, and RAD 161  
Corequisites:  RAD 131 and RAD 171  
This course provides advanced principles of imaging including digital radiography. Emphasis is placed on the factors that impact brightness, contrast, recorded detail, and
_distortion. Upon completion, students should be able to demonstrate an understanding of advanced principles of imaging. (SS)

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<tr>
<td>RAD 131</td>
<td>Radiographic Physics I</td>
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<td>This course introduces the principles of radiation characteristics and production. Emphasis is placed on imaging equipment. Upon completion, students should be able to demonstrate a basic understanding of radiation characteristics and production. (S)</td>
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<td>RAD 151</td>
<td>RAD Clinical Ed I</td>
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<td>Prerequisite: Enrollment in the Radiography program Corequisite: RAD 110 and RAD 111</td>
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<td>This course introduces patient management and basic radiographic procedures in the clinical setting. Emphasis is placed on mastering positioning of the chest and extremities, manipulating equipment, and applying principles of ALARA. Upon completion, students should be able to demonstrate successful completion of clinical objectives. (F)</td>
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<tr>
<td>RAD 161</td>
<td>RAD Clinical Ed II</td>
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<td></td>
<td>Prerequisites: RAD 110, RAD 111, and RAD 151 Corequisite: RAD 112 and RAD 121</td>
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<td>This course provides additional experience in patient management and in more complex radiographic procedures. Emphasis is placed on mastering positioning of the spine, pelvis, head and neck, and thorax and adapting procedures to meet patient variations. Upon completion, students should be able to demonstrate successful completion of clinical objectives. (S)</td>
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<tr>
<td>RAD 171</td>
<td>RAD Clinical Ed III</td>
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<td>Prerequisites: RAD 112, RAD 121, and RAD 161 Corequisite: RAD 122 and RAD 131</td>
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<td>This course provides experience in patient management specific to fluoroscopic and advanced radiographic procedures. Emphasis is placed on applying appropriate technical factors to all studies and mastering positioning of gastrointestinal and urological studies. Upon completion, students should be able to demonstrate successful completion of clinical objectives. (SS)</td>
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<tr>
<td>RAD 211</td>
<td>RAD Procedures III</td>
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<tr>
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<td>Prerequisites: RAD 122 Corequisites: RAD 231, RAD 241, and RAD 251</td>
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<td>This course provides the knowledge and skills necessary to perform standard and specialty radiographic procedures. Emphasis is placed on radiographic specialty procedures, sectional anatomy, and advanced imaging. Upon completion, students should be able to demonstrate an understanding of these areas. (F)</td>
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<tr>
<td>RAD 231</td>
<td>Radiographic Physics II</td>
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<tr>
<td></td>
<td>Prerequisites: RAD 131 or RAD 171</td>
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<tr>
<td></td>
<td>This course provides advanced principles of radiation characteristics and production including digital imaging and Computed Tomography (CT). Emphasis is placed on imaging equipment. Upon completion, students should be able to demonstrate an understanding of radiation characteristics and production. (F)</td>
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RAD 241 Radiobiology/Protection 2 0 2
Prerequisites: RAD 122, RAD 131, and RAD 171
Corequisite: RAD 211, RAD 231, and RAD 251
This course covers the principles of radiation protection and radiobiology. Topics include the effects of ionizing radiation on body tissues, protective measures for limiting exposure to the patient and personnel, and radiation monitoring devices. Upon completion, students should be able to demonstrate an understanding of the effects and uses of radiation in diagnostic radiology. (F)

RAD 245 Image Analysis 1 3 2
Prerequisites: RAD 211, RAD 231, RAD 241 and RAD 251
Corequisites: RAD 261
This course provides an overview of image analysis and introduces methods of quality management. Topics include image evaluation, pathology, quality control, and quality assurance. Upon completion, students should be able to demonstrate a basic knowledge of image analysis and quality management. (S)

RAD 251 RAD Clinical Ed IV 0 21 7
Prerequisites: RAD 122, RAD 131, and RAD 171
Corequisite: RAD 211, RAD 231, and RAD 241
This course provides the opportunity to continue mastering all basic radiographic procedures and to attain experience in advanced areas. Emphasis is placed on equipment operation, pathological recognition, pediatric and geriatric variations, and a further awareness of radiation protection requirements. Upon completion, students should be able to demonstrate successful completion of clinical objectives. (F)

RAD 261 RAD Clinical Ed V 0 21 7
Prerequisite: RAD 251
Corequisite: RAD 245
This course is designed to enhance expertise in all radiographic procedures, patient management, radiation protection, and image production and evaluation. Emphasis is placed on developing an autonomous approach to the diversity of clinical situations and successfully adapting to those procedures. Upon completion, students should be able to demonstrate successful completion of clinical objectives. (S)

RAD 271 Radiography Capstone 3 0 1
Prerequisites: RAD 211, RAD 231, RAD 241, RAD 251
Corequisites: RAD 245, RAD 261
This course provides an opportunity to exhibit problem-solving skills required for certification. Emphasis is placed on critical thinking and integration of didactic and clinical components. Upon completion, students should be able to demonstrate the knowledge required of any entry-level radiographer. (S)

RED: Reading

Initial student placement in developmental courses is based on individual college placement testing policies and procedures. See “Admissions” for more information.
Students should begin developmental course work at the appropriate level indicated by that college's placement test.

**RED 080  Introduction to College Reading**  
Prerequisite: ENG 075  
This course introduces effective reading and inferential thinking skills in preparation for RED 090. Emphasis is placed on vocabulary, comprehension, and reading strategies. Upon completion, students should be able to determine main ideas and supporting details, recognize basic patterns of organization, draw conclusions, and understand vocabulary in context. *This course does not satisfy the developmental reading prerequisite for ENG 111 or ENG 111A.* (F/S/SS)

**RED 090  Improved College Reading**  
Prerequisites: RED 080  
This course is designed to improve reading and critical thinking skills. Topics include vocabulary enhancement; extracting implied meaning; analyzing author's purpose, tone, and style; drawing conclusions and responding to written material. Upon completion, students should be able to comprehend and analyze college-level reading material. *This course satisfies the developmental reading prerequisite for ENG 111 or ENG 111A.* (F/S/SS)

**RED 091  Fast Track Improved College Reading**  
Prerequisites: RED 080  
This course provides an intensive review of selected RED 090-level reading strategies. Topics include the following reading strategies at the RED 090 level: critical thinking, major question types, main idea, patterns of organization, vocabulary, and inference. Upon completion, students should be able to apply selected RED 090 reading strategies to various texts. (D)

**REL: Religion**

**REL 110  World Religions**  
Prerequisite: RED 090 or RED 091  
This course introduces the world's major religious traditions. Topics include Primal religions, Hinduism, Buddhism, Islam, Judaism, and Christianity. Upon completion, students should be able to identify the origins, history, beliefs, and practices of the religions studied. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC).* (F/S)

**REL 211  Introduction to Old Testament**  
Prerequisite: RED 090 or RED 091  
This course is a survey of the literature of the Hebrews with readings from the law, prophets, and other writings. Emphasis is placed on the use of literary, historical, archeological, and cultural analysis. Upon completion, students should be able to use the tools of critical analysis to read and understand Old Testament literature. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* (D)
REL 212 Introduction to New Testament 3 0 3
Prerequisite: RED 090 or RED 091
This course is a survey of the literature of first-century Christianity with readings from the gospels, Acts, and the Pauline and pastoral letters. Topics include the literary structure, audience, and religious perspective of the writings, as well as the historical and cultural context of the early Christian community. Upon completion, students should be able to use the tools of critical analysis to read and understand New Testament literature. All New Testament books will be covered. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (F/S)

REL 221 Religion in America 3 0 3
Prerequisite: RED 090 or RED 091
This course is an examination of religious beliefs and practice in the United States. Emphasis is placed on mainstream religious traditions and non-traditional religious movements from the Colonial period to the present. Upon completion, students should be able to recognize and appreciate the diversity of religious traditions in America. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (F/S)

SEC: Information Systems Security

SEC 110 Security Concepts 3 0 3
This course introduces the concepts and issues related to securing information systems and the development of policies to implement information security controls. Topics include the historical view of networking and security, security issues, trends, security resources, and the role of policy, people, and processes in information security. Upon completion, students should be able to identify information security risks, create an information security policy, and identify processes to implement and enforce policy. (F)

SEL: Selected Topics

The appropriate curriculum prefix should be substituted for SEL. For example, Selected Topics in English would use the ENG prefix. The complete course title would substitute the curriculum area for the blank. A first-year one credit English selected topics course would be ENG 191 Selected Topics in English.

SEL 191 Selected Topics in 0-1 0-3 1
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

SEL 192 Selected Topics in 0-2 0-6 2
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the
program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**SEL 193**  
Selected Topics in  
1-3 0-9 3  
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**SEL 291**  
Selected Topics in  
0-1 0-3 1  
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**SEL 292**  
Selected Topics in  
0-2 0-6 2  
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**SEL 293**  
Selected Topics in  
1-3 0-9 3  
This course provides an opportunity to explore areas of current interest in specific program or discipline areas. Emphasis is placed on subject matter appropriate to the program or discipline. Upon completion, students should be able to demonstrate an understanding of the specific area of study.

**SEM: Seminar**

**SEM 196**  
Seminar in  
0-1 0-3 1  
This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**SEM 197**  
Seminar in  
0-2 0-6 2  
This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

**SEM 198**  
Seminar in  
1-3 0-9 3  
This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.
SEM 296 Seminar in 0-1 0-3 1
This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

SEM 297 Seminar in 0-2 0-6 2
This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

SEM 298 Seminar in 1-3 0-9 3
This course provides an opportunity to explore topics of current interest. Emphasis is placed on the development of critical listening skills and the presentation of seminar issues. Upon completion, students should be able to critically analyze issues and establish informed opinions.

SLP: Speech-Language Pathology Assistant

SLP 111 Ethics and Standards for SLPAs 3 0 3
Prerequisites: Enrollment in the Speech Language Pathology Assistant Program
This course provides an overview of the theory, practice, and philosophy of speech-language pathology assisting. Topics include legal and ethical issues, scope of practice, multiculturalism, and diversity. Upon completion, students should be able to describe characteristics of the profession and identify components of safe and ethical practice. (F)

SLP 112 SLP Anatomy & Physiology 3 0 3
Prerequisites: BIO 163 or BIO 169
This course introduces the basic pathophysiology of the orofacial and thoracic structures of the human body. Emphasis is placed on the most commonly treated speech, language, and hearing disorders. Upon completion, students should be able to identify and describe basic pathophysiology related to the production of speech and hearing. (SS)

SLP 120 SLPA Admin. Procedures and Management 2 0 2
Prerequisites: Enrollment in the Speech Language Pathology Assistant Program
This course covers organizational and functional skills appropriate to the speech-language pathology workplace. Emphasis is placed on scheduling, office etiquette, operation of office equipment, time management, and quality issues. Upon completion, students should be able to demonstrate correct operation of office equipment and work cooperatively and effectively within the speech-language pathology professional environment. (SS)

SLP 130 Phonetics/Speech Patterns 2 2 3
Prerequisites: Enrollment in the Speech Language Pathology Assistant Program
This course introduces the International Phonetic Alphabet and the categories of speech
sounds, including voice, place, and manner of production. Emphasis is placed on the accurate transcription of normal and abnormal speech samples using the IPA and on the production of effective natural speech. Upon completion, students should be able to transcribe and categorize speech sounds and understand the relationship between respiration, articulation and phonation during natural speech. (S)

SLP 140 Normal Communication 3 0 3
Prerequisites: Enrollment in the Speech Language Pathology Assistant Program
This course introduces normal verbal and non-verbal communications across the life span, including appropriate social interaction with diverse populations. Topics include normal speech, language, and hearing in a multicultural society and an introduction to screening for normality and abnormality. Upon completion, students should be able to identify normal speech, language, and hearing patterns. (F)

SLP 211 Developmental Disorders 3 2 4
Prerequisites: SLP 111, SLP 130, and SLP 140
This course covers screening for speech, language, and hearing disorders; use of observational checklists; and administration of therapeutic protocols. Emphasis is placed on conditions commonly treated in speech-language pathology. Upon completion, students should be able to accurately administer screening tests and therapeutic protocols and identify characteristics of developmental speech, language, and hearing disorders. (F)

SLP 212 Acquired Disorders 3 5 5
Prerequisite: SLP 111, SLP 112, SLP 130, SLP 140
This course includes an introduction to clinical settings. Emphasis is placed on acquired conditions commonly treated in speech-language pathology. Upon completion, students should be able to accurately administer screening tests and therapeutic protocols and identify characteristics of acquired speech, language, and hearing disorders. (S)

SLP 220 Assistive Technology 1 2 2
Prerequisites: SLP 111, SLP 130, and SLP 140
Corequisite: SLP 211
This course introduces the preparation, use, and maintenance of selected communication equipment in the treatment of respective disorders. Emphasis is placed on the collaborative use of assistive equipment for speech, language, and hearing disorders. Upon completion, students should be able to instruct the patient and caregiver in the use and maintenance of assistive communication equipment. (F)

SLP 230 SLPA Fieldwork 0 12 4
Prerequisite: SLP 211
Corequisite: SLP 212 and SLP 231
This course provides supervised fieldwork experience in speech-language pathology assisting in a minimum of two diverse sites. Emphasis is placed on the use of written protocols in providing patient care. Upon completion, students should be able to integrate ethical concepts into safe and effective clinical practice. (S)
SLP 231  SLPA Fieldwork Seminar  3  0  3
Prerequisite: SLP 211
Corequisite: SLP 212 and SLP 230
This course provides an opportunity to discuss fieldwork experiences with peers and faculty. Emphasis is placed on management of clinical problems, conflict resolution, and job seeking and retention skills. Upon completion, students should be able to meet entry-level requirements for speech-language pathology assistants. (S)

SOC: Sociology

SOC 210  Introduction to Sociology  3  0  3
Prerequisite: RED 090 or RED 091
This course introduces the scientific study of human society, culture, and social interactions. Topics include socialization, research methods, diversity and inequality, cooperation and conflict, social change, social institutions, and organizations. Upon completion, students should be able to demonstrate knowledge of sociological concepts as they apply to the interplay among individuals, groups, and societies. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

SOC 213  Sociology of the Family  3  0  3
Prerequisite: RED 090 or RED 091
This course covers the institution of the family and other intimate relationships. Emphasis is placed on mate selection, gender roles, sexuality, communication, power and conflict, parenthood, diverse lifestyles, divorce and remarriage, and economic issues. Upon completion, students should be able to analyze the family as a social institution and the social forces which influence its development and change. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)

SOC 220  Social Problems  3  0  3
Prerequisite: RED 090 or RED 091
This course provides an in-depth study of current social problems. Emphasis is placed on causes, consequences, and possible solutions to problems associated with families, schools, workplaces, communities, and the environment. Upon completion, students should be able to recognize, define, analyze, and propose solutions to these problems. This course has been approved for transfer under the CAA and ICAA as a general education course in Social/Behavioral Sciences. Instructional content for this course is available in the Virtual Learning Community (VLC). (F/S)
## SON: Medical Sonography

**SON 110**  
Introduction to Sonography  
1 6 3  
Prerequisite: Enrollment in the Medical Sonography or Cardiovascular Sonography program  
Corequisite: SON 130  
This course provides an introduction to medical sonography. Topics include applications, sonographic terminology, history, patient care, ethics, and basic skills. Upon completion, students should be able to define professionalism and sonographic applications and perform basic patient care skills and preliminary scanning techniques. (F)

**SON 111**  
Sonographic Physics  
3 3 4  
Prerequisite: CVS 163 or SON 110  
This course introduces ultrasound physical principles, bioeffects, and sonographic instrumentation. Topics include sound wave mechanics, transducers, sonographic equipment, Doppler physics, bioeffects, and safety. Upon completion, students should be able to demonstrate knowledge of sound wave mechanics, transducers, sonography equipment, the Doppler effect, bioeffects, and safety. (S)

**SON 120**  
SON Clinical Ed I  
0 15 5  
Prerequisite: SON 110  
This course provides active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (S)

**SON 121**  
SON Clinical Ed II  
0 15 5  
Prerequisite: SON 120  
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (SS)

**SON 130**  
Abdominal Sonography I  
2 3 3  
Corequisite: SON 110  
This course introduces abdominal and small parts sonography. Emphasis is placed on the sonographic anatomy of the abdomen and small parts with correlated laboratory exercises. Upon completion, students should be able to recognize and acquire basic abdominal and small parts images. (F)

**SON 131**  
Abdominal Sonography II  
1 3 2  
Prerequisite: SON 130  
This course covers abdominal and small parts pathology recognizable on sonograms. Emphasis is placed on abnormal sonograms of the abdomen and small parts with correlated sonographic cases. Upon completion, students should be able to recognize abnormal pathological processes in the abdomen and on small parts sonographic examinations. (S)

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SON 140  Gynecological Sonography  
Prerequisite: SON 110  
This course is designed to relate gynecological anatomy and pathology to sonography. Emphasis is placed on gynecological relational anatomy, endovaginal anatomy, and gynecological pathology. Upon completion, students should be able to recognize normal and abnormal gynecological sonograms. (S)

SON 220  SON Clinical Ed III  
Prerequisites: SON 110 and 121  
This course provides continued active participation in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (F)

SON 221  SON Clinical Ed IV  
Prerequisite: SON 220  
This course provides continued active participation off campus in clinical sonography. Emphasis is placed on imaging, processing, and technically evaluating sonographic examinations. Upon completion, students should be able to image, process, and evaluate sonographic examinations. (S)

SON 225  Case Studies  
Prerequisite: CVS 163 or SON 110  
This course offers the opportunity to present interesting cases found during clinical education. Emphasis is placed on presentation methods which integrate patient history, laboratory results, and sonographic findings with reference to current literature. Upon completion, students should be able to correlate information necessary for complete presentation of case studies. (F)

SON 241  Obstetrical Sonography I  
Prerequisite: SON 110  
This course covers normal obstetrical sonography techniques, the normal fetal environment, and abnormal first trimester pregnancy states. Topics include gestational dating, fetal anatomy, uterine environment, and first trimester complications. Upon completion, students should be able to produce gestational sonograms which document age, evaluate the uterine environment, and recognize first trimester complications. (F)

SON 242  Obstetrical Sonography II  
Prerequisite: SON 241  
This course covers second and third trimester obstetrical complications and fetal anomalies. Topics include abnormal fetal anatomy and physiology and complications in the uterine environment. Upon completion, students should be able to identify fetal anomalies, fetal distress states, and uterine pathologies. (S)

SON 250  Vascular Sonography  
Prerequisite: SON 111  
This course provides an in-depth study of the anatomy and pathology of the vascular
system. Topics include peripheral arterial, peripheral venous, and cerebrovascular disease testing. Upon completion, students should be able to identify normal vascular anatomy and recognize pathology of the vascular system. (F)

SON 289   Sonographic Topics
Prerequisites: SON 110
This course provides an overview of sonographic topics in preparation for certification examinations. Emphasis is placed on registry preparation. Upon completion, students should be able to demonstrate a comprehensive knowledge of sonography and be prepared for the registry examinations. (S)

SPA: Spanish

SPA 111   Elementary Spanish I
Corequisite: SPA 181
This course introduces the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the development of basic listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. Instructional content for this course is available in the Virtual Learning Community (VLC). (D)

SPA 112   Elementary Spanish II
Prerequisite: SPA 111
Corequisite: SPA 182
This course is a continuation of SPA 111 focusing on the fundamental elements of the Spanish language within a cultural context. Emphasis is placed on the progressive development of listening, speaking, reading, and writing skills. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate further cultural awareness. This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts. (D)

SPA 120   Spanish for the Workplace
This course offers applied Spanish for the workplace to facilitate basic communication with people whose native language is Spanish. Emphasis is placed on oral communication and career-specific vocabulary that targets health, business, and/or public service professions. Upon completion, students should be able to communicate at a functional level with native speakers and demonstrate cultural sensitivity. (SP)

SPA 161   Cultural Immersion
Prerequisite: SPA 111
This course explores Hispanic culture through intensive study on campus and field experience in a host country or area. Topics include an overview of linguistic, historical, geographical, sociopolitical, economic, and/or artistic concerns of the area visited. Upon completion, students should be able to exhibit first-hand knowledge of issues pertinent
to the host area and demonstrate understanding of cultural differences. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (SU)

### SPA 181 Spanish Lab 1
- **Corequisite:** SPA 111
- **Prerequisite:** None

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with grammatical accuracy to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

### SPA 182 Spanish Lab 2
- **Corequisite:** SPA 112
- **Prerequisite:** SPA 181

This course provides an opportunity to enhance acquisition of the fundamental elements of the Spanish language. Emphasis is placed on the progressive development of basic listening, speaking, reading, and writing skills through the use of various supplementary learning media and materials. Upon completion, students should be able to comprehend and respond with increasing proficiency to spoken and written Spanish and demonstrate cultural awareness. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

### SPA 211 Intermediate Spanish I
- **Corequisite:** SPA 281
- **Prerequisite:** SPA 112

This course provides a review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. *This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement.* (D)

### SPA 212 Intermediate Spanish II
- **Corequisite:** SPA 282
- **Prerequisite:** SPA 211

This course provides a continuation of SPA 211. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. *This course has been approved for transfer under the CAA and ICAA as a general education course in Humanities/Fine Arts.* (D)
SPA 281  Spanish Lab 3 0 2 1
Prerequisite: SPA 182
Corequisite: SPA 211
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate effectively, accurately, and creatively about the past, present, and future. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

SPA 282  Spanish Lab 4 0 2 1
Prerequisite: SPA 281
Corequisite: SPA 212
This course provides an opportunity to enhance the review and expansion of the essential skills of the Spanish language. Emphasis is placed on the continuing study of authentic and representative literary and cultural texts through the use of various supplementary learning media and materials. Upon completion, students should be able to communicate spontaneously and accurately with increasing complexity and sophistication. This course has been approved for transfer under the CAA and ICAA as a premajor and/or elective course requirement. (D)

TRF: Turfgrass

TRF 110  Introduction Turfgrass Culture & Identification  3 2 4
This course provides an in-depth study of turfgrass. Topics include principles of reproduction, growth development, species characteristics, establishment and maintenance of golf courses and sports fields, and lawn applications. Upon completion, students should be able to identify turfgrass species through characteristics and reproductive stages and develop an establishment and maintenance plan for high quality turf areas. (SF)

TRP: Truck Driver Training

TRP 100  Truck Driver Training  6 18 12
Prerequisite: Reading Placement of at least 40 or completion of ENG 075
This course provides training in inspecting and driving tractor trailers and assuming driver responsibilities on the road and at pickup and delivery points. Emphasis is placed on defensive driving, federal motor carrier safety regulations, trip planning, cargo handling, vehicle systems, hours of service, and accident prevention. Upon completion, students should be able to demonstrate the skills required for the commercial driver's license and employment. This is a certificate-level course. (F/S/SS)
WEB: Web Technologies

WEB 110  Internet/Web Fundamentals  2  2  3
This course introduces World Wide Web Consortium (W3C) standard markup language and services of the Internet. Topics include creating web pages, search engines, FTP, and other related topics. Upon completion, students should be able to deploy a hand-coded website created with mark-up language, and effectively use and understand the function of search engines. *Instructional content for this course is available in the Virtual Learning Community (VLC).*  (F)

WEB 111  Introduction to Web Graphics  2  2  3
This course introduces the creation of web graphics, and addressing problems peculiar to WWW display using appropriate software. Topics include web graphics file types, optimization, RGB color, web typography, elementary special effects, transparency, animation, slicing, basic photo manipulation, and other related topics. Upon completion, students should be able to create graphics, such as animated banners, buttons, backgrounds, logos, and manipulate photographic images for Web delivery.  (S)

WEB 115  Web Markup and Scripting  2  2  3
This course introduces Worldwide Web Consortium (W3C) standard client-side Internet programming using industry-established practices. Topics include JavaScript, markup elements, stylesheets, validation, accessibility, standards, and browsers. Upon completion, students should be able to develop hand-coded web pages using current markup standards. *Instructional content for this course is available in the Virtual Learning Community (VLC).* (S)

WEB 120  Introduction Internet Multimedia  2  2  3
This is the first of two courses covering the creation of internet multimedia. Topics include internet multimedia file types, file type conversion, acquisition of digital audio/video, streaming audio/video and graphics animation plug-in programs and other related topics. Upon completion, students should be able to create internet multimedia presentations utilizing a variety of methods and applications.  (S)

WEB 140  Web Development Tools  2  2  3
This course provides an introduction to web development software suites. Topics include the creation of web sites and applets using web development software. Upon completion, students should be able to create entire web sites and supporting applets. *Instructional content for this course is available in the Virtual Learning Community (VLC).*  (S)

WEB 182  PHP Programming  2  2  3
Prerequisites: CIS 115
This course introduces students to the server-side, HTML-embedded scripting language PHP. Emphasis is placed on programming techniques required to create dynamic web pages using PHP scripting language features. Upon completion, students should be able to design, code, test, debug, and create a dynamic web site using the PHP scripting language.  (F)
WEB 210  Web Design
This course introduces intermediate to advanced web design techniques. Topics include customer expectations, advanced markup language, multimedia technologies, usability and accessibility practices, and techniques for the evaluation of web design. Upon completion, students should be able to employ advanced design techniques to create high impact and highly functional web sites. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

WEB 211  Advanced Web Graphics
Prerequisites: WEB 111
This course covers the advanced concepts related to the creation and manipulation of graphic images for web delivery. Topics include graphics acquisition, use of masks and channels, advanced special effects, advanced photo manipulation, and other related topics. Upon completion, students should be able to create, manipulate, and optimize web graphics with advanced techniques and maintain an online coursework portfolio. (S)

WEB 230  Implementing Web Server
Prerequisites: NET 110 or NET 125
This course covers website and web server architecture. Topics include installation, configuration, administration, and security of web servers, services and sites. Upon completion, students should be able to effectively manage the web services deployment lifecycle according to industry standards. Instructional content for this course is available in the Virtual Learning Community (VLC). (F)

WEB 250  Database Driven Websites
Prerequisites: DBA 110
This course introduces dynamic (database-driven) website development. Topics include the use of basic database CRUD statements (create, read, update and delete) incorporated into web applications, as well as in software architecture principles. Upon completion, students should be able to design and develop database driven web applications according to industry standards. (F)

WEB 289  Internet Technologies Project
Prerequisites: WEB 230 and WEB 250
This course provides an opportunity to complete a significant Web technologies project from the design phase through implementation with minimal instructor support. Emphasis is placed on project definition, documentation, installation, testing, presentation, and training. Upon completion, students should be able to complete an Internet project from the definition phase through implementation. (S)
Adult, Corporate and Continuing Education Division

Corporate and Continuing Education Department

The Corporate and Continuing Education Department at Caldwell Community College and Technical Institute seeks to provide relevant, high-quality instruction to meet the needs and interests of businesses, industries, agencies, and the community. The department is dedicated to serving all adults in their pursuit of employment skills, discovery of new and emerging technologies, and commitment to lifelong learning.

Mission

To provide accessible, quality educational instruction in occupational courses to individuals who seek to enhance their employment skills and to offer a variety of community service and self-supporting courses to individuals and to the community for personal enrichment.

Goals

- Assure quality instruction;
- Provide lifelong learning opportunities for students by providing access to additional educational pursuits;
- Partner with external organizations to respond to and encourage economic development and provide training to upgrade and/or retain the workforce;
- Respond to the immediate and future training needs of businesses, industries and agencies;
- Maintain successful student pass rates for first-time test takers on certification/licensure exams;
- Provide students with the skills and knowledge necessary to be successful in their chosen careers.
Occupational Training
“Workforce Preparedness for Today and Tomorrow”
“Hope, Opportunity and Jobs”

Occupational Training courses provide opportunities for citizens to prepare for new occupations or upgrade their knowledge and skill in their current employment. The opportunities are provided through single courses or a series of courses specifically designed for an occupation. The courses are offered in technical or vocational occupations and vary in length according to the complexity of the skill and the need of the employee or employer. Occupational courses can be developed upon request for a group or an employer and taught at a time and place convenient to those requesting instruction. Through these program areas, certification, recertification, and short-term skills training are provided.

A variety of courses are provided for the professional development of individuals who need additional skills, upgraded skills, or new skills in these areas. Although degrees are not awarded for completion of continuing education courses, certificates are provided and students may become certified or may be prepared for testing and certification, i.e. state certification or apprenticeship programs. Courses include, but are not limited to, the following:

Certification and Licensure

EPA Refrigerant Recovery/Recycling Certification
This 14-hour course is designed to aid technicians in preparing to take the CFC recovery/recycling certification examination. The certification examination will be offered as a part of this course and forwarded to the NC Board of Refrigeration Examiners.

Escort Driver Certification
This 8-hour course satisfies the requirements set by the NCDOT to certify oversized - overweight load escort vehicle drivers. Defensive driving, escort driver requirements, skills training, and an examination are components of the course. The NCDOT will issue a certificate for those completing the course and scoring 75% or higher on the end of course examination.

Escort Driver Re-Certification
This 4-hour course satisfies the requirements set by the NCDOT to re-certify oversized - overweight load escort vehicle drivers.

Motor Vehicle Independent Dealer License-Renewal
This 6-hour of training required for renewal of the motor vehicle independent dealer license is satisfied by successful completion of this course. A variety of topics are covered with a minimum of two hours of training being devoted to current Department of Motor Vehicles issues. Positive identification is required to receive credit for attending the course.
Nail Technologist (Manicurist)
This 316-hour course is designed to prepare students to become a licensed manicurist in North Carolina. Topics studied during the course include professional image, manicuring and pedicuring, bacteriology, sanitation and disinfecting, nail product chemistry, anatomy and physiology, OSHA safety regulations, disorders of the nail, acrylic nails, nail wraps, gel nails, silk wraps, nail art, nail enhancements, nail piercing, nail jewelry and nail appliqués. Upon successful completion of the course, the student will be eligible to sit for licensure through the North Carolina Board of Cosmetic Art Examiners.

Admission Requirements:
• High School Diploma/GED
• Must be 16-18 years of age – minor permission form required
• Social security card
• Government issued photo ID

Notary Public Education
This 6-hour Notary Public course provides individuals the opportunity to become or renew their standing as a Notary with the state of North Carolina. The course of study meets the state guidelines for instruction.

OBD Emission Control Inspection
This 8-hour course is designed to prepare auto technicians and service personnel to become OBD emission inspectors for motor vehicles. Course topics include regulations and test inspection procedures required by the NC DMV - Enforcement Selection - for OBD emission inspectors. Upon completion, a student should have knowledge of the rules, regulations and procedures for OBD emission inspections, is able to inspect a vehicle properly and is prepared to sit for the state certification exam.

Tanning Facility Operator
Effective January 1, 1993, the North Carolina Division of Radiation Protection requires any person operating a tanning bed in North Carolina to be at least 18 years of age and be certified. This eight-hour course instructs the student on the proper and safe way to operate a tanning bed.

Admission Requirements:
• Must be 18 years of age

Teacher Assistant Institute
This Teacher Assistant Institute meets the “No Child Left Behind” Act qualifications and is designed to meet the needs of current and prospective paraprofessionals. Note: Additional courses may be approved.

Requirements for the Teacher Assistant Institute are:
• WorkKeys assessments in Math, Reading, and Writing
• 96 hours of approved continuing education courses
Courses include, but are not limited to:
- Effective Teacher Training; 30 hours
- Approved online courses which begin every month.
  Note: Current list of courses is available at
  www.ed2go.com/cccti; 24 hours
- WorkKeys Prep and Assessment
  Available in JobLink Center

Vehicle Safety Inspection Course
This 8-hour course of instruction is offered for certification or renewal as a North Carolina Vehicle Safety Inspector. Individuals meeting the state requirements and successfully completing the end of course test will be designated as a North Carolina Safety Inspector.

Caldwell Community College and Technical Institute
Human Resources Development (HRD) Classes

Career Exploration 101 (HRD 7039)
This course is designed to help students assess their skills, interests and abilities and then apply those to possible career fields. Students will work through self assessments, career research, decision making skills, workplace skills and life planning.

Economic Budgeting (HRD 7502)
This class is designed to cover cost cutting tips for anyone’s budget, including household and family expenses.

Employment Connections (HRD 7040)
This class is designed for dislocated workers, the unemployed, those who want to get a new job, and those who want to start a new career. Topics covered include: job search, applications, building workplace relationships, and communicating effectively.

Success with Blackboard (HRD 7049)
This course is designed to introduce students to the world of virtual learning. Students will become familiar with the Blackboard platform and will learn how to sign-in to Blackboard, navigate and contribute to an online course. Students will also receive tips for success when taking an online course.

Computers for Work (HRD 7051)
This class is for those who have little or no experience using the computer. This class emphasizes the role of information technology in the world of work and enhances employability by teaching basic computer literacy skills.

Word for Work (Beginning Word) (HRD 7052)
Learn the basics of the most widely used word processing software program offered by Microsoft. This class emphasizes the use of Microsoft Word to create a resume and cover letter.
Excel for Work (Beginning Excel) (HRD 7053)
Learn the basics of the most widely used spreadsheet software program offered by Microsoft. This class emphasizes the use of Microsoft Excel to create a personal budget.

PowerPoint for Work (Beginning PowerPoint) (HRD 7054)
Learn the basics of the most popular presentation software offered by Microsoft. This class emphasizes the use of Microsoft PowerPoint to create a presentation that is appropriate for interviews.

Keyboarding for Work (HRD 7055)
Use the computer to learn the basic skills of touch-typing.

CRC Lab (HRD 7048)
This self-paced course allows students to work through modules covering such topics as; resume writing, job searching, applications and interview techniques. Students may also enhance their keyboarding skills and practice the job skills assessments (WorkKeys) through computer-based programs.

IT Institute
Caldwell Community College and Technical Institute, in partnership with Google Inc. and other local industries, has developed an Information Technology Institute that provides specialized training for entry-level information technology positions. The hands-on institute prepares students for a variety of jobs such as data technicians, technical assistants, etc. Those Completing the IT Institute will:
- Gain Knowledge of current trends and skills recommended for IT jobs
- Develop a resume in a format recognized by the industry
- Produce a portfolio of work to share with prospective employers
- Learn valuable "soft skills" required for the IT field, including communication, team building and self-management
- Opportunity to refresh IT skills for those with IT degrees

VMware Academy
CCC&TI is pleased to offer the VMware Academy for those interested in learning about Cloud Computing. Completion of the Academy modules prepares you for certification in this new and exciting Information Technology field.

VMware is by far the leader in virtualization that converts physical computers into an equivalent soft version, stored as a set of files. This allows access to your virtualized machine (VM) using any browser enabled workstation or thin client. The VMs use the resources of a Cluster, made up of multiple Servers that host the VMs. The collection of VMs hosted share the resources, Processing/Memory/Storage and Network, of the cluster. VMware’s vSphere tool used to manage clusters provides optimal utilization of the combined resources within this cloud.
Fire, Rescue, EMS

Basic Anatomy & Physiology
This course provides a basic study of the structure and function of the human body. Topics include a basic study of the body systems as well as an introduction to homeostasis, cells, tissues, nutrition, acid-base balance, and electrolytes. Upon completion, students are able to demonstrate a basic understanding of the fundamental principles of anatomy and physiology. This course is a prerequisite for EMS 3031, Emergency Medical Technician-Paramedic.

CPR
This course is designed to instruct students in cardiopulmonary resuscitation with an emphasis on prevention through changes in lifestyles. Successful completion of the course will result in certification from the American Heart Association.

EMT-Basic
This basic level course is required to become an Emergency Medical Technician and prepares students to take the NCOEMS or NR examination. Topics covered are: basic pre-hospital emergency care such as treatment for shock, bleeding, burns, poisonings, childbirth, pediatric emergencies, CPR, use of ambulance equipment and communications to the emergency department.

Prerequisites:
- Must be 18 years of age
- High School Diploma/GED, or successful completion of an exam assessing basic reading comprehension skills at a minimum at the tenth-grade level.

EMT-Intermediate
This course prepares the EMT to perform skills such as intravenous medication administration, inhalation medication administration, use of blind insertion airway devices and subcutaneous injection.

Prerequisites:
- Successful completion of the EMT Basic course
- High School Diploma/GED
- Placement test. A reading, math and English test is required for entrance into the course. Test is waived if the student shows proof of a post secondary degree.

EMT-Paramedic
This course prepares the EMT to perform skills such as endotracheal intubation, use of drugs for pain, and manual defibrillation.

Prerequisites:
- Successful completion of the EMT Basic course
- High School Diploma/GED
- Placement test. A reading, math and English test is required for entrance into the course. Test is waived if the student shows proof of a post secondary degree.

Co-Requisites:
- Successful completion of the Basic Anatomy & Physiology course.
Firefighter I / II

Firefighter I & II is a series of courses developed by the NC Department of Insurance, Fire and Rescue Commission. Successful completion of the courses required for each level will certify the firefighter at either Level I or II. Examples of courses offered in the series are Ladders, Fire Behavior, Forcible Entry, Fire Control and Water Supplies. Fee is waived for all students affiliated with a paid or volunteer fire department.

Prerequisites:
- Must be 18 prior to certification as a firefighter, but may begin training at the age of 16 (with a minor permission form)
- High School Diploma / GED prior to being certified.

First Aid

This course covers the basics of first aid, including what to look for prior to giving care to ensure patient safety. Skills learned include bleeding control, basic splinting and caring for shock and diabetic emergencies. First aid classes can be customized to meet individual and/or group needs.

Hazardous Materials

Hazardous Materials is a series of courses approved by the NC Department of Insurance. Hazardous Materials Level I certification requires completion of Hazardous Materials Awareness and Operations/Terrorism. A Hazardous Materials Level I certification is required for Firefighter Level II and Rescue Technician. The awareness course provides the responder with knowledge and skills needed for detecting and identifying hazardous materials and initiating the incident command system. The operations course trains the responder to understand and interpret the basic hazards of the chemical incident and to make proper risk assessment within the limitations of equipment, resources, training, and personnel on hand.

Prerequisites:
- Must be 18 prior to certification;
- High School Diploma / GED prior to certification.

Medical Responder

This entry-level course prepares students to meet state certification requirements and perform basic life support skills to assist Emergency Medical Technicians in the field. Skills developed are patient assessment, CPR, splinting and hemorrhage control.

Prerequisites:
- Must be 18 years of age
- High School Diploma / GED, or successful completion of an exam assessing basic reading comprehension skills at a minimum at the tenth-grade level.

Technical Rescuer

Technical Rescuer is a series of courses approved by the North Carolina Department of Insurance, Fire and Rescue Commission. Successful completion of the courses required will then certify a student as a TR. Examples of the courses offered in the series are TR-Rescue Operations, TR-Ropes and TR-VMR Vehicle Anatomy. Fee is waived for all students affiliated with a paid or volunteer rescue department.

Prerequisites:
- Must be 18 prior to certification as TR, but may begin training at the age of 16.
- High School Diploma / GED prior to certification
Health Services

Massage Therapy – Watauga Campus
This 600-hour five (5) course series is divided into three semesters and is designed to prepare the student for the certification examination required for the North Carolina licensure application process. Through class work and practical “hands-on” training, students obtain a solid foundation for professional practice as an entry level Massage Therapist. Upon successful completion of the course, the student is eligible to sit for the certification exam and apply for state licensure in North Carolina.

Semester I is offered beginning each fall semester. Modules include: Anatomy and Physiology I, Body Mechanics, Chair Massage, Communication, CPR, Documentation and Assessment, Hygiene and Standard Precautions, Indications and Contraindications, Kinesiology, NC Board meeting, NC Laws and Regulations, Special Populations, Student Clinics, Swedish Massage, Wellness and Self Care.

Semester II is offered beginning each spring semester. Modules include: Anatomy and Physiology II, Active Isolated Stretching, Business, Ethics, Four Handed Massage, Hydrotherapy, Joint Mobility, Oriental Theory, Orthopedic Assessment, Sports Massage and Student Clinics.

Semester III is offered beginning each summer semester. Modules include: Chakras, Deep Tissue Massage, Infant Massage, Certification Exam Prep, Pathophysiology, Prenatal Massage, Reflexology, Somatic Psychology, Spa Tour, Stone Massage and Student Clinics.

Note: Massage Therapy Semesters I, II, and III are sequenced courses. Students are admitted fall semester only.

Admission Requirements:
- Must be 18 years of age
- High School Diploma or GED
- No felony convictions
- Placement test. A reading test is required for entrance into the course. Test is waived if the student shows proof of a post secondary degree.
- Attend mandatory orientation session
- Interview with Massage Therapy Coordinator
- Completed admission packet

Massage Therapy – Caldwell Campus
This 600-hour five (5) course series is divided into two semesters and is designed to prepare the student for the certification examination required for the North Carolina licensure application process. Through class work and practical “hands-on” training, students obtain a solid foundation for professional practice as an entry level Massage Therapist. Upon successful completion of the course, the student is eligible to sit for the certification exam and apply for state licensure in North Carolina.
Semester I is offered beginning each fall semester. Modules include: Anatomy and Physiology I with Kinesiology, Body Mechanics, Chair Massage, Chakras, Communication, CPR, Documentation and Assessment, Ethics, Hydrotherapy, Hygiene and Standard Precautions, Indications and Contraindications, Infant Massage, NC Board meeting, NC Laws and Regulations, Reflexology, Somatic Psychology, Spa Tour, Special Populations, Student Clinics, Swedish Massage, Wellness and Self Care.

Semester II is offered beginning each spring semester. Modules include: Anatomy and Physiology II, Active Isolated Stretching, Business, Certification Exam Prep, Deep Tissue Massage, Four Handed Massage, Joint Mobility, Oriental Theory, Orthopedic Assessment, Pathophysiology, Prenatal Massage, Sports Massage, Stone Massage and Student Clinics.

Note: Massage Therapy Semesters I, II are sequenced courses. Students are admitted fall semester only.

Admission Requirements:
- Must be 18 years of age
- High School Diploma or GED
- No felony convictions
- Placement test. A reading test is required for entrance into the course. Test is waived if the student shows proof of a post secondary degree.
- Attend mandatory orientation session
- Interview with Massage Therapy Coordinator
- Completed admission packet

Medication Aide
This 29-hour course is designed to prepare non-licensed personnel with the skills required by the North Carolina Board of Nursing to practice as a Medication Aide in long-term care/skilled nursing facilities within the state of North Carolina.

Course Topics include:
- Safe and accurate administration of medications via the following routes: oral, eye, ear, nasal, topical, inhalant, nebulizer, vaginal, and rectal.
- Medical asepsis, hand hygiene, terminology, and legal implications. Students are not taught IM, IV, subcutaneous injections, or administration of meds via G-tubes.
Upon successful completion, students are eligible to sit for the state examination in order to become listed on the North Carolina Division of Health Service Regulation Medication Aide registry.

Admission Requirements:
- Must be 18 years of age
- High School Diploma or GED
- Current listing with the Division of Health Service Regulation as a Nurse Aide I with no substantiated findings of abuse, neglect or misappropriation of property
- Proof of completion of a minimum 75-hour, state approved Nurse Aide I course
- Social security card
- Government issued photo ID
Nurse Aide I
This 160-hour course prepares students to provide personal care and perform basic nursing skills for the elderly and other adults. Emphasis is placed upon the aging process. Topics covered include safety, restorative care, personal and functional diseases/disorders, communication, patient’s rights, nutrition management and elimination. In addition, CPR instruction, competency and certification are included in the course curriculum. Students are required to successfully complete all segments of the course including classroom, lab, and clinical hours in order to receive a certificate of course completion.

The student must also successfully pass a two-part written and skills state administered examination, in order to satisfy requirements imposed by the Division of Health Service Regulation to become listed as a Nurse Aide I in North Carolina. Upon successfully completing both course work and state exam, the student will then be listed with the Division of Health Service Regulation.

Admission Requirements:
- Reading placement test. Test is waived if the student shows proof of a post-secondary degree.
- Completion of a minor permission form for students 16 - 18 years of age
- Social security card
- Government issued photo ID
- Proof of childhood immunizations
- TB test
- Hepatitis B series or declination
- Malpractice insurance

Nurse Aide II
This 192-hour two-part course prepares students to perform more complex nursing skills than those required for Nurse Aide I. The first segment of the course includes 100 hours of classroom instruction with lab practice. Curriculum focus is on infection control, oropharyngeal suctioning, established tracheostomy care, observation and maintenance of oxygen therapy, enteral nutrition, wound care, urinary and bowel elimination. The second segment of the course involves 92 hours of clinical learning experience in various health care settings. Students will demonstrate proficiency of knowledge and skills learned through interactions with patients and residents while in the clinical setting. A comprehensive written and skills evaluation is administered to confirm student competency for completion of this two-part course. Students are then eligible to apply for listing as a Nurse Aide II in North Carolina through the Board of Nursing.

Admission Requirements:
- Current listing with the Division of Health Service Regulation as a Nurse Aide I with no substantiated findings of abuse, neglect or misappropriation of property
- Proof of completion of a minimum 75-hour, state approved Nurse Aide I course
- High School Diploma or GED
- Reading placement test. Test is waived if the student shows proof of a post-secondary degree.
- Social security card
- Government issued photo ID
- Proof of childhood immunizations
- TB test
- Hepatitis B series or declination

Nurse Aide Refresher
This 20-hour course is designed as a refresher for individuals whose Nurse Aide I listing has expired within the previous two years. It also allows out of state individuals the opportunity for initial listing in North Carolina.

Basic Nurse Aide I knowledge of personal care and nursing assistant skills are reviewed and students are allowed to practice in a lab setting during this course. The North Carolina Nurse Aide I Candidate Handbook is provided as the basis for this comprehensive review. Upon successful completion, the student will be better prepared to apply for and successfully pass the two-part written and skills examination required by North Carolina for relisting.

Admission Requirements:
- Proof of completion of a minimum 75-hour state approved Nurse Aide I course
- Proof of expired Nurse Aide I listing within the past two years
- Documented proof of any name change since initial/previous listing
- Social Security Card
- Government issued photo ID

Pharmacy Technician
This 108-hour course is designed to train individuals to work under the supervision of a pharmacist in a variety of settings. Coursework provides the student with basic essential knowledge and skills required to work as a technician in the pharmacy.

Material taught in this course includes: state and federal drug laws/regulations; drug forms and routes of administration; pharmaceutical abbreviations, measurements and calculations; reading and interpretation of prescriptions; drug classifications and commonly prescribed drugs; community and hospital pharmacy practices; compounding; medical safety and dispensing; preparation of sterile IV products; human relations.

Upon successful completion of the course, the student will be equipped with a basic understanding of pharmacy practice and be eligible to sit for the national certification examination administered by the Pharmacy Technician Certification Board in order to become credentialed as a certified pharmacy technician (CPhT).

Admission Requirements:
- Must be 18 years of age
- High School Diploma or GED
- Placement tests. Reading and math placement tests are required for entrance into the course. Tests are waived if the student shows proof of a post-secondary degree.
- Social security card
- Government issued photo ID
- Proof of childhood immunizations
Phlebotomy
This 164-hour two-part course prepares students to draw blood specimens from patients to be analyzed. Part I (120 class/lab hours) covers issues such as equipment maintenance, appropriate communication skills when working with patients, proper selection of venipuncture sites, the care of blood specimens, data entry, as well as clerical duties associated with record keeping. Part II (44 clinical hours) provides “hands on” experience with specimen collections in a clinical setting. Upon successful completion of parts I and II, the student will receive a certificate and will be prepared to sit for a national certification examination.

Admission requirements:
- Must be 18 years of age
- High School Diploma or GED
- Reading placement test. Test is waived if the student shows proof of a post-secondary degree.
- Social security card
- Government issued photo ID
- Proof of childhood immunizations
- Malpractice insurance

Vocational and Technical Services

Aviation Courses
This 48-hour Ground School for Pilots is designed for the prospective pilot. The 48-hour Instrument Rating School is designed for the advanced pilot. Both schools are offered for private pilot certification and pilot instrument rating.

BioWork
BioWork is a 128-hour introductory course bringing together the basics of manufacturing technology and the fundamentals of science—two essentials for competent, entry-level technicians in biotechnology, pharmaceutical, and chemical manufacturing. BioWork is intended for high school graduates, traditional manufacturing workers who have lost jobs, or anyone interested in a new line of work.

Cabinetmaking
This 96-hour course is designed to teach the fundamental techniques of cabinetmaking. Course topics include the proper selection of woods, building materials, tools, finishes, installation and labor costs. Participants will plan, blueprint, and build cabinets suitable for kitchen or bath.

Construction Trades
Courses are taught using a competency-based curriculum which allows students to work at their own pace as suits their needs and/or abilities. Currently, four disciplines are offered and include:
- Carpentry
- Electrical
- Plumbing
- Heating Ventilation and Air Conditioning
General Contractor's License Preparation
This 60-hour course prepares students for the General Contractor's licensing examination. Emphasis on blueprints, laws and regulations, employment security laws of NC, and workers' compensation. Upon successful completion of the course, students are eligible to sit for the NC Contractor's licensing examination.

National Electric Code License Preparation
This 60-hour course is designed to prepare the student for the Electrical Contractor's Licensing examination. Students examine all aspects of the electrical code and are assessed to evaluate competency during the class.

Plumbing Contractor's License Exam Preparation
This 36-hour review course is designed to prepare the student to sit for the NC Plumbing Contractor's exam. This course is a study of the plumbing code minimum requirements and principles involved in the designing of the plumbing system. Students must meet the State minimum experience requirement in order to take the state certification examination.

Upholstery Institute
These courses are designed to provide the knowledge and skills necessary to become an entry-level upholsterer. In addition, students will learn the soft skills needed for employment. Both courses include core skills training in upholstery manufacturing concepts, tools and safety and soft skills training in employability skills, communication, problem-solving and critical thinking.

Welding
These courses are designed to provide the beginner and professional the opportunity to gain or develop skills. MIG, TIG, stick, pipe, and basic welding offer the beginner or professional the opportunity to develop skills that may qualify them for promotion or certification.

Institute of Sustainable Technology

Green 101 - Small Business
This course addresses simple methods to reduce energy consumption, reduce waste and improve the bottom-line by becoming more environmentally conscious in the small business work environment. Students learn about aspects of “Going Green” they might not have considered before such as the importance of local sourcing and how it impacts small businesses and the environment. Course addresses areas to include self analysis of business in energy use or carbon footprint, water reduction methods, energy efficiency, green transportation, supporting local business and heritage, and how to effectively market your business once you adopt these sustainable methods. This course is offered online.

Sustainable Development
Students will study the development which ensures the well-being of the human race by understanding and integrating a triple bottom line of social development, economic
development, and environmental conservation and protection as the foundation of sustainability. Students will learn about the history, methods, vocabulary and real world practices associated with sustainable development.

Renewable Energy Overview
In this course, students learn about renewable energy sources such as photovoltaic, solar thermal, wind, micro-hydro, geothermal, and bio-fuels. Each class is geared toward a specific renewable energy source. The classes give students an in-depth look at how each of the energy sources can benefit students and/or their clients.

Emerging Trends in High Performance Building
This course is for those who want to learn more about high performance building. The course covers air and heat flow, proper insulating techniques, moisture control, and crawl spaces. Students also learn about testing methods using instruments such as the blower door, duct blaster, thermal cameras, and carbon monoxide testers. The students learn how to become a Certified Green builder and explore different building programs that fit any building trade.

Introduction to Building Science
This course provides students with the skills necessary to create an indoor environment that is healthy, comfortable, durable, and energy efficient. Students gain an understanding of the complex relationships between occupant, building, machines, and nature. Students acquire a basic understanding of how to achieve a better building envelope for either residential or commercial applications.

Water Management and Green Landscape Design
This course introduces students to ways to deal with water in a holistic fashion, taking into account the various sectors affecting water use, including political, economic, social, technological and environmental considerations. The course also deals with integrating these ideas with landscaping practices which promote native plant growth along with proper plant location management. Students identify simple ways to incorporate these sustainable practices at home or work that make a positive impact.

Building Performance Institute
The Building Performance Institute (BPI) is a nationally-recognized training program that enables students to become the type of builder necessary for the future. BPI works with building performance industry stakeholders to ensure the professional measure for excellence in building performance contracting is established and maintained by creating and regularly updating technical requirements through an open, transparent, consensus-based development process. Please visit www.bpi.org to learn more about BPI.

Building Operators Certificate (BOC)
Students are provided information and an understanding of energy efficiency guidelines for building operators (e.g., maintenance personnel at hospitals, schools, industrial sites or other large scale utility customers). This training and certification program for building operators is nationally recognized.
Advanced HVAC Technology
This course is designed to introduce the HVAC professional to the most current design and installation techniques, materials, and performance testing equipment; intended to enhance efficiency for any given building envelope.

Advanced Plumbing Technology
This course introduces the plumbing professional to the most current design and installation techniques, materials, and performance testing equipment; intended to enhance energy efficiency for any given building envelope. The course also introduces the plumbing professional to the world of hydronic heating and cooling systems especially with respect to solar thermal technology and high efficiency boiler systems.

Fundamentals of Photovoltaic Technology
This course provides an in-depth view into the technology, applications, and considerations associated with photovoltaic systems. Learn about site assessment, placement, installation, wiring, safety and other key aspects of PV technology. Students are prepared to sit for the NABCEP certification exam upon completion of this course.

Fundamentals of Solar Thermal Technology
This course provides an in-depth view into the technology, applications and considerations associated with solar thermal systems. Learn about one of the most affordable and cost effective renewable energy sources. Students who complete the course are prepared to sit for the NABCEP certification exam.

Advanced Electrical
This course introduces the electrical professional to the most current design and installation techniques, materials, and performance testing equipment; intended to enhance energy efficiency for any given building envelope. This course also introduces the electrical professional to lighting systems integrated with day lighting, the importance of a systematic understanding of ventilation, integrated heating and cooling systems especially with respect to solar thermal, photovoltaic, and high efficiency boiler and furnace systems.

Introduction to Sustainable Design
This course introduces concepts and principles related to sustainable site development and architectural design. Topics include low impact and sustainable site development, water efficiency, energy efficiency, material and resource management, indoor environmental quality, and return on investment. Upon completion, students are able to articulate and integrate sustainable design principles into site and architectural design.

Junk to Funk - Sculpting with Recycled Materials
This sculpture course shows students the artistic side of sustainability. Students learn how to communicate a message of sustainability through artistic expressions with varied media, many of which can be gathered as recyclable/reusable items.

Green Small Business Seminars
No cost Green Small Business Seminars include, but are not limited to:
• Tax Benefits for Going Green
• Green Certifications
• Renewable Energy: Is it Right for Me?
• Green Updates for Your Home.
• Want to Start Your Very Own Green Business?

The Institute of Sustainable Technology offers certificate pathways to provide students with the green skills necessary to succeed in their chosen career field. Students who successfully complete the courses in their pathway, will receive a certificate of completion. The overall goal of the institute is creating success, hope, opportunity, and jobs.

Build A Local Corporate Green Team!
Reduce Costs and Improve Environmental Impact with the Institute for Sustainable Technology at Caldwell Community College and Technical Institute.

Sustainable Systems for Business Executives
1 day Seminar
Suggested for The Entire Green Team
Start the team out right by learning to think as a team in terms of systems. Discard old linear thinking as you learn the fundamentals of green manufacturing and how to save money with the latest energy efficient resources and practices. Help your departments work together to make your company more sustainable.

Corporate Social Responsibility Practitioner IEMA Accredited Certification
2 day Seminar plus Action Plan project
Suggested for Human Resources, Marketing, and Auditors
Receive certification as a CSR Practitioner (Institute of Environmental Management and Assessment approved). Understand how to create and implement a valuable CSR action plan within your organization.

VMware Academy
2 Parts/24 hours each - Available online, at your business or on campus!
Suggested for Information Technology professionals or Network Administrators
Reduce energy costs by as much as 80 percent with cloud computing! Become a VMware Certified Professional.

Life-Cycle Assessment and Life-Cycle Design
6 hour webinar
Suggested for Marketing, Procurement, Buyers, Auditors, and Designers
Understand how to perform and utilize life-cycle assessments to improve the design of products for recyclability and reduced impact. Identify marketing edge and supply chain vulnerabilities.

Lean is Green
Project length depends on client needs
Suggested for Production Team Leaders and Plant Managers
Lower your production costs and retain high quality standards in your business by reducing waste by maximizing resource applications. Create a future state map to critically analyze your production methodology.
Energy Management Diploma Series
Meets 2 days per month for 9 months (offered via NC State University)
Suggested for Engineers, Facilities and Maintenance professionals
Complete an overview of energy management training and become a more valuable energy professional. Reduce costs and carbon footprint at your facility through better decisions and improved infrastructure. See http://coned.ncsu.edu/energymgt.html.

Building Operators Certification
Meets 1 day per month for 7 months
Suggested for Engineers, Facilities and Maintenance professionals
Receive certification in this nationally recognized, competency-based training program that transforms your organization into a more comfortable, energy-efficient and environmentally friendly workplace. Develop a site-specific action plan that focuses on cost-avoidance.

Renewable Energy Overview
1 Day Seminar
Suggested for Engineers, Facilities and Maintenance professionals
Focus on the various alternative energy technologies and receive information on current policies and financial models.

Green Building Diploma
Three week-long workshops within three years (offered via NC State University)
Suggested for Engineers, Facilities and Maintenance professionals
Get involved with the rapidly growing market for high-performance and sustainable buildings in both the commercial and residential sectors.

Online Courses
Corporate and Continuing Education currently has 200+ Ed2Go online courses available ranging from computer application to personal enrichment courses that begin every month. Registration is required one week prior to the beginning of the course. For details and complete course listing, visit www.ed2go.com/cccti.

Minimum Requirements
- Basic familiarity with computer use and operations
- Access to the Internet
- E-mail account
- Current antivirus software, updated frequently
- Netscape Navigator or Internet Explorer

Minimum Hardware Requirements:
PC
- 486/75MHz processor
- 16 MB memory
- 28.8K modem
- Windows 98 or above
- CD-ROM drive

MacIntosh
- 75MHz processor
- 16 MB Memory
- 28.8K modem
- Mac OS 7.5
- CD-ROM drive
Small Business Center
“The First Step to Your Business Success”

The Small Business Center is designed to meet the training needs of the area’s small business owners, managers, and other personnel, as well as entrepreneurs planning to start a small business. Training sessions are offered as workshops, seminars, and short-term courses. The Small Business Center also offers confidential business counseling at no cost and has a resource center with publications and other research materials to help with small business research and problem solving. To schedule an appointment with the Small Business Center, please call 828-726-2242.

General Interest

Basic Rider Safety Program
The Basic Rider Course (BRC) is designed for the student with little or no motorcycle experience, as well as for re-entry riders who have not ridden in a long time. Persons interested in attending a BRC must be 16 years of age or older. Students under the age of 18 must have the written consent of a parent or guardian as well as submit the school’s official minor permission form. Motorcycles are provided by the college, however the student is responsible for the protective gear required to participate in this course. Courses are held March through November each year.

Experienced Motorcycle Safety Course
Offered on demand, the Experienced Rider Course (ERC) is an 8 hour course designed for riders who have successfully completed the BRC or who possess basic riding skills and who would like to sharpen their current riding safety skills. It’s a great way to learn more about your riding abilities as well as the capabilities of your motorcycle. Students must possess a valid motorcycle license/endorsement. A motorcycle learner’s permit is also acceptable. It is recommended that you have at least 6 months or 3,000 miles riding experience. You must provide a street legal, properly licensed motorcycle for the range exercise and must show proof of insurance. Your bike must also pass a visual safety inspection at the beginning of the course. Passengers may participate. Protective gear is also required.

Advanced Motorcycle Safety Course
The Advanced Rider Course is a one-day course intended for motorcyclists who have completed the MSF Basic Rider Course or have a similar experience level.

The classroom segment focuses on the behavioral aspects of riding such as attitude and personal risk assessment, and includes discussions about braking proficiency, cornering techniques, traction management, and specific characteristics unique to sport bikes. The goal is to provide riders with a way to further develop personal riding strategies to minimize risk, with particular emphasis on the Search-Evaluate-Execute (SEESM) strategy used in all MSF curricula. A knowledge test is given at the end of the classroom portion.
The range session builds on these topics by providing riders the opportunity to develop and improve skills in braking, cornering and swerving. Included is a demonstration of the components of total stopping distance and practice in obstacle avoidance and evasive maneuvers.

**Alive at 25! Defensive Driving Course**
This course goes hand in hand with the defensive driving program; however, this young driver intervention program zeroes in on drivers between the ages of 16 and 24 – the group most likely to be involved in fatal collisions. This highly interactive four-hour course teaches young drivers how to take control of situations by taking responsibility for their own driving behavior.

**Defensive Driving Course**
Those charged with certain traffic violations, such as speeding, unsafe movement, etc., in any county that recognizes the NC Safety and Health Council program may have their charges reduced by the District Attorney by taking this 4-hour course. Violations will be reduced to improper equipment and points will not appear on your driver’s license or your insurance. The course is offered weekly.

**General Information**

Corporate and Continuing Education courses are offered at all college facilities in both Caldwell and Watauga Counties. Courses are also held off site.

**Admissions**
Admission is open to individuals 18 years of age or individuals whose regular high school class has graduated. A Minor Permission Form is required for those between 16 and 18 years of age.

**Fees**
Registration fees are required for occupational training and self supporting courses. Textbooks or special materials may be purchased from the campus bookstore. One occupational training course is fee exempt each semester for NC residents 65 years of age and older. Additional fees may be charged in certain courses. A campus access fee is assessed for every course held on campus.

**To Enroll**
Registration dates may be found in the front of the college catalog under Academic Calendar. Semester schedules are available on the college website www.ccti.edu or a printed copy is available upon request to the Corporate and Continuing Education Department. The college reserves the right to cancel any course when insufficient numbers are registered. Applicants are admitted on a first come, first served basis. Students may register any Tuesday from 8 am - 7 pm at the Corporate and Continuing Education Office on either campus and at the first class session if space is available. Parking permits are available at the time of registration. See Academic Calendar for current registration dates and holidays.
Refund Policy
Students registered for an occupational training course who officially withdraw prior to the first day of class will be eligible for a 100 percent refund, if requested. Students who officially withdraw on the first day of class or by the 10 percent date of the class will be eligible for a 75 percent refund, if requested. (Students enrolled in a multi-entry/multi-exit class who officially withdraw on the first day of class or within 10 calendar days of the first class meeting are eligible for a 75 percent refund, if requested). Students registered for an occupational training course that is canceled for any reason by the vice-president will automatically be issued a 100 percent refund. To receive a refund, a student must complete and sign a continuing education drop/refund form and have the vice-president sign for the course(s) being dropped.

Course Repetition Policy - Occupational Extension
No occupational extension training course may be taken more than twice within a five-year period unless the student pays full cost of the course. The occupational extension repeat policy does not apply to students taking course(s) for certification, licensure, or recertification.

Attendance/Grading System
A course syllabus will be distributed by the instructor to include attendance policies at the beginning of each course. Students will be held responsible for understanding all attendance and classroom rules issued by the instructor. Numerical and/or letter grades will be given for occupational training classes requiring certification. All other continuing education grades will be recorded as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
</tr>
<tr>
<td>B</td>
<td>Above Average</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
</tr>
<tr>
<td>D</td>
<td>Below Average</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory</td>
</tr>
<tr>
<td>U</td>
<td>Unsatisfactory</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
</tr>
</tbody>
</table>

Student Records/Transcripts
Student records and transcripts can be reviewed by students for accuracy and may be picked up in person by presenting a signed request in the Student Services office. Certificates are given for the satisfactory completion of some occupational training courses. CCC& TI adheres to the Family Privacy Rights Act and assures all students that their records will remain confidential. The college has the right to release information which may include the following:

- student's name
- date of birth
- address
- telephone number
- dates of attendance
Rules and Regulations
All the rules and regulations of the college under "Student Conduct and Responsibilities" will be adhered to by Corporate and Continuing Education students.

J.E. Broyhill Civic Center

The J.E. Broyhill Civic Center of CCC&TI is located in Lenoir, N.C., two miles north of the Caldwell campus in Hudson on U.S. 321. The Broyhill Center features a 1,000 seat state-of-the-art proscenium performance theatre and up to eight meeting rooms with banquet seating for up to 300.

Scheduling and use of the Broyhill Civic Center is on a first come, first served basis. Scheduling must be submitted through R25 WebViewer via the intranet. College events are permitted to use the facility free of rental charge. However, there may be charges for such items as linens, cleaning and optional equipment.

The Broyhill Civic Center offers discount tickets to all employees and students of CCC&TI (college ID must be presented). Discounts are based on events and availability. We may not be able to offer discounts to events that are not produced by J.E. Broyhill Civic Center or CCC&TI.
Basic Skills Department

To meet the needs of adults who do not have a high school credential, and those who are unemployed and underemployed, the Basic Skills Department offers classes in over 15 locations each semester. These classes in both Caldwell and Watauga counties serve students wishing to improve their reading, writing or math skills, earn a GED or Adult High School Diploma, learn to speak English, improve life skills, or learn a specific academic skill for their job. All Basic Skills classes are tuition free.

Literacy

**ABE** – Adult Basic Education classes are offered for people who would like help learning basic speaking, reading, and writing skills. Instruction is also provided in math, science, and social studies. Books and materials which have been especially prepared for adult learners are provided. Students can progress at an individual pace and/or enroll in classes that address specific topics. Instructors are available to assist students in this pre-high school program. Volunteer tutors are also available to assist as needed. Orientation and placement testing are offered weekly.

**GED or General Educational Development** – The GED Diploma program is designed to give adults who have less than a twelfth-grade education an opportunity to earn a high school equivalency certificate. Classes are offered on the Caldwell and Watauga campuses, and throughout the community. Individualized instruction is provided in an adult-centered atmosphere. To complete the GED, passing scores are required on five tests: reading, science, math, social studies, and writing. Persons wanting to earn a GED may enroll and complete the program at any time during the semester. Orientation and placement testing are offered weekly.

**GED Online** – Adults who have reliable access to the internet can choose to enroll in the GED online program to prepare for the tests. Applicants must meet a reading level
requirement and have dependable computer equipment that meets the standard for the online program. After completing the regular Basic Skills Orientation and Assessment class, students qualifying for GED online must attend a brief GED online orientation in order to get the login information and guidelines for the program.

**Enrollment Procedure for ABE/GED Program**

The first step in the enrollment process is to register for and attend a Basic Skills Orientation and Assessment class. Orientation sessions are offered weekly at the Basic Skills Center in Hudson and at the Watauga Basic Skills Center in Boone (Minor applicants, 18 years old and under, must bring a completed Minor Permission Form).

**ESL – English as a Second Language** classes are designed for non-native students who need to learn to speak, read, or write English. Classes are held on campus, in the community, and sometimes in the workplace. Classes to help students prepare for the United States Citizenship exam are also offered. Special curricula and instructional techniques are used to meet the needs of this population.

**Family Literacy** – The Family Resource Center and Whitnel Elementary School offer Caldwell Even Start Family Literacy classes. Adults in need of basic skills instruction may attend class with their children ages six weeks to seven years. These classes provide comprehensive and intensive services to families. Components of the program include Adult Basic Education/GED, Parent Education, Parent/Child Together Time and Early Childhood Education. Local elementary schools provide “study clubs” for parents improving their English or working toward a GED. Pre-school and school aged children may attend these free classes.

**Compensatory Education** – This is a community college program is designed for adults with mental retardation or traumatic brain injury. Its goals are to help the individuals acquire basic skills and abilities needed to become more independent and self directed and to meet and manage community, social, work, and personal adult responsibilities. Classes meet in community rehabilitation programs, group homes, community sites and on campus.

**Adult High School Diploma**

**Program Description**

The Adult High School Program is for anyone who wants to complete his/her high school education and earn a diploma. The AHS classes are offered at Caldwell Community College and Technical Institute in Hudson and Boone. Classes are free and textbooks are provided free of charge for use in the classroom.

Students may choose to enroll in morning or evening classes, or both. Core subject classes meet twice a week for three hours and elective classes meet once a week for three hours. Classes are structured for students to earn one unit of credit for each class completed. Most classes can be completed in eight weeks.
Graduation Requirements
A total of 20 units must be completed for graduation. Applicants may receive transfer credits for courses previously completed in public, private, or home school. If there are no credits to transfer, a student may earn all 20 units with the AHS program. The Adult High School graduation requirements are:
• A minimum score of 9.0 on the Reading, Language Skills, and Math Placement tests.
• Passing scores on the NC Competency Test
• English 4 units
• Mathematics 3 units (to include Algebra I)
• Science 3 units (to include Biology and Physical Science)
• Social Studies 3 units (to include Government/Economics, US History, and a World Studies)
• Health or PE 1 unit
• Electives 6 units
20 units (including passing scores on the NC Competency Tests)

Enrollment Procedure
The first step in the enrollment process is to attend orientation and placement testing. Orientation sessions are offered weekly at the Basic Skills Center in Hudson and at the Watauga Basic Skills Center in Boone (Minor applicants, 18 years old and under, must bring the Minor Permission Form). A score of 9.0 or above is required to be eligible for AHS class registration. Review classes are available for those who would like to retest. Applicants should also have an official transcript sent from their last high school.

New Student Registration
The New Student Registration takes place every eight weeks. Attendance at Adult High School registration is a requirement for enrollment. Applicants will be assigned a date to attend the registration session after completing orientation and placement testing. At registration, the applicant will receive important information about the program and will register for classes.
Absher, James
*Housekeeper, Environmental Services*

Alexander, Anna
*Instructor, Accounting*
B.S., University of North Carolina at Chapel Hill; M.B.A., Appalachian State University, CPA and CMA

Allbritton, Linda Devlin
*Instructor, Early Childhood Program-Watauga*
B.S., Florida Atlantic University; M.S.A., Appalachian State University

Allen, Paul
*Instructor, Culinary Arts*
A.A.S., Cape Fear Community College

Anderson, Joseph Matthew
*Transition Advisor, West Caldwell High School; Athletic Director; Head Coach, Men’s Basketball*
B.A., Mars Hill College

Annas, Rosanne
*Director, Radiography Program; Instructor*
B.S., University of Saint Francis; M.A.Ed., Western Carolina University

Annas, Shirley
*Housekeeper, Environmental Services*

Arney, Christine
*Coordinator, Compensatory Education; Instructor*
B.S., Western Carolina University

Aultman, Laura Marie
*Instructor, Art*
B.A., University of North Carolina at Asheville; M.F.A., University of Florida

Badr, Mohamed Elhefni
*Interim Director, Automotive Systems Technology; Instructor*
ASE Certified Master Technician
B.A., State University of New York, Stony Brook; M.B.A., Hofstra University

Annas, Camille
*Director, Academic Support Center*
A.A., Caldwell Community College and Technical Institute; B.A., Lenoir-Rhyne College; M.A., Appalachian State University

Bailey, Jan
*Librarian-Watauga Campus*
B.A., Lincoln Memorial University; M.A., State University of West Georgia; M.I.S., Florida State University

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Barber, Mark  
*Department Chair, Industrial and Public Services*  
A.A.S., Community College of the Air Force; B.S., University of South Carolina at Coastal Carolina; M.A., Webster University; Ed.D., Appalachian State University

Benson, Patrick Wayne  
*Coordinator, Massage Therapy; Instructor*  
A.A.S., Caldwell Community College and Technical Institute

Barlowe, Gloria  
*Technician, Computer Information Services*  
A.A.S., Caldwell Community College and Technical Institute

Bentley, Jeff  
*Director*  
J.E. Broyhill Civic Center  
A.A.S., Western Piedmont Community College

Barrier, Teddie  
*Instructor, Networking Technology*  
A.A.S., Catawba Valley Community College, B.S. Gardner-Webb University, M.A., Appalachian State University

Benton, Laura  
*Coordinator, Writing Center*  
B.A., M.A., East Carolina University

Bassinger, Donnie  
*Vice President, Facility Services*  
B.S., Catawba College; M.A. and Additional Studies, Appalachian State University

Biddix, Andrea Nekol  
*Accountant*  
A.A., Caldwell Community College and Technical Institute; B.S., Appalachian State University; B.S., Gardner-Webb University

Bean, Donna  
*Department Chair, Adult, Corporate and Continuing Education*  
A.A.S., Caldwell Community College and Technical Institute; B.S., Gardner-Webb University; M.S., Appalachian State University

Boggs, Leigh-Anne  
*Instructor, Physical Therapist Assistant Program*  
A.A., Southwestern Community College; B.A., Lenoir-Rhyne College; M.A.Ed., Western Carolina University

Benoit, Kate Rebecca  
*Institutional Researcher*  
B.A., State University of New York at Cortland; M.A., University of North Texas

Boham, Kenneth A.  
*President*  
B.S., East Carolina University; M.Ed., North Carolina State University; Ed.D., North Carolina State University
Bolick, Sherry Wilson  
**Professional Development Coordinator, Early Childhood Education Program**  
A.A.S., Caldwell Community College and Technical Institute  
B.S., Gardner-Webb University  
M.A., Lenoir-Rhyne College

Bolt, Cheryl D.  
**Program Assistant, J.E. Broyhill Civic Center**  
A.A.S., Caldwell Community College and Technical Institute;  
B.S., Gardner-Webb University

Boone, Rebecca  
**Counselor, TRIO/SSS**  
B.A., University of North Carolina at Chapel Hill; M.A., Appalachian State University

Bowers, Tony  
**Housekeeper, Environmental Services**

Bowman, Amy  
**Assistant, Public Information**  
B.A., Mars Hill College

Bradshaw, Michael  
**Department Chair, Math and Natural Sciences**  
B.S., Appalachian State University; M.A., Appalachian State University; additional studies, University of North Carolina at Greensboro

Braswell, Timothy  
**Courier**  
Truck Driver Training Certificate, Caldwell Community College and Technical Institute

Brazier, Natasha Saron  
**Technician, Financial Aid**  
A.A., Caldwell Community College and Technical Institute;  
Additional Studies, Western Piedmont Community College, Gardner-Webb University

Brinkley, Patricia  
**Admissions Representative**  
B.A., University of North Carolina at Charlotte

Brookshire, Joan  
**Library Technical Assistant**  
Studies at Caldwell Community College and Technical Institute

Brown, Charles Shannon  
**Director, Counseling and Advisement Services**  
B.F.A., University of North Carolina at Greensboro; M.A., Hahnemann University Graduate School

Brown, Cheryl  
**Program Assistant, Corporate and Continuing Education Center - Watauga Continuing Education Center**  
B.M.E., Mars Hill College
Brown, Shari  
*Coordinator, Adult Education; Instructor*  
B.S., University of North Carolina at Greensboro; M.A., Appalachian State University

Bryant, Christina  
*Assistant to the President*  
A.A.S. and additional studies, Caldwell Community College and Technical Institute

Bryant, Jonathan C.  
*Specialist, TRIO/Educational Talent Search*  
A.A., Caldwell Community College and Technical Institute  
B.S., Appalachian State University

Calloway, Donna  
*Instructor, Cosmetology*  
Diploma, Macon University of Cosmetology; Teacher’s Certificate, NC State Board of Cosmetic Art; A.A.S., Caldwell Community College and Technical Institute; B.S., Appalachian State University

Carswell, Kevin Robert  
*Facility Specialist*

Chapman, Jessica Ayer  
*Instructor, English*  
B.A., UNC-Wilmington  
M.A., Appalachian State University

Chapman, Pamela  
*Instructor, Nursing*  
Diploma in Nursing, Durham Technical Institute; A.A.S., Caldwell Community College and Technical Institute; B.S.N., Winston-Salem University; M.S.N., Gardner-Webb University

Chester, DeAnna  
*Instructor, Communications - Watauga*  
B.A., Pfeiffer College; M.A., University of North Carolina at Greensboro; additional studies, Richmond College

Chester, Roger Garland  
*Instructor, Truck Driver Training Program*

Christie, Marla  
*Director, College Foundation*  
B.A., Mars Hill College; additional studies, UNC-Asheville

Chapman, Heather Winkler  
*Instructor, English*  
B.A., Lenoir-Rhyne College  
M.A., UNC-Charlotte

Church, Donna  
*Executive Assistant to the President*  
A.A.S., Caldwell Community College and Technical Institute, Professional Associate, PSP Certificate, NCAEOP; additional studies, Gardner-Webb University
Church, Kathy
*Office Manager, Basic Skills*
A.A.S., Caldwell Community College and Technical Institute; NCAEOP, Professional Associate Certificate

Clark, Janice
*Technician; Computer Information Services*
A.A.S., Caldwell Community College and Technical Institute; B.S., East Carolina University

Clement, Debra
*Administrative Assistant, Finance and Administration*
A.A.S., Caldwell Community College & Technical Institute

Clement, Rita
*Library Media Technical Assistant, Processing*
A.A.S., Caldwell Community College and Technical Institute

Cline, Dan
*Administrator, Evening/Weekend Programs*
A.A., Wingate Jr. College; B.A., Lenoir-Rhyne College; M.A., Appalachian State University

Cline, Diane
*Administrative Assistant, Financial Aid*
A.A.S., Caldwell Community College and Technical Institute

Cloer, Brenda
*Housekeeper, Environmental Services*

Cloer, Kathy
*Instructor, History*
B.A., University of North Carolina at Chapel Hill; M.A., Appalachian State University; additional studies, University of Copenhagen

Cockerham, Yvonne Turner
*Instructor, Office Administration – Watauga*
B.S., Gardner-Webb University; M.B.A., Campbell University

Connor, Matthew
*OE Instructor, BAS Recruiter, College Connections Host*
A.A., Montreat College; B.A., Oral Roberts University; M.Div., Asbury Theological Seminary

Cook III, Aaron
*Coordinator, Science Programs; Instructor*
A.S., Western Piedmont Community College; B.S., Appalachian State University; M.A., Appalachian State University

Cooke, Marischa
*Department Chair, Learning Resource Center*
B.A., Lenoir-Rhyne College; M.S.I.S.; University of North Carolina; additional studies, Duke University
Cornell, Brenda
Administrative Assistant, Student Services - Watauga
A.A.S., Caldwell Community College and Technical Institute

Crump, Tracy
Instructor, Early Childhood Education Program
B.S., M.S., Louisiana Tech University; Ed.S., McNeese State University; Ed.D., Western Carolina University

Cornett, Robin
Clinical Coordinator, Radiography Program; Instructor
A.A., Wilkes Community College; B.S., Gardner-Webb University; M.A.Ed., Western Carolina University

Curtis, Trina
Technician, College Stores
A.A.S., Caldwell Community College & Technical Institute

Cortner, Amy
Instructor, English
B.S., East Tennessee State University; M.A., East Tennessee State University

Darling, Melissa
Director, ESL
B.A., Lenoir-Rhyne College; M.A., Appalachian State University

Council, Jimmy
Director, Nuclear Medicine Program; Instructor
A.A.S., Caldwell Community College and Technical Institute; B.S., M.B.A., California College for Health Sciences

Davenport, Manifred
Director, Environmental Services

Crouch, Kay
Director, Music Program; Instructor
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