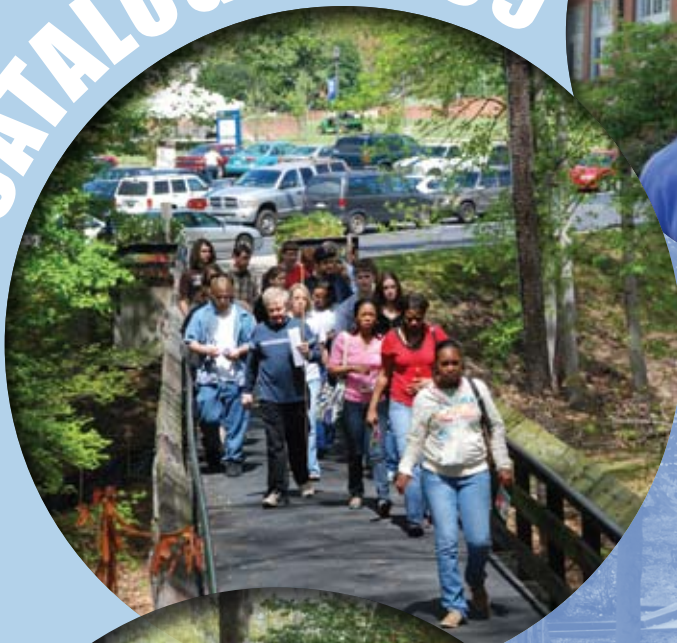CATALOG '08-'09

DCC

Danville Community College

still ↑...the place to BE!

MESSAGE FROM THE PRESIDENT

Welcome!

We believe that Danville Community College will make a difference in your life. First, when you attend DCC, you become part of an institution where the faculty and staff believe in celebrating student achievement and success. Our students run the gamut of age and background - from students just out of high school to working adults who are seeking to update their workforce skills. You are never alone; you are never a number. You are an individual who will receive personalized attention and assistance from our outstanding faculty and staff.

Second, Danville Community College offers a comprehensive number of high quality programs for virtually every student who has the ability to benefit. You may select either programs of study for transfer to a four-year college or university or a full range of occupational-technical degree, diploma, or certificate programs that lead directly to employment upon graduation from DCC. In addition, many students pursue specialized training through the College's premiere workforce services programs.

Third, we are committed to ensuring that the citizens of the DCC service region; i.e., Danville, Pittsylvania County and Halifax County, have complete access to the many programs and services the College offers - including a comprehensive package of financial aid options. Moreover, we have expanded our distance learning capability to enhance the availability of the aforementioned programs and services.

The 2008-2009 DCC Catalog is designed to provide timely information about Danville Community College; however, the catalog cannot answer all of your questions. We encourage you to visit our beautiful campus or check out our web site (www.dcc.vccs.edu) and see why DCC offers a world of opportunity for you.
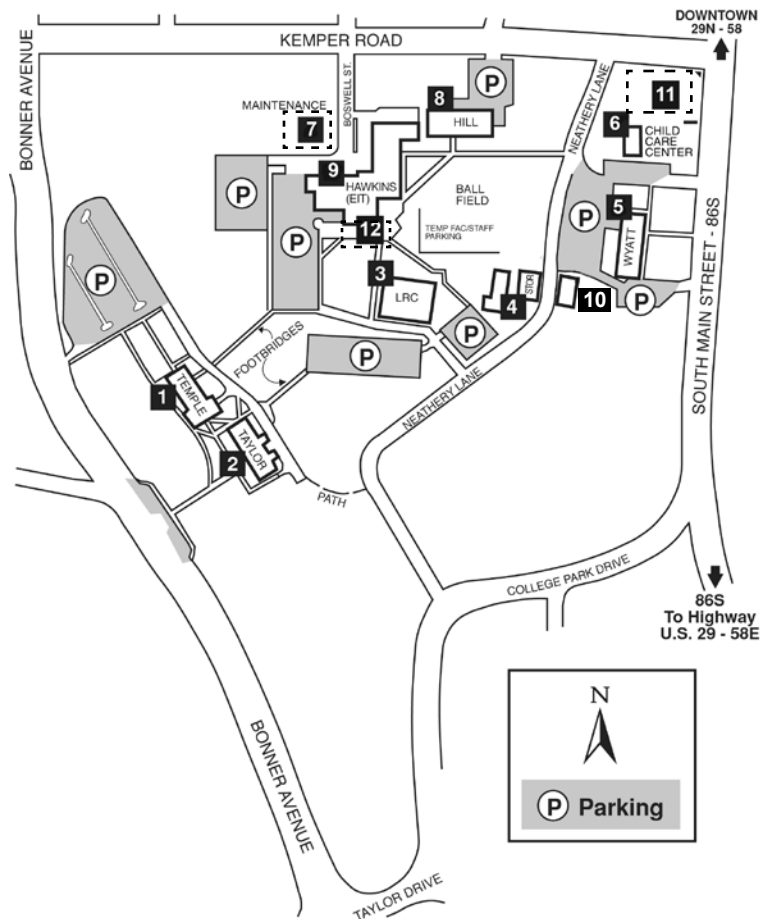
We are here to help you achieve your dream!

Very sincerely,

B. Carlyle Ramsey
President
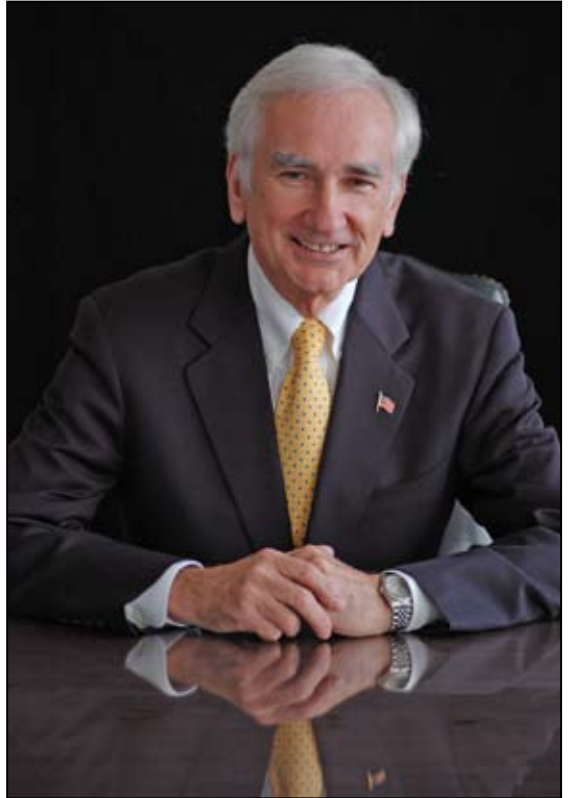
CAMPUS/AREA MAPS

Key to campus map

1. Temple Building
2. Taylor Building
3. Whittington W. Clement Learning Resources Center
4. Storage Building
5. Wyatt Building
6. Carrington Child Development Center
7. Maintenance/Receiving (Fall 2008)
8. Hill Building
9. Charles R. Hawkins Engineering & Industrial Technologies Building
10. Womack Building
11. Health Sciences Building (Fall 2009)
12. Student Center (Fall 2009)

★ **Main Campus**
   1008 South Main Street
▲ **RCATT**
   121 Slayton Ave.
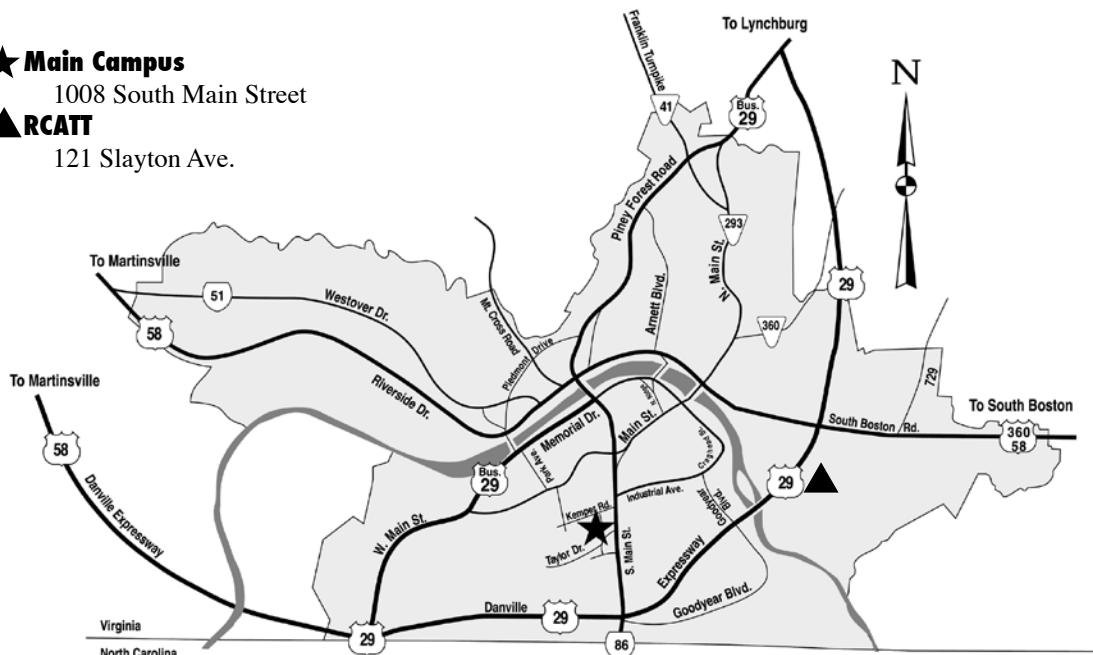
LOCATIONS/OFFICE HOURS

Danville Community College
1008 South Main Street
Danville, VA 24541-4004
434.797.2222 • Toll Free: 1.800.560.4291
TTY: 434.797.8542 • FAX: 434.797.8541
Email: info@dcc.vccs.edu
www.dcc.vccs.edu

Administrative Office Hours
8 a.m. to 5 p.m., Monday through Friday
(Note: Hours may be extended during peak registration periods.)

Whittington W. Clement
Learning Resources Center Hours
(During Full-Session Classes)
Monday - Thursday: 8 a.m. to 9 p.m.
Friday: 7:30 a.m. to 5 p.m.
Saturday: 10 a.m. to 4 p.m.
(Learning Assistance Center only)
Sunday: 1 to 5 p.m.

Off-Campus Locations

Camp Grove
337 Bradley Road
Danville, VA 24541
434.773.3001

Cascade
3561 Huntington Trail
Cascade, VA 24069
434.797.8412

Moffett Memorial Baptist Church
1026 N. Main St.
Danville, VA 24541
434.793.1722

Regional Center for Advanced Technology & Training (RCATT)
121 Slayton Avenue
Danville, VA 24541
434.797.6437

Riddle Center
(located in the Gretna Public Library)
207-B Coffey Street
Gretna, VA 24557
434.656.8000

Seeland Crossing
135 Jones Crossing
Danville, VA 24541
434.792.5544

Southern Virginia Higher Education Center
P.O. Box 739
820 Bruce Street
South Boston, VA 24592
434.572.5456 or 434.572.5451

TABLE OF CONTENTS

PROGRAMS OF STUDY

Your Community College Offers the Following Programs of Study

Associate of Arts and Science Degree (College Transfer – AA&S)
Associate of Science Degree (College Transfer – AS)
Associate of Applied Science Degree (AAS)
Diploma (D)
Certificate (C)

Note: An application for admission is available online at www.dcc.vccs.edu, or by contacting the Admissions Office at 434.797.8467.
*Fall 2009

2008-2009 ACADEMIC CALENDAR

FALL SEMESTER 2008

Advising by Appointment/Registration for Fall Semester 2008 .... June 12-August 20
Payment of Tuition & Add/Drops (8:00 a.m. - 4:30 p.m.)
   (Day & Evening Classes) ....July 7-August 20
Faculty Planning and Preparation Days ....August 18-20
Classes Begin...August 21
Late Registration ....August 22, 25-28
Last Day for New Registration..August 28
*Swaps/Drops Only (8:00 a.m. - 4:30 p.m.)..August 29, September 2
   *Swaps cannot be processed without the approval of the instructor
Holiday (College closed) ....September 1
Last Day to Withdraw With Full Tuition Refund ....September 8
Faculty Planning and Preparation Day...October 14
Mid-term grades posted ....October 15
Last Day to Withdraw Without Mitigating
   Circumstances (W Grade Issued)..October 24
Institutional Effectiveness Day ....November 5
Advising by Appointment/Registration for Spring Semester 2009 ....November 10-
                                                         December 10, January 5-9
Faculty Research Day ....November 26
Holidays (College Closed)..November 27-28
Classes End ....December 10
Exams...December 11-12, 15-17
Faculty Planning and Preparation Days ....December 18-19, 22-23

SPRING SEMESTER 2009

Advising by Appointment/Registration for
   Spring Semester 2009...November 10-December 10,
                                                         January 5-9
Registration/Payment of Tuition & Add/Drops (8:00 a.m. - 4:30 p.m.)
   (Day & Evening Classes) ....November 10-December 22,
                                                         January 5-9
Faculty Research Days ....January 2
Faculty Planning and Preparation Day ....January 5-9
Classes Begin...January 12
Late Registration ....January 12-16
Last Day for New Registration..January 16
Holiday (College Closed)..January 19
*Swaps/Drops Only ....January 20-21
   *Swaps cannot be processed without the approval of the instructor
Last Day to Withdraw With Full Tuition Refund ....January 29
Faculty Research Day ....March 2
Spring Break ....March 2-6
Mid-term Grades posted ....March 12
Last Day to Withdraw Without Mitigating
   Circumstances (W Grade Issued) ....March 20
Institutional Effectiveness Day ....April 2
Advising by Appointment/Registration for Summer Session ....April 6-May 4
Classes End ....May 4
Exams ....May 5-8, 11
Faculty Planning and Preparation Days ....May 12-15
Graduation ....May 15

SUMMER SESSION 2009

Advising by Appointment/Registration for Summer Session ....April 6-May 4
Registration/Payment of Tuition
  (8:00 a.m. - 4:30 p.m.) (Day & Evening Classes) ....April 6-May 22
Advising by Appointment/Registration
  for Fall Semester 2009 ....June 8-July 27

FULL SESSION:

Classes Begin ....May 26
Late Registration ....May 26-29, June 1
*Swaps/Drops Only ....June 2
   *Swaps cannot be processed without the approval of the instructor
Last Day to Withdraw With Full Tuition Refund ....June 3
Holiday (College Closed) ....July 3
Last Day to Withdraw Without Mitigating
   Circumstances (W Grade Issued) ....July 6
Classes End ....July 27

FIRST SESSION:

Classes Begin ....May 26
Late Registration ....May 26-29
Last Day to Withdraw With Full Tuition Refund ....June 1
Last Day to Withdraw Without Mitigating
   Circumstances (W Grade Issued) ....June 12
Classes End ....June 24

SECOND SESSION:

Classes Begin ....June 25
Late Registration ....June 25-27, 29
Last Day to Withdraw With Full Tuition Refund ....July 1
Holiday (College Closed) ....July 3
Last Day to Withdraw Without Mitigating
   Circumstances (W Grade Issued) ....July 10
Classes End ....July 27

GENERAL INFORMATION

The College

Danville Community College is a two-year institution of higher education under the statewide Virginia Community College System. DCC's service area includes the City of Danville, Pittsylvania County, and Halifax County. The College, its employees, and students are governed by the policies established by the State Board for Community Colleges with the support and advice of the Danville Community College Board.

Danville Community College does not discriminate on the basis of race, color, age, national origin, sex, or disability in its programs and activities, admissions, and employment. Inquiries related to the college's nondiscrimination policies should be directed to: Affirmative Action Officer, Danville Community College, 1008 S. Main St., Danville, VA 24541, 434.797-8458; toll free: 800.560.4291, ext. 8458, or TTY: 434.797.8542.

Danville Community College values the multi-cultural diversity of its students, faculty, and staff. We are committed to creating and nurturing a campus environment that both welcomes and empowers all individuals. We recognize cultural differences of background, experience, and national origin, and we seek to promote a genuine understanding and appreciation for these differences. We also seek to recognize and promote the common bonds of humanity, which cross the boundaries of cultural difference.

The College has an open admissions policy. You can enroll if you have a high school diploma or the equivalent, or have reached the age of 18 and can benefit from a program of study. In order to help you succeed, you may, however, be required to participate in developmental studies before beginning coursework in the particular field of study you have chosen.

Disability Services

Danville Community College believes in promoting an atmosphere free of inequity and partiality in which all students have access to educational opportunity. DCC believes in creating an inclusive and welcoming community for all students. Danville Community College is committed to ensuring that all qualified students with disabilities have the opportunity to take part in educational programs and services on an equal basis. The College is committed to removing architectural barriers, but also strives to ensure that students with disabilities receive access to education and opportunities in this academic community. DCC facilitates access to reasonable accommodations for students with disabilities in accordance with their documented disabilities.

In order that the College may assess each student's needs and plan most effectively for his or her academic experience, the student should contact the Counseling Office at 434.797.8460.

Location

The 86-acre campus is located approximately two miles from downtown Danville on South Main Street (Route 86). Please refer to campus and area maps on page 2.

History

Danville Community College developed from two institutions, Danville Technical Institute and the Danville Division of Virginia Polytechnic Institute. Danville Technical Institute opened in 1936 as Danville Textile School, becoming Danville Technical Institute in 1941. The Danville Division of Virginia Polytechnic Institute first began as an engineering division in 1946, and was later expanded to include the first two years of coursework for all engineering, business administration, liberal arts, and science majors.

Beginning in the summer of 1966, all programs taught by Danville Technical Institute were brought under the Virginia Department of Community Colleges. Effective July 1, 1968, the Danville Division of Virginia Polytechnic Institute merged with the existing community college to provide more comprehensive programming.

Vision Statement

Danville Community College will be the college of choice in our region for exemplary educational programs and services.

Mission Statement

Danville Community College is committed to providing quality comprehensive higher education and workforce programs and services to promote student success and to enhance business and community development.

Programs

Danville Community College is a comprehensive institution of higher education offering programs of instruction extending two years beyond the high school level. These programs include:

1. **Occupational-Technical Education:** The occupational and technical education programs are designed to meet the increasing demand for technicians, semiprofessional workers, and skilled crafts persons for employment in industry, business, professions, and government. The programs are planned primarily to meet the needs for workers in the region being served by the College.

2. **University Parallel-College Transfer Education:** The university parallel-college transfer program includes college freshman and sophomore courses in arts and sciences and pre-professional programs meeting standards acceptable for transfer to baccalaureate degree programs in four-year colleges and universities.

3. **General Education:** General education is that portion of the collegiate experience that addresses the knowledge, skills, attitudes, and values characteristic of educated persons. It is unbounded by disciplines and honors the connections among bodies of knowledge. The following eight elements embody the essence of general education: communication; learning skills; critical thinking; interpersonal skills and human relations; computational and computer skills; understanding culture and society; understanding science and technology; and wellness. Locally developed general education objectives covering the 16 general education elements shall be included in the catalog of each institution (Virginia Community College System Policy Manual). See General Education Objectives on page 11.

4. **Continuing Adult Education:** These programs are offered to enable the adults in the region to continue their learning experiences. This work includes both degree credit and non-degree credit work offered on- and off-campus.

5. **Special Training Program:** Special training is provided where specific job opportunities are available for new or expanding industries. This special training is coordinated with Virginia's economic expansion efforts and with the needs of employers.

6. **Developmental Studies Program:** Foundation and developmental programs are offered to help prepare a student for admission to an occupational-technical curriculum or to a university parallel-college transfer curriculum in the community college. These programs are designed to help develop the basic skills and understanding necessary to succeed in other community college programs.

7. **Specialized Regional and Community Services:** The facilities and personnel of the College are available to provide specialized services to help meet the cultural and educational needs of the region served by the community college. This service includes the non-classroom and non-credit programs, cultural events, workshops, meetings, lectures, conferences, seminars, and special community projects that are designed to provide needed cultural and educational opportunities for the citizens of the region.

College Goals

The seven goals of the College are:

1. **Educational Programs:** The College will provide quality credit and non-credit educational programs and instruction.

2. **Faculty and Staff:** The College will have an excellent faculty and staff.

3. **Academic and Student Services:** The College will provide quality services to assist students in achieving their academic and personal goals.

4. **Educational Environment:** The College will have facilities, equipment and technology that enhance an effective learning environment.

5. **Outreach Programs:** The College will have a comprehensive outreach program.

6. **Community Relations:** The College will foster effective partnerships.

7. **Resources:** The College will obtain and use resources to achieve its mission and goals.

General Education Objectives

In order to fulfill its purpose, Danville Community College seeks to enable and encourage students to investigate career choices that are compatible with their abilities and interests; apply critical thinking and decision-making skills; demonstrate competence and achievement in their chosen fields of study; apply knowledge and skills learned in the classroom to actual situations; apply principles of personal and interpersonal skills; prepare for entry into subsequent educational programs and/or into chosen career fields; expand workforce skills; and master essential skills in reading, writing, computation, oral communications, and computer literacy.

The College recognizes that certain values need to be assimilated by students. These values include a framework of ethics, an appreciation of democratic institutions, knowledge of world cultures and international affairs, recognition of the impact of science and technology on society, and a commitment to lifelong learning.

The following 16 General Education Objectives apply to all certificate, diploma, and degree programs offered by the College:

Communication
1. Students will read critically, write in an organized manner, listen objectively, and speak effectively.

Learning Skills
2. Students will recognize the need for life-long learning.
3. Students will demonstrate skills to locate and utilize information resources.
4. Students will draw from knowledge of appropriate disciplines, identify problems, analyze alternate solutions, and make decisions.

Critical Thinking
5. Students will develop critical thinking skills including analysis, evaluation, synthesis, and reflection.
6. Students will demonstrate the ability to function in an independent, self-directed manner.

Interpersonal Skills and Human Relations
7. Students will recognize effective interpersonal skills.
8. Students will recognize the need for value judgments and will display a concern for ethics and social responsibility.

Computational and Computer Skills
9. Students will utilize mathematical procedures for effective performance on the job and in society.
10. Students will be able to use appropriate computer technology.

Understanding Culture and Society
11. Students will recognize the value of democratic institutions.
12. Students will recognize the existence of different perspectives and cultural values.
13. Students will recognize the function and impact of major social, cultural, economic, and political institutions.
14. Students will develop a historical consciousness and a global perspective.

Understanding Science and Technology
15. Students will know and understand the major developments in science and technology, in relationship to their field of study, and will evaluate their impact on contemporary society and on the environment.

Wellness
16. Students will recognize behaviors that promote physical and emotional well-being.

Computer Competency

In keeping with DCC's general education objective that students will be able to use appropriate computer technology, the college provides a teaching-learning environment geared to achieving this objective. All classrooms are equipped with a data port for Internet access, and all students who complete an associate degree, certificate, or diploma will graduate able to demonstrate a working knowledge of computer concepts, components, and operations to accomplish educational and career tasks.

Computer competency may be acquired/demonstrated through required courses in curricular programs that include word processing, spreadsheet, database, and/or presentation/communication components; through equivalency

testing; or by substituting other computer courses. In addition, students will be able to access and utilize information from the World Wide Web and the VCCS Student Information System.

Danville Community College has computer labs for classroom work and labs for open use available in the Taylor, Temple, Hill, Wyatt, Hawkins Engineering & Industrial Technologies, and Clement Learning Resources Buildings on campus, as well as at off-site locations where classes are held.

Educational Foundation

The Danville Community College Educational Foundation is a tax-exempt, non-profit organization governed by a Board of Directors composed of concerned citizens, donors and alumni. The Foundation was established to enhance the academic excellence of Danville Community College and to improve the College's ability to serve the citizens of our area in accordance with the College's mission. Objectives of the Foundation include: awarding student scholarships, providing professional development for faculty and staff, ensuring that instructional equipment keeps pace with technological changes, strengthening the academic programs, and encouraging cultural activities.

Accreditation

Danville Community College is one of 23 colleges in the Virginia Community College System. The associate degree curricula of the College have been approved by the State Council of Higher Education for Virginia. Danville Community College is accredited by the Southern Association of Colleges and Schools, 1866 Southern Lane, Decatur, GA 30033, telephone 404.679.4500, to award the associate degree. (Note: Inquiries to the Commission should relate only to the accreditation of DCC, and not to general admission information.
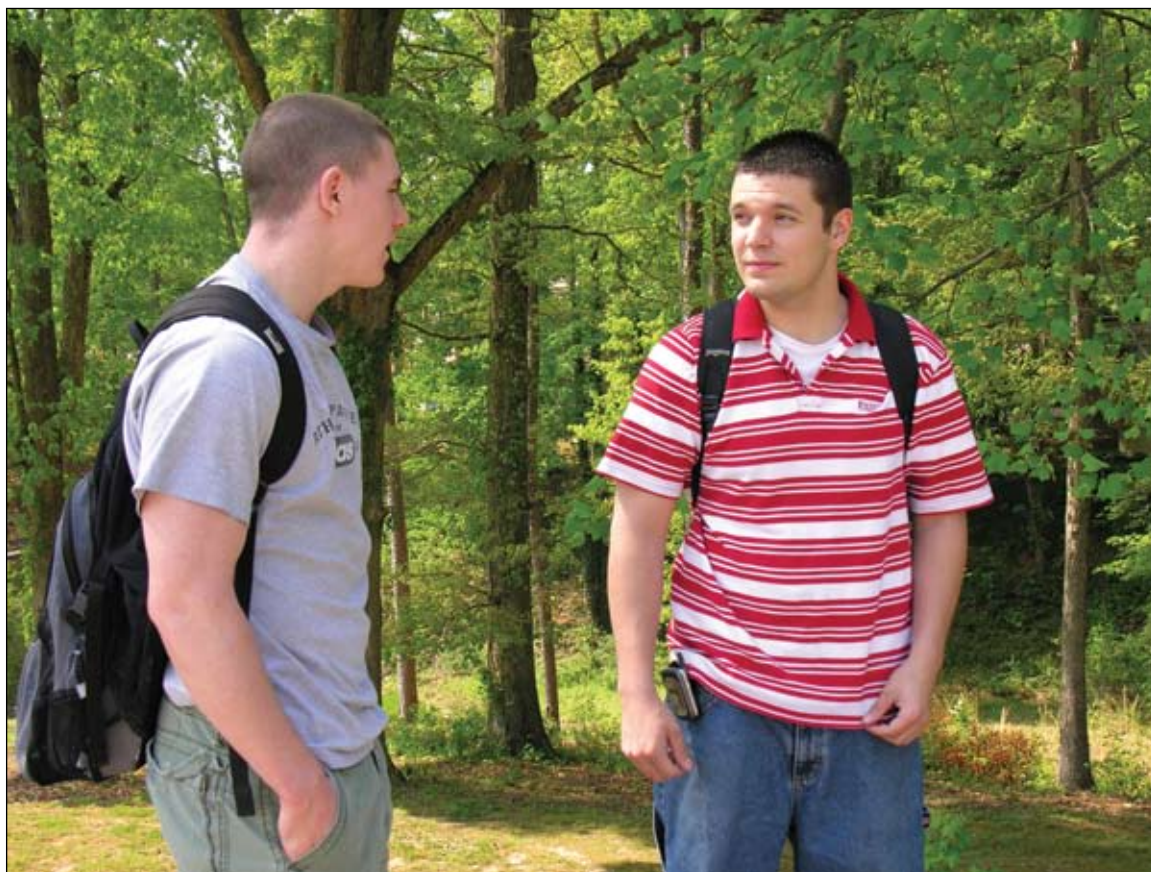
ENROLLMENT INFORMATION

Admission Information

All matters pertaining to admission to DCC should be addressed to the Office of Admissions and Records, located on the first floor of the Wyatt Building, Room 108.

Admission Requirements*

In general, you may enroll if you have a high school diploma or the equivalent or are at least 18 years of age and can benefit from a program of study. A student may be admitted by meeting one of the following:

1. Graduate of accredited high school
2. Admission by GED Examination
3. Admission by transfer
4. Dual enrollment
5. Concurrent enrollment
6. Contract arrangement
7. Special student
8. International student

Under certain circumstances, Danville Community College may admit students 18 years of age or older who have not completed high school. Admission to the College does not mean admission to a curriculum or to a program that has additional requirements.

Graduate of an accredited high school: A graduate of an accredited high school is eligible for admission without regard to the units or courses taken in high school. An official high school transcript showing graduation must be presented for admission.

Admission by GED Examination: A non-high school graduate who is at least 17 years of age and who has successfully completed the General Education Development test (GED) is eligible to apply for admission.

Admission by Transfer: If you are requesting a transfer from another college, you should:

1. Submit a general admission application to the College.
2. Submit transcript(s) of all previous college work.
3. Submit high school transcript(s).

Upon acceptance, you will meet with a counselor and/or an appropriate academic division dean who will outline for you which specific courses, previously taken, fit the program of study you are beginning at Danville Community College. Generally, no credit will be given for courses with grades lower than "C." You may be advised to repeat courses in order to make satisfactory progress in your curriculum. (Coursework transferred in or accepted for credit must be completed at an institution accredited by a post-secondary regional accrediting commission at the time the coursework was completed.)

Dual Enrollment: Danville Community College may enter a contractual agreement with high schools in the service region and offer college-level courses at the high school location. In accordance with the Virginia Community College System statewide agreement on dual enrollment, students enrolled in these courses may earn both high school and college credit. Students who plan to attend a four-year institution should check with the baccalaureate institution(s) to determine whether dual enrollment credits will transfer.

Concurrent Enrollment: High school seniors may be admitted to the College and enroll for courses prior to graduating from high school. Prior to admission, the College must receive written permission from the student's parents and his/her high school principal, and be approved by the Director of Student Development and Enrollment Management.

Contract/Memorandum of Agreement: Under certain circumstances, Danville Community College may enter into an agreement with business, industrial, and governmental groups to provide educational services. Students admitted under this arrangement will receive full benefit of College services; however, they may need to meet additional requirements in order to enroll in a program.

Special Student: Any person who wishes to enroll at Danville Community College who has not completed his/her junior year of high school may be permitted to register as a special student. This status will restrict the student to enrolling in a maximum of one (1) credit course per session. Final approval for such admission requires the recommendation of the principal of the last school attended, permission of the student's parents, approval of the College Admissions Committee, and the approval of the Vice President of Academic and Student Services.

International Students: Besides the College's general admission requirements, all international students must demonstrate proficiency in both

written and oral English. Applications, and all required papers, must be received by April 30 for admission to the Fall term. No applications will be taken after this date.

Admission Procedures

Regular Admission:
(For program-placed students):
1. A completed application for admission form.
2. A completed Virginia Residency Form. Official transcripts from all high schools, colleges, and universities attended. If the student has been out of high school ten (10) years or more, high school transcripts are not required for admission to the College; however, certain programs may require high school transcripts for admission.
3. Program-placed students normally are required to take an appropriate placement test. The COMPASS Assessment is administered in the Wyatt Building. Contact the College's Counseling Office for the location, testing times, and to schedule an appointment to take the assessment. COMPASS assessment results are binding for a three-year period.

Non-Curricula Admission:
(Applies to non-program-placed students)
1. A completed application for admission form.
2. A completed Virginia Residency Form.
3. Acceptance by the College does not ensure admission to a specific curriculum or course.

Once accepted by the College, the student will meet with a college counselor. Together they will discuss his/her educational interests and decide if additional tests are needed to help choose a program or course. The counselor will advise the student about the specific admission requirements of the program in which he/she is interested. After these requirements are met, the student can be admitted to the program. Provided all program admission requirements are met, priority will be given to students:
a. Recommended by the program's admission committee;
b. Legal residents of Virginia living in cities and counties supporting the College;
c. Other Virginia residents;
d. Other U.S. citizens; and
e. Others.

Admission Denied/Revoked: Admission to the College, or to College functions or activities may be denied or revoked to individuals who are unable to demonstrate safe and/or nondisruptive conduct.

Admissions to Specific Curricula: In addition to the general admission requirements explained above, specific requirements are listed for each program of the College. Among the items generally considered in determining students' eligibility for admission to a curriculum are their educational and occupational experiences and other reasonable standards to ensure that they can successfully complete the program requirements. Specific requirements for each program of the College are listed in the Program of Study section of this Catalog. If a student does not meet the requirements for a specific program or course, the student may improve his or her chances of eligibility by completing Developmental Studies courses. Program-placed students normally are required to take an appropriate placement test.

Residence Requirements: Each student applying for admission must complete a Virginia In-State Tuition Application in order to be declared legally domiciled in Virginia. Students must verify that one year before the date of entering the term for which they are requesting in-state tuition status they had given up any previous domicile and were living in Virginia with the unqualified intention of remaining in Virginia. Please contact the Admissions Office if you have any questions regarding residency requirements.

Domicile Appeals Process: A student who disagrees with an initial tuition classification may make a written appeal to the Domicile Appeals Committee within 10 calendar days of the initial notification. The committee will respond to the appeal within 15 calendar days. The Domicile Appeals Committee shall consist of two members of the Student Services Office. No person who serves at one level of this appeals process shall be eligible to serve at any other level of this review.

If the student still disagrees with the tuition classification, the student may file a final written appeal with the Director of Student Development and Enrollment Management. This written appeal must be made within five calendar days of the student's notification of the first appeal. The Director of Student Development and Enrollment Management will notify the student in writing of the final administrative decision within 30 calendar days of receipt of the appeal.

A student who is not satisfied with the outcome of the review by the Director of Student Development and Enrollment Management may appeal to the appropriate circuit court. The student must file a petition for review with the court within 30 calendar days of receipt of the decision by the Director Student Development and Enrollment Management.

Advanced Standing for Experiential Learning Guidelines

Students who have reason to believe that previous educational studies, training programs, or work experience may entitle them to an adjustment in the course requirements for a particular curriculum should contact the Vice President of Academic and Student Services. Recognizing that many adults have gained college-level knowledge in non-collegiate settings through work experience, seminars, workshops, non-credit courses, and other educational experiences, Danville Community College provides a mechanism for evaluating and awarding college credit for knowledge. Credit earned through this evaluation process is considered Advanced Standing Credit.

The following shall apply to the Advanced Standing Credit requirements:

1. To earn credit for prior learning, an individual must be admitted to the curriculum in which advanced standing is requested.
2. As much as 25 percent of the required curriculum credits may be earned through the advanced standing process.
3. Advanced standing credits awarded through the advanced standing evaluation process will be posted to the student's transcript after the student has successfully completed 15 credits of coursework in the curriculum with a cumulative grade point average of at least 2.25 in the curriculum.
4. Advanced standing will be awarded only for courses in which a student is not currently and has not been previously enrolled.

Procedure for student to apply for Advanced Standing Credit

The procedure will be administered by two faculty members. One of the faculty members must teach the course for which credit is requested.

1. Student must submit a resume that will be reviewed by the faculty members.
2. Student will be interviewed and a determination will be made by the faculty members at this time whether or not to proceed.
3. Student will be requested to take a brief oral examination administered by the faculty members. Again, a determination will be made whether or not to proceed.
4. Student will be requested to take a written test, perform specific tasks, and/or complete a project.
5. The results of the above will be reviewed by the faculty members who will make a final decision whether or not to recommend that credit be awarded.
6. The recommendation will be forwarded to the appropriate administrator.

Course Acceptance Policy

1. The administrator responsible for the program for which the evaluation of a student's previous coursework is requested shall:
   a. Determine the acceptability of each course the student wishes to transfer or apply toward the program requirements based upon his/her knowledge of changes, which have occurred since the course(s) was completed;
   b. Give particular attention to courses in areas which have had significant technological changes in recent years (i.e., electronics, automotive, graphic imaging, information systems, accounting, administrative support technology, etc.);
   c. As deemed appropriate, seek the input of faculty or other administrators regarding the proper course of action.
2. Courses which are determined to have outdated information and whose acceptance would not assure the student of having current skills may be used to meet elective credit requirements.
3. Students who have kept their educational training current through their job activities may have their coursework given special consideration for acceptance.
4. A student who wishes to challenge the decision regarding the non-acceptance of his/her coursework may do so by demonstrating his/her competencies in an appropriate manner to the administrator or appropriate faculty member.
5. Because of the diversity of courses offered and the differences in changes which occur over a given time, no specific timeframe can

be established for courses whose content may have become obsolete. However, it is recommended that all technical courses taken under the quarter system or more than five years ago be carefully reviewed for their current relevance.

6. The decision to accept or not accept a course(s) should be made with the idea that a student's graduation indicates current and relevant competencies in the program of studies.

Auditing a Course

To audit a course, the student must obtain permission from the appropriate division dean. Audited courses carry no credit and do not count as part of the student's course load. Students wishing to change status in a course from audit to credit or credit to audit must do so within the add/drop period for the course.

Registration

Danville Community College has implemented a new student information software system. As a result, students have access to enhanced services and certain commonly used terms have changed. Students are now able to register via the Internet. For instructions on using the internet options, you may visit the DCC web site at www.dcc.vccs.edu or pick up an information booklet from the Admissions Office, Room 108 in the Wyatt Building. Registration information is also included in each semester class schedule.

Registration Information

Registration is held prior to the beginning of each semester or term. Specific registration dates are listed in the Academic Calendar in this Catalog. The dates also are posted in each building on campus, in each semester's class schedule, and on the College's website (www.dcc.vccs.edu).

Mail Registration

All students are advised to confer with a counselor or faculty advisor before registering for classes. However, if you want to register for evening credit classes by mail, simply complete a DCC registration form and return it by the announced due date, along with the tuition (and a completed application, if a new student) to the Business Office. Mail registration for on-campus courses may require payment of a maintenance fee and a student activity fee. Please check these fees as listed below, and add fees to your payment as appropriate.

Internet/Web Registration

Students may register via the Internet at https://dcc.my.vccs.edu. For more information, contact the Admissions Office at 434.797.8467.

Offerings

The College reserves the rights to cancel, withdraw, or combine classes when necessary. Classes with insufficient enrollment normally are cancelled the first week of class (see Tuition Refund Policy in this *Catalog*).

Expenses

Tuition

Tuition rates are established annually by the State Board for Community Colleges. Current rates can be verified by contacting the Admissions Office. The College has an extensive financial assistance program. We emcourage you to review that section of this Catalog, and to contact our Financial Aid Office for additional information. Fees are subject to change by the State Board for Community Colleges.

Payment of Tuition and Fees

Fall Semester: Students wishing to enroll for Fall Semester classes may do so on the published dates during the months of June, July and August. Students are expected to pay tuition and related fees on the same day that they register; otherwise they risk losing their enrollment in classes.

Spring Semester, Summer Session, and Special Session Classes: Students enrolling for classes must pay all tuition and related fees on the same day that they register. Failure to do so will result in the cancellation of their registration.

Students who have not paid tuition and fees are not authorized to attend class(es).

Student Activity Fee

The Student Activity Fee currently is $1.00 per credit hour. Monies are used for social, cultural and student activities. Please note that fees are subject to change. Contact the Admissions Office at 434.797.8467 for the current cost.

Maintenance Fee

All students enrolled for three or more semester hours on campus pay a Maintenance Fee. Currently, the Maintenance Fee is $1.00 for three or more credits taken on campus. Monies are used to maintain College parking lots. Please note that fees are subject to change. Contact the Admissions Office at 434.797.8467 for the current cost.

VCCS Technology Fee

All students on and off campus will be charged a technology fee for each credit hour for which they enroll. This fee will be shown separately on the payment receipt. All monies support the acquisition of high technology equipment for academic purposes. Currently, the Technology Fee is $3.50 per credit. Please note that fees are subject to change by the State Board for Community Colleges.

Capital Fee

Currently, students with out-of-state residences are charged a $3.00 per credit Capital Fee. Please note that fees are subject to change by the State Board for Community Colleges.

E-rate

The e-rate is applicable to designated distance learning courses delivered entirely over the internet. Contact the Admissions Office for the current cost.

Other Fees

There are NO special laboratory or library fees. Students are responsible for any College property which they damage or lose (such as laboratory or shop equipment, supplies, library books, and materials).

Nonpayment of Tuition and Fees, or Other College Debts

A student's continued attendance at the College is dependent upon proper settlement of all debts owed the institution. Transcripts, certificates, diplomas, or degrees will not be issued, nor will students be permitted to complete registration until accounts are cleared satisfactorily with the Business Office, Bookstore, or Library. Should the student fail to satisfy all due and payable amounts for tuition and fees, College loans, fines, or other debts owed the College, the College may initiate disciplinary action in accordance with the Code of Student Conduct and Discipline Policy.

Transcripts

Transcripts may be obtained by completing a transcript request form in the Admissions and Records Office, or by signed letter requesting transcripts sent to a specific location. Fax requests and requests via the Internet also are acceptable. Please contact the Admissions Office at 434.797.8420, fax: 434.797.8451, or access DCC Online at www.dcc.vccs.edu.

Books and Materials

Students are expected to obtain their own books, supplies, and consumable materials. These are available from the DCC Bookstore.

Grading System

The quality of performance in any academic course is reported by a letter grade, the assignment of which is the responsibility of the instructor. These grades denote the character of study and are assigned quality points as follows:

A Excellent
    4 grade points per credit
B Good
    3 grade points per credit
C Average
    2 grade points per credit
D Poor
    1 grade point per credit
F Failure
    0 grade point per credit
    P Pass
        No grade point credit (applies to special courses. P/U Option: No more than 7 credits can count toward graduation.)
    R Re-enroll
        No grade point credit (used only for Developmental Studies courses. See below).
    S Satisfactory
        No grade point credit (used only for satisfactory completion of a Developmental Studies course).
    U Unsatisfactory
        No grade point credit (applies to specialized courses and seminars). (P/U Option: No more than 10 credits can count toward graduation.)
    W Withdrawal
        No credit (A grade of withdrawal implies that the student was making satisfactory progress in the course at the time of withdrawal or that the withdrawal was officially made before the "deadline" date published in the college calendar.) See Withdrawal Policy in the next section.
    I Incomplete
        No credit. This grade is used for a number of unavoidable reasons. The incomplete extends enrollment in the course and the requirements for satisfactory completion will be established through the instructor. A student must complete the course by the end of the next term or another grade (A, B, C, D, F, P, R, S, U, or W) may be awarded by the instructor. In the case of "I" grades earned at the end of the Spring Semester, students shall have through the end of the subsequent Fall Semester to complete the requirements. This new grade would be based upon coursework which has been completed. The W grade should be awarded only under mitigating circumstances which must be documented and a copy placed in the student's academic file.
    X Audit
        No credit (Permission of the Division Dean is required to audit a class.)

The grade point average (GPA) is determined by dividing the total number of grade points earned in courses by the total number of credits attempted.

Grading – Developmental Studies Course

A grade of "S" (Satisfactory) shall be assigned for satisfactory completion of the developmental studies course.

A grade of "R" (Re-enroll) shall be assigned to a student who makes satisfactory progress during the term, but has not completed the course objectives. This grade, which is to be used only for developmental studies, is to permit re-enrollment for the completion of the course objectives.

A grade of "U" (Unsatisfactory) shall be assigned to a student not making satisfactory progress. The Developmental Studies academic advisors, with the concurrence of the Director of Student Success, will determine the subsequent sequence of courses for the student who receives a grade of "U."

A student may enroll no more than twice in any single developmental course. Appeal for a third and final enrollment must be addressed to the Director of Student Development and Enrollment Management. For additional information, refer to "Repeating A Course" section of this *Catalog*.

Withdrawal Policy

Withdrawing from a course without an official form automatically results in course failure. Withdrawals cannot be completed by telephone. The official date of withdrawal is the date the withdrawal form is received in the Admissions Office and not the date of initiation of the form unless the two coincide. If a student withdraws from a class prior to the termination of the add/drop period for the session, the student is removed from the class roll and no grade is awarded. After the add/drop period, but prior to the completion of 60 percent of a session (nine weeks for regular session), a student who withdraws or is withdrawn from a course will be assigned a grade of "W."

Students should be aware that withdrawal from a course might negatively affect their financial aid award. Students are encouraged to check with the Financial Aid Office to determine the impact of a course withdrawal on financial aid eligibility.

After that time, if a student withdraws or is withdrawn from a course(s) or the College, a grade of "F" will be assigned. Exceptions to this policy may be made under mitigating circumstances; such circumstances must be documented and a copy of the documentation placed in the student's academic file. If mitigating circumstances cause the withdrawal, and if the student is making satisfactory progress at the time of withdrawal, the grade of "W" will be given.

Curriculum students who withdraw from a course(s) or who withdraw from the College after sixty percent of the class has passed should initiate the withdrawal request in their Division Dean's office where the Dean will decide whether the reason for withdrawal is mitigating. If the student is withdrawing from the College, an exit interview with a counselor will be required.

Non-curricular students should initiate their withdrawals in the Counseling Office where a counselor will decide if the reason is mitigating. In all cases, mitigating circumstances must be documented and the document, plus the completed withdrawal or drop form, will be placed in the student's permanent record. Students must sign withdrawal forms. Even though students have the option of withdrawing from a course using the College's website without faculty signatures, it is recommended that students meet with the faculty member to ensure the withdrawal process has been completed successfully.

Tuition Refund

Students are eligible for a tuition refund if they drop classes or withdraw from the College on or before the announced date each semester. The add/drop form or withdrawal form must be processed by the Admissions Office. The College publishes in each semester's Class Schedule the dates during which a student may be eligible for tuition refunds. The College will consider no refunds after the announced date unless the student has encountered severe medical problems that relate directly to the individual student, or in case of an administrative error. Before any consideration can be made, the student must appeal to the Vice President of Academic and Student Services, and then to the Vice President of Financial and Administrative Services. The tuition refund policy and the deadline dates are established by State policy. Please refer to the College Calendar in this *Catalog* for the deadline for tuition refund for full semester courses. Classes of shorter duration may have a different withdrawal deadline. Please contact the Admissions Office, if you have questions.

Notification of Student Rights

Each institution shall establish and publish information release policies that respect the rights of individual privacy, and the confidentiality of records, and the best interests of the student and institution. As provided by the Family Educational Rights and Privacy Act (FERPA), colleges may disclose the following Virginia Community College System directory information items without the student's prior consent:

1. Student's Name
2. Participation in officially-recognized activities and sports
3. Address
4. Telephone Listing
5. Weight and height of members of athletic teams
6. Electronic mail address
7. Degrees, honors and awards received
8. Date and place of birth
9. Major field of study
10. Dates of attendance
11. Grade level
12. The most recent educational agency or institution attended
13. Number of credit hours enrolled

Students must provide official notification to the Admissions Office to prevent the disclosure of directory information. Students having questions pertaining to FERPA may contact the Director of Student Development and Enrollment Management.

Degrees, Diplomas, and Certificates

Danville Community College offers the following degrees, diplomas, and certificates for students who successfully complete approved programs:

1. An Associate of Arts and Science Degree (AA&S) is awarded to students majoring in Business Administration, Liberal Arts, and Science, who plan to transfer to four-year colleges or universities after completing their Danville Community College program.
2. An Associate of Applied Science Degree (AAS) is awarded to students majoring in one of the occupational-technical programs and who plan to obtain full-time employment immediately upon graduation from the College.
3. An Associate of Science Degree (AS) is awarded to students majoring in Engineering and who plan to transfer to a baccalaureate program at a university.
4. A Diploma is awarded to students who complete one of the two-year non-degree occupational curriculums.
5. A Certificate is awarded to students who complete one of the approved non-degree curriculums that are usually less than two years in length. The College also offers Career Studies Certificates for programs that can be completed in less than one year.

See the Programs of Study section of this *Catalog* for more information, or contact the Admissions Office.

Assessment Requirements

The Commonwealth of Virginia requires a comprehensive plan for student outcomes assessment. The Danville Community College Plan was approved by the State Council of Higher Education for Virginia in 1987 and has been reviewed each year. The Plan includes a variety of procedures to ensure that the institution has an effective process for improving the instructional and student development programs. These include:

1. Assessing general education competencies of degree seeking students (Associate of Arts and Science, Associate of Applied Science, and Associate of Science Degrees).
2. Administering pre- and post-tests to Developmental Studies students.
3. Tracking the progress of selected groups of students during their enrollment at Danville Community College.
4. Surveying graduates and non-completers about the programs at the College.
5. Using a variety of assessment techniques to measure the level of success of students in meeting the objectives of their programs of study.

Students are required to participate in the assessment procedures which are appropriate to their curricula. For additional information, contact the Director of Planning, Effectiveness and Research at 434.797.8576.

Outcomes Assessment Requirement Degree students will be required to take a battery of tests designed to measure general education achievement and/or achievement in selected major areas prior to graduation for the purpose of evaluating general education competencies and academic programs. No minimum score or level of achievement is required for graduation. Individual test results will remain confidential. Group scores will be used for accountability to the state and for improvement of academic programs.

Institutional Effectiveness Days

Two class days are designated each academic year (one per term) as Institutional Effectiveness Day. The faculty in each program at Danville Community College reviews student outcomes objectives and measurement tools for each curriculum to ensure assessment of student outcomes. Other effectiveness assessment measures such as student engagement and satisfaction are handled through the Office of Planning, Effectiveness and Research.

Graduation Requirements
Catalog Year Determination

All students who are initially placed in a program (including Developmental Studies) are placed in a catalog year at the same time. The catalog year to which a student is assigned determines the catalog which describes their program requirements. Keeping in mind that the catalog goes Summer, Fall, and Spring, a student who is accepted for Summer 2007, Fall 2007, or Spring 2008 will be placed in the 2008-2009 catalog year.

Students who have been attending in a non-curricular status will be placed in the catalog year corresponding to their program placement, not the catalog year corresponding to the year they became a non-curricular student.

Students who were previously in a program and dropped out of college for at least one year or changed programs and then ask to be readmitted to the original program after one year will be placed in the program in existence at the time of their re-admittance. Students who drop out for less than one year or request re-admittance to a program within a year after dropping out of it, will be readmitted under the original catalog, unless there have been significant changes to the program requirements. The counselor, in consultation with the Division Dean, will be responsible for selecting the catalog year when there is a question about which to use when readmitting a student.

Associate Degree Requirements

To be awarded an Associate Degree from Danville Community College, a student must:
1. Have fulfilled all of the course requirements of the curriculum as outlined in the College catalog (see Catalog Year Determination);
2. Have been recommended for graduation by the faculty and Division Dean for the student's curriculum;
3. Have completed all of the course and credit-hour requirements of the degree curriculum with at least twenty-five percent (25%) of the credits applicable for the degree acquired at Danville Community College;
4. Have earned a grade point average of at least 2.0 on all courses attempted which are applicable toward graduation in the curriculum;
5. Must complete all required assessment testing, interviews, or other activities, including but not limited to general education assessment instrument(s) provided by the College used to assess and improve the effectiveness of programs and services.
6. Have filed an application for graduation in the Office of Admissions and Records;
7. Have resolved all financial obligations to the College and returned all library and other College materials;
8. Have attended graduation exercises except when waived by the Vice President of Academic and Student Services.

Diploma Requirements

To be awarded a diploma from Danville Community College, a student must:
1. Have fulfilled all of the course requirements of the curriculum as outlined in the College catalog (see Catalog Year Determination)
2. Have been recommended for graduation by the faculty and Division Dean for the student's curriculum;
3. Have completed at least twenty-five percent (25%) of the credits applicable for the diploma at Danville Community College;
4. Have earned a grade point average of at least 2.0 on all courses attempted which are applicable toward graduation in the curriculum;
5. Have completed all required assessment testing, interviews, or other activities;
6. Have filed an application for graduation in the Office of Admissions and Records;
7. Have resolved all financial obligations to the College and returned all library and other College materials;
8. Have attended graduation exercises except when waived by the Vice President of Academic and Student Services.

Certificate Requirements

When a student successfully completes a program of instruction which does not lead to an associate degree or diploma, a certificate may be awarded. To be awarded a certificate from Danville Community College, a student must have fulfilled all of the course requirements of the curriculum as outlined in the College catalog (see Catalog Year Determination). Also, when a student pursues a degree or diploma program, but is unable to complete the degree or diploma requirements, the student, upon the recommendation of the appropriate Division Dean and the Vice President of Academic and Student Services may be issued a certificate, provided the portion of study successfully completed is equivalent to an approved certificate program; and the student has earned at least a 2.0 grade point average in all courses attempted which are applicable toward graduation in the curriculum, and 25 percent of the credits applicable for the certificate are completed at Danville Community College.

Graduation Honors and Awards

Appropriate honors are recorded on diplomas, certificates, or degrees. The honors, based upon scholastic achievement at Danville Community College, are as follows:

Grade Point Average or Better

3.2 Cum Laude (with honors)
3.5 Magna Cum Laude (with higher honors)
3.8 Summa Cum Laude (with highest honors)

Academic Load

The normal course load during a regular semester at Danville Community College is 15-18 semester hours. A student must register for at least 12 credits to be considered a full-time student. A student wishing to enroll in 19 or 20 semester hours (not counting student orientation) must have a 3.0 grade point average or higher and/or the approval of his/her Division Dean. Under exceptional circumstances, a student may be allowed to enroll in more than 20 semester hours provided a request is made in writing to the Vice President of Academic and Student Services and supported by written statements from the student's advisor and Division Dean.

During the summer session, a student is restricted to two regular courses each summer term or 12-14 semester hours for the entire summer session. Students wishing to enroll in 15 semester hours must have a 3.0 grade point average or higher and/or the approval of the appropriate Division Dean. Under exceptional circumstances, a student may be allowed to enroll in more than 15 semester hours provided a request is made in writing to the Vice President of Academic and Student Services and supported by written statements from the student's advisor and Division Dean.

Academic Standing

Students are considered to be "in good academic standing" if they maintain a semester minimum grade point average (GPA) of 2.00; are eligible to re-enroll at the College; and are not on academic suspension or dismissal status. Students on academic warning or academic probation who are eligible to re-enroll may be considered eligible to receive financial aid assistance or other benefits requiring a "good academic standing" status.

Honors Program

In keeping with the college's commitment to provide educational opportunities consistent with the ability and interests of the individual student, DCC invites motivated students to enroll in its Honors program. This program consists of individually contracted Honors projects in regularly-sectioned courses, Honors Courses, and an Honors Symposium that includes two courses related by a common theme in addition to a corresponding one credit hour weekly Honors seminar.

Students may earn "Honors Program Graduate" designation on their diplomas and transcripts by completing a minimum of 12 credit hours through a variety of options that include Honors Projects, Honors courses, or an Honors Symposium that includes a one credit hour Honors seminar. This designation also requires that the student achieve a grade point average (GPA) of 3.0 or greater in the honors courses and an overall graduating GPA of 3.0 or greater. All Honors work must be completed one week prior to the graduation ceremony. Students may earn Honors designation on transcripts only by completing less than 12 hours of Honors work.

Students are eligible for Honors work if they meet all of the following criteria:

1. COMPASS score in Math in the College Algebra range
2. A 3.25 or higher high school Grade Point Average (GPA)
3. A 3.0 or greater overall GPA in non-Honors courses
4. Completion of MTH 2
5. Non-Developmental in English
6. satisfy prerequisites of each Honors Community course
7. Special life experiences or aptitude for the course(s) and the endorsement of two DCC faculty members

Honors Projects are based on projects negotiated with faculty and the Honors Program Chair. These projects can be done in any non-Honors course and typically focus on topics of special interest to the student, requiring appropriate additional or alternative assignments which go beyond regular coursework.

Students may also earn Honors credit by participating in an Honors Symposium. An Honors Symposium consists typically of two core courses linked by a common theme. The work is challenging and is designed to enhance the student's intellectual capacities. Students enrolling in an Honors

Symposium can expect stimulating and rigorous assignments which expand the ability to write, think critically and independently, research accurately, and make reasonable inferences.

Symposium themes, such as "human nature," or "environment in crisis" cut across discipline lines and demonstrate to the student that some issues and problems require the contributions of multiple disciplines. A limited enrollment of 15 students for Honors Symposium courses ensures the opportunity to increased student-to-student and student-to-faculty interaction.

Students wanting more information about the Honors Program should contact the Honors Program Chair, Ms. Carmen Eichman, at 434.797.8506.

Academic Honors

President's Honors List: A student who is enrolled for six or more credit hours for the semester during which the honor is extended, has compiled a cumulative grade point average of at least 3.0, a semester grade point average of 3.75 or higher, and has completed a minimum of 24 semester hours at Danville Community College will be placed on the President's Honors List.

Vice President's Honors List: A student who is enrolled for six or more credit hours for the semester during which the honor is extended; has compiled a cumulative grade point average of at least 3.0 and a semester grade point average of 3.0 to 3.74; and has completed a minimum of 24 semester hours at Danville Community College will be placed on the Vice President's Honors List.

Academic Warning

Any student who fails to attain a minimum grade point average of 2.00 for any one term will receive an academic warning.

Academic Probation

Any student who fails to maintain a cumulative grade point average of at least 1.5 after attempting 12 semester credit hours will be placed on academic probation. The statement, "Academic Probation," will be entered on the student's permanent record.

Any student on academic probation is required to consult with a counselor and may be required to elect less than the normal academic course load n the next term following this action. Generally, persons on probation are ineligible for appointive or elective office in student organizations unless the

Vice President of Academic and Student Services or another appropriate College administrator grants special permission.

Academic Suspension

The student on academic probation who fails to attain a grade point average of at least 1.50 for the term enrolled will be subject to academic suspension. Academic suspension normally will be for one semester unless the student reapplies and is accepted for readmission to lower level curriculum of the College. The statement, "Academic Suspension," will be entered on the student's permanent record. Any student who is academically suspended must apply for readmission to the College by a written letter to the College Admissions Committee. Students are placed on academic suspension only after they have attempted 24 semester credit hours.

Academic Dismissal

A student who does not maintain at least a 2.00 grade point average for the term following reinstatement to the College after having been on academic suspension will be academically dismissed from that curriculum. Students who have been placed on academic suspension and achieve a 2.00 grade point average for the term of their reinstatement must maintain at least a 1.50 grade point average in each subsequent term of attendance.

Students remain on probation until their cumulative grade point average is raised to a minimum of a 1.50. Failure to attain a 1.50 grade point average in each subsequent term until the cumulative GPA reaches 1.50 will result in academic dismissal. Academic dismissal normally is permanent unless, with good cause, the student reapplies and is accepted under special consideration for readmission by the Admissions Committee of the College. The statement, "Placed on Academic Dismissal," will be entered on the student's permanent record. Students will be dismissed only after they have attempted 24 semester credit hours.

Academic Renewal

The purpose of this policy shall be to adjust the cumulative grade point average (GPA) of eligible students who have enrollments from 1984 and forward. The Academic Renewal process shall not affect academic, financial, and administrative events

that have occurred in the past. Academic renewal may be granted only once and cannot be revoked once awarded. The following procedures shall be used at Danville Community College:

1. The student must complete the Academic Renewal Selection Form provided by the Admissions Office. Copies of this form will be located in all division offices as well as the Admissions Office.
2. The form must be submitted to the Admissions Office.
3. A student denied "Academic Renewal" may appeal the decision to a committee of at least three people. This committee will be chaired by the Director of Student Development and Enrollment Management, and the other two committee members will be appointed annually by the Director of Student Development and Enrollment Management. A written appeal should be sent to the Director of Student Development and Enrollment Management within seven (7) days of denial.
4. Once "Academic Renewal" has been granted, the Admissions Office will enter all necessary data via the Student Information System (SIS) to complete "Academic Renewal."
5. All students should be warned about the pitfalls of "Academic Renewal." (Example: A student may have a "D" in a course that

is needed for graduation, but cannot get credit for the course if it is part of Academic Renewal. The course will have to be repeated.)

NOTE: *Separation from the College "five years or more" is defined as a minimum sixty-month period of continuous non-enrollment at the College. An "eligible" student must be enrolled at the College as of Summer 1994, or any term forward from Summer 1994, in order to qualify for Academic Renewal. However, the continuous 60-month period of non-enrollment may have occurred prior to Summer 1994, as well as the qualifying period of re-enrollment and subsequent completion of an additional twelve credits. The qualifying "2.5 GPA based upon first 12 semester hours completed" is defined as a GPA calculation involving all courses and attempts taken in any term (or terms) up to the point of the twelfth semester hour being completed. A 2.5 GPA must be achieved based upon a calculation of all courses and attempts within the qualifying period of re-enrollment.*

Prerequisites and Corequisites

Many courses at DCC are associated with other courses referred to as "prerequisites" and "corequisites." The basic idea behind these associations is that in order to be successful in a particular course, the student must have acquired or be in the process of acquiring certain other skills or knowledge.

A prerequisite is a course that a student must take before enrolling in a particular course. A corequisite is a course which a student must take while they are taking another course if they have not already completed that course. For example, Biology 102 has Biology 101 as a prerequisite. Students must successfully complete Biology 101 before taking Biology 102. Further Algebra I (MTH 3) is a corequisite for Biology 101. One must take MTH 3 while taking Biology 101 if one has not completed MTH 3. Students should register only for those courses for which they have completed the prerequisite requirements and must register for corequisite courses as needed. If a student does not know what the prerequisites or corequisites are for a course, faculty advisers will be able to provide this information.

For more information, please see the list of prerequisites for each course beginning on page 167.

GPA for Repeat Courses

The GPA of a student will reflect only the last grade received for repeat courses which were initially taken in the Summer of 1994 or later. "General Usage" courses such as 099, 199, etc. are not counted as repeat courses. Repeat courses not figured in the GPA will be designated on the transcript with the words "repeated course" under the class.

Attendance

It is the philosophy of Danville Community College that student and faculty interactions are critical to the learning process. Class attendance enhances this process. Regular attendance is thus expected of students. Students missing twenty-five percent (25%) or more of the total time allocated for classes and/or labs may be administratively withdrawn from the course upon recommendation of the instructor. Students who are administratively withdrawn prior to the completion of 60% of the classes and/or labs will be issued a grade of "W." After that point, students who are administratively withdrawn will be issued a grade of "F." Faculty have the discretion to establish more restrictive policies which will be published in the course outline. Faculty also have the option to excuse a student when documented, mitigating circumstances prevent the student from attending a class or lab session. Students should be aware that failure to attend classes will negatively affect their financial aid award.

Examinations

Students are expected to take all examinations, including final examinations, at the regularly scheduled time. Exceptions cannot be made without permission of the instructor.

Repeating a Course

A student is normally limited to two enrollments in the same credit course. If special circumstances warrant consideration of a third enrollment, the student must make the request in writing to the Director of Student Development and Enrollment Management. Please note all requests for third (3d) enrollments into classes must be "submitted and acted upon " before the first day of classes for the term of enrollment. After reviewing the request with the Admissions Review Committee and receiving input from the appropriate Dean and faculty, the Committee will make a recommendation to the Vice President of Academic and Student Services, who will notify the student in writing of the decision.

If a student is denied further enrollment in a course, that student may not enroll in any other course for which the denied course is a prerequisite. For example, a student at DCC denied further enrollment in ENG 1, 3, 4, or 5 will not be allowed to enroll in an ENG course numbered 100 or higher.

Workforce Services

Workforce Services includes credit and non-credit courses and activities designed to meet occupational, professional, and personal interests and needs. These activities begin at various times throughout the year and vary in length according to need. Non-credit activities, by law, are self-supporting.

Danville Community College has a vital interest in the economic development of its service region. Through its Workforce Services organization, the College provides a wide variety of educational opportunities for companies and organizations. Services include on-campus or on site tailored training programs; short courses, workshops, and seminars; high-tech training using state-of-the-art equipment; management and supervisory development training; basic skills training; teleconferencing; and use of College facilities for company-sponsored training. The Regional Center for Advanced Technology and Training (RCATT) houses many of the workforce services programs. For more information, contact 434.797.6437.

Apprenticeship Training

Apprenticeship training is coordinated through Danville Community College in partnership with the Virginia Department of Labor and Industry. Apprenticeship is a voluntary training system which assists businesses and their employees with obtaining training in the technologies. Apprentices learn the "how to" of their occupation on the job and learn the "why" in related technical instruction taught in the classroom. For more information, contact the Apprenticeship Coordinator at 434.797.8494.

Continuing Education

Continuing Education includes special courses for college credit and non-credit activities for which the Continuing Education Unit (CEU) is awarded. These courses and activities are intended primarily for adults who want to upgrade their technical skills, improve their employability, increase their earnings, acquire new skills, or meet educational requirements for job certification. For more information, call 434.797.8430.

Community Services

Community Services includes non-credit activities for which Continuing Education Units (CEU's) are not awarded. They consist of courses in crafts, leisure-time activities, as well as exhibits and special community projects. For more information, call 434.797.8430.

Middle College

The Middle College offers individuals aged 18-24 years old without a high school diploma or GED an opportunity to obtain a GED certificate and provides academic and career readiness training. The program includes several components, the main two being GED Preparation, and Workforce Preparation, which incorporates earning a Career Readiness Certificate (CRC). Middle College also helps students with completion of the financial aid process; participation in career counseling; selecting a desired program of study at DCC; and receiving a certificate, diploma or associate degree. For additional information, call 434.797.6433.

Middle College II

The Middle College II program offers individuals who are 25 years or older an opportunity to obtain a GED certificate. For additional information, call 434.797.8584.

Southern Piedmont Educational Opportunity Center

The Southern Piedmont Educational Opportunity Center is a federally funded grant program that provides free educational assistance to low-income adults and first generation college students. The EOC offers: assistance in completing admission and financial aid applications, information on G.E.D. programs and postsecondary institutions, career counseling and assessments, and academic advising. For more information about the SPEOC, call 434.797.8577 or stop by the office located on the first floor of the Wyatt Building.

Other Programs

Tech Prep

Tech Prep offers a secondary/postsecondary educational career path that is seamless and has integrated options for work-based learning in high school and continuing through college. If students choose the Tech Prep path, they have the option to enter the workforce after completing a technical degree/certificate/diploma program at DCC or further their education to pursue a four-year degree.

Tech Prep links academic and technical studies and uses input from business, industry, government, and the community in order to build a curriculum that leads to successful employment. Tech Prep students may be eligible to earn credit for work completed in high school under existing articulation agreements. Students interested in Tech Prep options should consult their high school counselors and/or the Tech Prep Coordinator at 434.797.8520. There is also a website that students may access that will provide additional information. Go to www.dcc.vccs.edu/techprep/index.html.

Upward Bound

The Upward Bound Program at DCC is a federal pre-college program designed to assist economically disadvantaged and/or first generation students complete high school and to enter and succeed in postsecondary education. Upward Bound offers extensive academic instruction as well as counseling, mentoring, tutoring, a summer bridge program, summer residential program, and other support services. Students interested in Upward Bound should consult their high school counselor and/or DCC's Coordinator of Upward Bound at 434.797.8562.

University of Richmond - School for Continuing Studies

Earn an interdisciplinary Bachelor of Liberal Arts degree from the University of Richmond in only two years. Students take two courses each Fall and Spring and one course each May term. Classes are held on Friday evenings and Saturdays, supplemented by weekly faculty-led online discussions. New students enter in September, and are organized into cohorts that proceed together through the program. Cohorts study at Danville Community College.

Take advantage of the University of Richmond's extensive resources. Research our financial aid packages including scholarships, grants, and loans. Virginia residents can take advantage of the Virginia Tuition Assistance Grant.

Students can take one of 10 six-hour, interdisciplinary, highly-concentrated courses at a time. Over two years, students will complete five courses each year for a total of 60 semester hours.

- **HUM 346U**   The History of Human Expression
- **PLSC 301U**   The Rights and Responsibilities of Citizenship
- **ADED 300U**   Knowledge Management
- **HUM 345U**   The History of Ideas
- **LDSP 310U**   Leadership and Ethical Decision Making
- **MGMT 345U**   Business Literacy
- **GSCI 301U**   Role of Science and Technology
- **ISTY 301U**   Understanding the Global Village
- **SA 310U**   The Examined Life
- **IDST 495U**   Capstone Senior Seminar

For more information, please contact Stephanie Ferrugia, Site Coordinator, at 434.797.8586 or via email at sferrugi@richmond.edu. The University of Richmond's Weekend College office is located in Wyatt Building, Room 213.

The Whittington W. Clement Learning Resources Center

The Whittington W. Clement Learning Resources Center (LRC) provides information and instructional support services for the college community. Centrally located on the DCC campus, the Learning Resources Center opened to students, faculty, and the community in October 1994. Housing the Library, Learning Assistance Center (LAC), Audio-Visual Services, Tutoring Center, and the Teaching, Learning and Technology Center, the LRC incorporates the latest in educational technology to offer a unique mix of traditional and nontraditional resources for learning and teaching. Old Dominion University Distance Learning classrooms are also located in the lower level of the LRC. For more information, please call 434.797.8453.

Library Services

The Library houses a collection of more than 68,000 items including books, non-print media, periodicals, government documents, and other materials to support the instructional programs of the College. As a member of VIVA, students and faculty have on-line access to databases that include thousands of digital and print journals, books, and reference sources as well as access to the Internet. Audio-visual equipment is available for previewing audio and video programs. The Robert V. Shaver Film Collection is the newest addition to the permanent collections. The Library offers strong reference support and the staff is committed to instruction in the use of resources, both on an individual and group basis. For more information on library services and information skills instruction, please call 434.797.8555.

Learning Assistance Center

The Learning Assistance Center (LAC) is located on the upper level of the Learning Resources Center. The mission of this large multipurpose area is to provide support and resources for teaching and learning. An open computer lab is available for students, staff, and public users. The LAC also provides make-up testing and testing for distance learning courses. Students are encouraged to use the LAC for group study. For more information, please call 434.797.8404.

Audio-Visual Services

Located on the lower level of the building, this LRC component provides general audio-visual operation, maintenance, and training for the College.

Distance Learning

Coordinated through the Learning Resources Center, the Distance Learning Program gives students the opportunity to attend accredited college classes in a flexible way which fits individual schedules and lifestyles. The college employs sound and acceptable practices for determining the amount and level of credit awarded for courses, regardless of format or mode of delivery. Distance learning students use videos, textbooks, study guides, Interactive Television, and the Internet to complete their coursework and earn college credits at home or at convenient off campus locations.

Using communications technologies to deliver instruction, distance-learning courses are designed to provide the same quality and content as traditional classroom-based courses. The primary difference between traditional courses and distance-learning courses centers on the degree of freedom and responsibility the student accepts when taking a distance-learning course. For some, this aspect makes distance-learning courses an ideal way of continuing their education because it alleviates many time constraints and scheduling conflicts.

All distance learning courses have an assigned instructor. In addition, distance-learning students have access to the same learning resources and student services as do students enrolled in traditional courses.

Teaching, Learning and Technology Center

The Teaching, Learning and Technology Center (TLTC) provides assistance to faculty who are developing curriculum materials and want to utilize instructional technologies in their teaching. Located in the lower level of the Learning Resources Center (LRC), the College's instructional design specialist works directly with those instructors who are interested in developing applications to support both traditional and distributed learning courses. The instructional designer also provides training for faculty and staff in the use of information technology. For more information, call 434.797.8557

Tutoring Center

The Tutoring Center provides free tutoring to currently enrolled DCC students who seek assistance with their DCC coursework. Tutoring is provided by trained professional and peer tutors. Both one-on-one peer tutoring and small group tutoring are available. DCC's Tutoring Center is nationally certified by the College Reading and Learning Association. The Tutoring Center is located on the upper level of the Learning Resources Center. For more information on tutoring services, call 434.797.6432.

STUDENT SERVICES

Counseling

As a service to current and prospective students, the College has counselors and faculty advisors who are committed to helping students with their academic, personal, career, and vocational plans. As part of this assistance, students are provided appropriate tests, inventories, college transfer information, and occupational/technical information regarding financial assistance or employment.

Testing

A well-planned testing program for students is coordinated by the Student Development staff. An appropriate placement test is required for all new students planning to enter one of the associate degree, diploma or certificate programs. This test is administered at the College, normally prior to registration. A student may retake the placement test after a five-year separation with exceptions made by the Division Dean.

Students with a documented disability should contact the Disability Services Counselor in the Counseling Office prior to taking the Placement Test. For more information on the College's testing services, please call 434.797.8460.

Freshman Preview

New students at Danville Community College are required to attend Freshman Preview, which includes opportunities for students and their parents/spouses to meet college administrators, faculty and staff, and learn more about campus resources. Included are campus tours, meetings with college officials, and information about departments/divisions, campus policies, student registration and scheduling procedures.

The students will also have the opportunity to interact with others as they participate in Freshman Preview activities. In addition, information about academic and student organizations will be available. Parents/spouses are invited to attend the Parent Preview, a special information session to assist with their student's transition to college. Students must have taken the DCC placement test and be placed in a program of study prior to attending a Freshman Preview session. Sessions are held prior to the start of the Fall Semester.

Consumer Information

Literature is available in the Student Development Office on the following areas: post graduate employment and college transfer success; curriculum retention and completion; related educational expenses; student rights and responsibilities; financial aid policies, procedures, and the award process.

Alliance for Excellence

The Alliance for Excellence is a program that supports the academic endeavors of African-American students. The Alliance is a partnership between the African-American churches and Danville, Central Virginia, Patrick Henry, and Virginia Western Community Colleges. This collaborative effort promotes an awareness of higher education opportunities and stresses the importance of academic excellence.

Neighborhood Educational Opportunity Centers

The Neighborhood Educational Opportunity Centers (NEOCs) exist as a partnership between Danville Community College and area churches and other, not-for-profit organizations. The Partnership is designed as a means of rebuilding communities and providing residents with access to higher education. The NEOCs host technology classes, GED instruction and numerous college preparedness and job readiness exercises.

Financial Aid

Danville Community College is committed in its belief that qualified students should have an opportunity to pursue educational objectives, regardless of financial resources. Full-time and part-time students may qualify for financial aid. Classes may be taken in the day or in the evening.

To be considered for financial assistance, students must apply by completing the Free Application for Federal Student Aid and have the results submitted to the Financial Aid Office. In addition, the student must enroll in an eligible curriculum and make satisfactory academic progress in the program of study. Contact the Financial Aid Office at 434.797.8567 for more information and application form

Federal Work-Study Program

This program provides an opportunity for a student who shows sufficient financial need to work while attending college. Numerous jobs are available each year on campus. Some students are assigned to off-campus community service jobs.

Federal Pell Grant Program

Full-time and part-time students who are enrolled in eligible curricula may receive non-repayable aid under this program, provided they demonstrate financial need.

Federal Academic Competitiveness Grant

Full-time students who qualify for Pell Grant, who graduated from high school after January 1, 2006 and completed a rigorous program of study, may be eligible for this grant. Contact the Financial Aid Office for more information.

Federal Supplemental Educational Opportunity Grant Program

Students who show financial need may qualify for this program. This is a non-repayable grant.

Federal Family Education Loan Program

Students who do not receive sufficient grant aid to attend Danville Community College may request a student loan under this program. Request forms are available in the Financial Aid Office. Students who wish to apply for a Federal Student Loan must also apply for federal assistance by completing the Free Application for Federal Student Aid.

College Scholarship Assistance Program

The Virginia State Council of Higher Education provides grants under this program to students who will be enrolled in participating Virginia institutions, who have been Virginia residents for at least one year, and who demonstrate sufficient financial need.

Other State Grants

Commonwealth Grant (COMA): The Commonwealth Award (COMA) Grant is a campus-based state grant program. Preference is given to students with exceptional need. To be eligible, recipient must be domiciled in Virginia and enroll for at least six (6) credits.

Virginia Guaranteed Assistance Program (VGAP)

The VGAP Grant is a campus-based state-funded program. In order to be considered a student must be: a first-time freshman, a dependant, a high school graduate with a high school grade point average of at least 2.50, a Virginia resident, and demonstrate financial need. Recipients must be enrolled as a full-time student to qualify. Recipients must maintain a minimum of a 2.0 grade point average to remain eligible for their VGAP award each semester and must complete a minimum of 24 semester hours each academic year to remain eligible for consideration during the next academic year.

Part-time Tuition Assistance Program (PTAP)

The Part-time Tuition Assistance Program Grant is a campus-based Virginia Community College System state grant program. These grants are

based on need and are awarded to eligible students who are enrolled for 1 to 6 credits a semester. These grant awards are for tuition and fees only.

Scholarships

DCC Scholarships are awarded through the College and the DCC Educational Foundation. Generally, only one application form is needed to apply for scholarships. The applications are available in the Foundation Office, Financial Aid Office, high school guidance counselors' offices and on the Educational Foundation's website. The DCC Educational Foundation reserves the right to limit the amount of each award to the endowment's annual return from investments. Scholarship listings are based on information available February 1, 2008. For more information, contact the Educational Foundation Office at 434.797.8437. Information is also available on the DCC Educational Foundation's website: http://www.dcc.vccs.edu/Foundation/foundation.htm.

Ahmed Children Scholarship

This scholarship is awarded to a full-time or part-time student who has enrolled for self-improvement with intention of completing a program or has plans for a degree. The recipient must maintain a 2.5 or better GPA and have financial need.

Alliance One International Endowed Scholarship

Funded by Alliance One International in 2000, the endowed scholarship is given to a full-time student who is in good academic and social standing with the college. Preference is given to students who are dependents of employees of Alliance One International or its predecessor companies. Second preference is given to students who are dependents of other local tobacco industry employees. Third preference is given to students who have lived for at least one year in Danville, Pittsylvania County or the surrounding area. In instances where multiple candidates meet the eligibility requirements, determination shall be based on a combination of the student's financial need and past academic achievement.

American National Bank and Trust Company Scholarship

This scholarship was made possible by American National Bank and Trust Company. The award is presented to an entering freshman who is enrolling

full time in a two-year program of study at DCC. The same student will be given preference for the award during his/her second year. The student must demonstrate a clear commitment to completing the academic program in a timely manner and cannot be eligible for other types of financial assistance.

Ashby-Pryor Endowed Scholarship

This scholarship was established in memory of Fred James and Pernie Sizer Ashby and Claude Edison and Mary Early Pryor. It is awarded to a DCC student each fall who is enrolled in at least nine credit hours and who demonstrates scholastic ability and good citizenship.

Barkhouser Endowed Scholarship

Richard and Kit Barkhouser established the Barkhouser Endowed Scholarship in 1998 to support a full-time freshman at DCC. The first-year student must reside within the DCC service region or in Caswell County, NC, and must demonstrate scholastic achievement, have at least a 2.50 high school GPA, and exhibit leadership potential.

Barksdale Honors Scholarship

The estate of Ms. Mary M. Barksdale endowed the Barksdale Honors Scholarship in 2000. DCC graduates who are transferring to accredited four-year colleges or universities must be considered by the College as "most likely to succeed." The recipients must have compiled exceptional records, both in academics and in extracurricular activities. Recipients also must have displayed leadership qualities on campus or in the community which influence positively the actions of others.

Barksdale - Rorrer Study Abroad Endowed Scholarship

The Barksdale-Rorrer Study Abroad Endowed Scholarship was established by Ms. Mary M. Barksdale, a DCC librarian until her retirement. The purpose is to enable DCC students to experience the culture and history of other countries thus broadening and promoting international understanding. The scholarship also honors former DCC history professor, Kinney Rorrer. Consideration for the scholarship includes financial need and academic achievement. Students must take the study tour as a credit course. Applications are available from Dr. Mark Wallace in the History Department at 434.797.8471.

Amy Jo Murray Bell Memorial Scholarship

The Amy Jo Murray Bell scholarship was established by family and friends in memory of Bell who attended DCC and later transferred to the Danville School of Radiology. The scholarship will be awarded annually to a student who is enrolled in the First Year Studies program with plans to complete training in radiology. The recipient must also have maintained a minimum of a 3.0 grade point average in high school or college. Preference will be given to an individual who is a single parent and has participated in community service activities.

O. T. Bonner Memorial Scholarship

The O. T. Bonner Memorial Scholarship was established in 1996 by Dr. John Bonner in memory of his father, O. T. Bonner, an educator who served as the first chair of the Danville Community College Board. The award is presented to a fulltime student at DCC.

Bucknam Scholarship

The Bucknam Scholarship, created in 1999 by Gregory and Tracy Bucknam and given in memory of Ms. Mary Barksdale, is an annual award. The recipient must be a resident of the Patrick Henry Boys Home, have graduated from high school during the same year in which the first scholarship award is received (current graduate), have maintained at least a 2.50 GPA during high school, and be enrolled full-time in any program of study at DCC. If the recipient maintains at least a 2.50 GPA at DCC during the first year, the student will be eligible to receive the Bucknam Scholarship for the second year.

Elizabeth B. Bustard Endowed Scholarship

The Elizabeth B. Bustard Endowed Scholarship is awarded to a full-time freshman who is committed to high ideals and demonstrates leadership and good citizenship. Scholastic achievement of at least a 3.00 GPA is the final criterion for this award.

James Bustard Endowed Scholarships

These scholarships, established in memory of James Bustard, a friend of the College, are presented annually to graduating DCC students who plan to transfer to an accredited four-year college or university. Other award criteria include commitment to high ideals, leadership, good citizenship and scholastic achievement.

Alexander Berkeley Carrington, Jr. & Ruth Simpson Carrington Charitable Trust Scholarships

The Carrington Charitable Trust Scholarships are awarded to two full-time students who demonstrate a commitment to completing the academic program in a timely manner and who have financial need.

James T. Catlin, Jr. - Kiwanis Scholarship

The James T. Catlin, Jr.-Kiwanis Scholarship is presented to a student who has completed two years of study at DCC; is a legal resident of Virginia Community College Region Number 12; and is transferring as a full-time student to a senior institution in pursuit of a baccalaureate degree. The purpose of the award is to recognize scholarship, to further the educational development toward leadership and citizenship of DCC students and to honor the memory of James T. Catlin, Jr. The scholarship recipient is selected by a Danville Community College Scholarship Committee with the approval of the Board of Directors of the Kiwanis Club of Danville, Virginia. The basis of selecting the recipient shall be: (1) financial need, (2) scholastic achievement, (3) leadership, and (4) citizenship.

Chatham Rotary Club Scholarship

The Chatham Rotary Club Scholarship is available to a student who is a resident of Pittsylvania County and enrolled full-time at DCC. The selection is based on academic merit and financial need.

Child Abuse Prevention Team Scholarship

Funds have been provided by the Danville Pittsylvania County Mental Health Association to assist with book and tuition costs of individuals who are working in the field of child care and who desire more knowledge and training in the child care curriculum. Eligible applicants include day care workers, home care providers, and foster parents. This award is for full-time or part-time students who may not qualify for other financial aid.

Climate Control, Inc. Endowed Scholarship

The Climate Control, Inc. Endowed Scholarship was established by the company's Board of Directors and Mr. John Cannon. Preference is given to children of employees of Climate Control, Inc. and then to Halifax County residents. To be eligible, a student must be enrolled full-time in a degree, diploma, or certificate program. The award is

renewable for a second year, provided the recipient maintains a 2.50 GPA and reapplies.

College Board Academic Excellence Scholarships

The Danville Community College Board has established two-year, full tuition scholarship to be awarded annually at each of the area's six public high schools. Eligibility will be based solely upon the class rank: the top five students at George Washington High School and Halifax County High School; and the top two graduates at Chatham, Dan River, Gretna, and Tunstall High Schools. Information about these scholarships can be obtained from the respective high school Counseling Offices.

College Board Recognition of Achievement Scholarships

The Danville Community College Board has established scholarships to be awarded to a graduate of each of the six public high schools in the College's service region. The recipient of each award is recommended by the high school on the basis of academic potential and not financial need. These scholarships are awarded annually.

Commonwealth Legacy Scholarship Program

The Commonwealth Legacy Scholarship program was established in 2006 by the Virginia Foundation for Community Colleges to increase access to higher education and to develop student leadership potential. The first DCC award was named in honor of Mrs. Rebecca McGovern. Subsequent awards will be given to a student attending DCC for the first time. The recipient must demonstrate academic excellence during high school; be a full-time, associate degree seeking student with plans to graduate from a Virginia Community College; demonstrate a willingness to promote community college education and the Commonwealth Legacy Scholarship Program; demonstrate a willingness to mentor future scholars; and demonstrate a commitment to developing leadership potential.

Corning Incorporated Endowed Scholarship

The Corning Incorporated Endowed Scholarship is presented each year to a rising sophomore who has demonstrated academic excellence. The recipient must be a full-time student (12 credit hours) enrolled in Electronics, Information Systems Technology, or Accounting.

P. Niles and Carol Daly Endowed Scholarship

The P. Niles and Carol Daly Endowed Scholarship is presented to an entering freshman who is enrolled full-time and needing financial assistance. Preference is given to Daly Seven Hotel employees and children of Daly Seven employees. The recipient must reside within the local area, must maintain a minimum 2.5 GPA, and exhibit leadership potential and good citizenship

Dan River Inc. Endowed Scholarship

The recipient of the Dan River Inc. Endowed Scholarship must be a full-time student who demonstrates a clear commitment to completing a degree program or transfer program at Danville Community College.

Danville Kiwanis Club Scholarship

The Danville Kiwanis Club Scholarship will provide awards for each of the two years a student is enrolled. The award covers tuition and books to a full-time or part-time DCC student who demonstrates financial need, scholastic ability, and good citizenship.

Danville Lions Foundation Endowed Scholarship

The Danville Lions Foundation Endowed Scholarship was established for full-time or part-time students who demonstrate visual or hearing impairments or other disabilities. The award(s) may be made for tuition, books, and fees. Tuition assistance is also available through the Danville Lions Foundation Endowment to train local teachers in sign language and other communications skills for the hearing impaired.

Danville Virginia Tech Alumni Scholarship

The Danville Virginia Tech Alumni Scholarship is presented annually to a graduating DCC student who plans to transfer to Virginia Tech as a full-time student. The award is based on commitment to high ideals, leadership, good citizenship, and a GPA of 3.00 or better in the graduate's curriculum.

Davenport Scholarship

The Davenport Scholarship was established by Mr. and Mrs. Ben Davenport, Jr., to benefit the child of an employee of Banister Bend Farms, Chatham Communications, Chatham Security Inc., Davenport Energy, First Piedmont Corporation, or Piedmont Transport. The student must be enrolled in a degree, diploma, or certificate program; and the basis of selection will be: scholastic achievement, financial need, and good citizenship. In order to receive the scholarship for a second semester, the student must maintain a 2.50 GPA for the first semester. The amount of the award will not exceed tuition for 16 hours per semester.

Robert and Jim Dunaway Scholarship

The award is made in memory of Robert and Jim Dunaway. Robert graduated from Danville Community College, Virginia Tech, and the University of North Carolina and pursued a career as an accountant. He received the McGovern General Excellency Scholarship when he graduated from DCC in 1988. Jim worked 12 years for the Pittsylvania County Sheriff's Office as a deputy.

Two scholarships will be awarded to recipients based upon the following criteria:
1. Recipient must be a second-year student enrolled in a business transfer program (focusing on accounting), who has maintained at least a 3.0 GPA and plans to transfer to a four-year institution with preference given to a student planning to attend Virginia Tech. Preference will also be given to a student who graduated from Tunstall High School.
2. Recipient must be a second-year student enrolled in the Administration of Justice program who has maintained a minimum 3.0 GPA. Preference will be given to a student or an immediate family member who is employed by the Pittsylvania County Sheriff Department.

Other requirements include: community involvement and demonstrated leadership potential and financial need even though the recipient may not qualify for financial aid. This award may be used for tuition, books, and fees.

Excelsis Research Scholarship

Mr. John Primiano, CEO of Excelsis Research, Inc., established this award in 1994 as the Danville Community College Science Scholarship. Two full-time students majoring in Science who demonstrate scholastic ability, financial need, and good citizenship will receive a scholarship.

Stephanie Ferguson Memorial Scholarship

Created in memory of Ms. Stephanie Ferguson by her parents and friends in 1991, the scholarship was first awarded in 2000. The recipient must be a current graduate of Dan River High School, maintain at least a 2.50 GPA, enrolled as a first-year student in the Child Development, Liberal Arts, or Science program, participated in extracurricular activities during high school exemplifying leadership, and exhibited a great determination to succeed.

Thelma E. Forney Endowed Scholarship

The Thelma E. Forney Endowed Scholarship has been established as a memorial to a deeply respected individual who was employed at Danville Technical Institute and Danville Community College for 27 years. The scholarship is awarded to a full-time student in the Administrative Support Technology Program, or in any other diploma-certificate program at DCC. Selection is based upon potential ability and financial need.

Archer T. Gammon Chapter #19 Disabled American Veterans/Sgt. Kenneth Gentry Memorial Scholarship Fund

The Archer T. Gammon Chapter #19 Disabled American Veterans has established the Sgt. Kenneth Gentry Memorial Scholarship Fund. Sgt. Gentry was killed in action while serving in Iraq in 1991. Each recipient will be selected in accordance with the following criteria:

1. The recipient shall be enrolling at DCC, shall be a disabled American veteran, and maintain at least a 2.00 GPA.
2. The financial circumstances of the applicant shall be such that the scholarship aid is necessary to the beginning and continuance of his/her education in college.
3. The student will be able to demonstrate a record of good citizenship and a strong belief in the American (U.S.) form of government.

Roy and Joan Gignac Endowed Scholarship

This scholarship is provided for a second-year student enrolled in electronics. If no candidate meeting this criterion is available, then the scholarship may be awarded to a student enrolled in Marketing or Business Administration. The student must also be a resident of Danville or Pittsylvania County, and preferably have a brother or sister who is attending an accredited institution of higher education as a full-time student. A 2.80 GPA in the curriculum is required for each of the two semesters that the scholarship is utilized. The scholarship must be used within 12 months of the date it is awarded and can only be used for tuition and fees. The student must demonstrate a clear commitment to completing the academic program in a timely manner and have a record of good citizenship.

Walter L. and E. Stuart James Grant Memorial Endowed Scholarships

The scholarships are awarded to children and immediate family members (defined as living in the same household) of Danville Register & Bee employees. In the event that there are no applicants from immediate family members of employees, then consideration will be given to a current Danville Register & Bee carrier in good standing or the spouse, son, or daughter of a current carrier (good standing to be determined by the Danville Register & Bee) or former carrier who gave up a route in good standing. To receive the award, the recipient must agree to assist for three hours per week with

the Estelle H. Womack Collection housed at the Danville Science Center. The full-time student must show evidence of financial need and the ability to successfully complete college-level academic requirements. Recipients are eligible to reapply for successive years.

Graphic Imaging Excellence Scholarship

In 2001, an anonymous donor established a scholarship which will be awarded each semester to a second-year student enrolled in the Graphic Imaging Technology program. The recipient must have financial need, maintained a 2.50 or better GPA, and exhibited academic promise in the printing field.

Norman D. Haar Endowed Scholarship

The Dr. Norman D. Haar Endowed Scholarship has been established in memory of an exceptional DCC Professor of Psychology. In order to be eligible, a student must have successfully completed Developmental Studies requirements and entered his/her chosen curriculum.

Hancock-Murray-Sacred Heart Church-School Scholarship

The Hancock-Murray-Sacred Heart Church-School Scholarship was established in 1996 by Pat and Cathy Daly in honor of Marguerite "Eddie" Hancock, former principal of Sacred Heart School. The scholarship is awarded to a Sacred Heart School Alumnus, a member of Sacred Heart Church, or a resident of the City of Danville, Virginia who demonstrates financial need or is no longer receiving parental support.

Rebekah L. Heldreth Memorial Scholarship

The Rebekah L. Heldreth Memorial Scholarship has been established in memory of an exceptional young lady. In order to be eligible, the recipient must be a female senior graduating from Chatham High School who has achieved a 3.0 GPA for her senior year in high school and has academic promise with a commitment to complete college, maintained high moral character, demonstrated concern for others, high ideals, good citizenship and possess leadership qualities, participated in community service, demonstrated financial need and enrolled full-time in the transfer Science program of study.

International Association of Administrative Professionals (IAAP) Scholarship

The DCC Chapter of IAAP awards scholarships for members who are returning full-time Administrative Support Technology or Office Information Processing students. Selection will be made by the IAAP Scholarship Committee based on the highest GPA attained by current members.

Intertape Polymer Group Scholarships

The Intertape Polymer Group Scholarships provide awards to children of employees of Intertape Polymer who are enrolled in a degree, diploma, or certificate program. The recipients must demonstrate scholastic achievement, financial need, and good citizenship.

Thelma Swann Johnson Memorial Endowed Scholarship

The Thelma Swann Johnson Memorial Endowed Scholarship was established in 2001 by Harry Johnson in memory of his wife, Thelma Swann Johnson. The scholarship is awarded to a sophomore who has maintained a 3.00 or better GPA and has enrolled full-time in a two-year program. The recipient must have participated in multiple activities during the first year at DCC, exemplified leadership within the community and at the College, and exhibited great determination and will to succeed.

Nathan Lester Excellence Endowed Scholarship

The Nathan Lester Excellence Endowed Scholarship has been established by The Lester Family. The award will be made to a goal-directed, motivated young person who has displayed a positive sense of excellence in art, music, or another academic arena. The recipient should be someone who might be unable to attend college without some financial assistance.

Little Life Scholarship

The Little Life Scholarship has been established for a male or female, who is attending DCC full-time or part-time and has experienced teen pregnancy but wishes to continue their education.

Fred Lloyd III Memorial Scholarship

The family and friends of long-time DCC History professor, Fred Lloyd, III, established a scholarship in his memory in 2002. The scholarship is awarded to a rising sophomore enrolled full-time in a transfer program (Liberal Arts, Science, or Business Administration). The recipient must have maintained at least a 2.5 GPA and exhibited good citizenship, character, and sound values that have been demonstrated through leadership and civic involvement.

Mildred H. Smoot McCall/SHS Class of '45 Memorial Endowed Scholarship

Established in August 2002 by Robert McCall in memory of his wife, this scholarship will be awarded to a first or second-year student who has maintained at least a 2.50 GPA while in high school and during the first year at DCC. The recipient is enrolled in either full-time or part-time as a program-placed student in a transfer program.

McGovern Endowed General Excellency Award

The McGovern Endowed General Excellency Award is presented each year at graduation. This scholarship is the result of a gift by Dr. and Mrs. Francis H. McGovern of Danville, Virginia. The recipient of this award will be a student who has completed two years at Danville Community College; has fulfilled the requirements of an Associate of Arts and Science Degree; is a legal resident of Virginia Community College Region Number 12; and is transferring to a senior institution in pursuit of a baccalaureate degree. The purpose of this award is to recognize scholarship and to further the educational development toward leadership and citizenship of Danville Community College students. The basis of selecting the recipient shall be: (1) scholastic achievement; (2) leadership; (3) citizenship.

James R. Meissner, II Memorial Scholarship

The James R. Meissner, II Memorial Scholarship was established by Mrs. Judith Meissner in January 1998 in memory of her husband who was a long-time faculty member in the Precision Machining Technology program. The scholarship will be awarded to a full-time freshman or sophomore who is enrolled in the

Precision Machining Technology program and who has maintained at least a 3.00 GPA.

Clyde and Joyce Midkiff Endowed Scholarship

The Clyde and Joyce Midkiff Endowed Scholarship is awarded to a graduate of Gretna Senior High School, enrolling full-time at Danville Community College. The award is applicable to tuition and books in the academic year in which the award is made. The award is based on financial need.

Ethel C. and Henry A. Mitchell Memorial Foundation Scholarship

The Ethel C. and Henry A. Mitchell Memorial Foundation Scholarship was established at DCC in 2002. The scholarship will be awarded to two first-year students at DCC who have maintained a high school GPA of at least 2.50; have enrolled in Public Service, Child Development, or a Liberal Arts program; have demonstrated financial need; and have performed at least one year of community service, either school-sponsored or community-based. Preference will be given to residents of the Almagro and surrounding communities in Danville.

Ann and Frank Mobley Endowed Scholarship

The Ann and Frank Mobley Endowed Scholarship is presented to an incoming full-time student from Pittsylvania County, with preference being given to a Tunstall High School student. Need, scholastic achievement of at least a 3.00 GPA for the last year in school, academic promise, and good citizenship are among the criteria for selection.

Robert E. Morgan Memorial Endowed Scholarship

The Robert E. Morgan Memorial Endowed Scholarship was established in memory of Robert E. "Bob" Morgan, a long-time professor of Electrical/Electronics at Danville Technical Institute and DCC. The award will be made to a student in the Electrical/Electronics curriculum who shows potential for successfully completing the program and does not qualify for other financial assistance.

Lyle Carter Motley, Sr. Endowed Scholarship

The Lyle Carter Motley, Sr. Endowed Scholarship was established in memory of Lyle C. Motley, a broadcaster of WMNA in Gretna, VA. The award will be made to a student who has graduated from any Pittsylvania County High School. The recipient must be enrolled in the Electronics program and have maintained at least a 3.0 GPA during high school or during the first year at DCC. Preference will be given to a student who is interested in working in the communications field such as radio or television.

Shaun William Murray Memorial Scholarship

The Shaun William Murray Memorial Scholarship was established by family and friends to recognize the former DCC student who died October 29, 2004. The award is given to a second-year student who is enrolled in the Liberal Arts program with plans to major in fine arts, or enrolled in the Graphics Imaging Technology program. The recipient must have maintained at minimum of 3.0 GPA in high school or in college. Preference is given to a recipient who has participated in community service activities, and who has lived in North Danville and attended any one of the following three schools: Woodrow Wilson, Irvin Taylor, or O.T. Bonner schools.

Vera B. Murphy Memorial / John M. Langston High School Reunion Committee Scholarship

This scholarship was established in memory of a former Danville principal and educator, Vera B. Murphy. The award will be made to a graduating high school senior who will enroll full-time at DCC, has maintained a 2.5 or better GPA, and resides in Danville, Pittsylvania County or Halifax County.

Kenneth L. Neathery Memorial Endowed Scholarship

The Kenneth L. Neathery Endowed Memorial Scholarship has been established at DCC to provide students with educational opportunities. Mr. Neathery devoted many years of service to the College. His deep concern for students and his belief in the worth of each individual guided his every action. This scholarship shall be awarded to a full-time program-placed business student at DCC. The scholarship may be awarded to a student

in any curriculum who demonstrates scholastic achievement and a commitment to high ideals.

Lawrence Olds Memorial Endowed Scholarship

The Lawrence Olds Memorial Endowed Scholarship was established as a living tribute to an individual dedicated to the education of the community. The scholarship will be awarded annually to a student who demonstrates academic potential and good citizenship.

Rexford E. O'Neil Endowed Scholarship

The Rexford E. O'Neil Endowed Scholarship, named in memory of DCC's long-time registrar, is awarded to an entering freshman enrolled fulltime in an associate degree or diploma program. The award is restricted to tuition and fees. The recipient should be a student who does not qualify for other types of financial assistance and shows promise of educational success.

Peoples Mutual Telephone Endowed Scholarship

The Peoples Mutual Telephone Endowed Scholarship, established in 1989 by the E. B. Fitzgerald III family, is awarded annually and may be used for tuition and fees. The recipient shall be selected in accordance with the following criteria:

1. Up to six semesters and three summer sessions provided the student maintains at least a 2.50 GPA, has entered a curriculum, remains in the program, demonstrates good citizenship, and reapplies annually.

2. If no candidate qualifies under the above, then the scholarship shall be awarded to a student who has resided in the Peoples Mutual Telephone service area for one year prior to the award.

Peoples Mutual Telephone Company, Inc. - Tech Prep Scholarship

Peoples Mutual Telephone Company, Inc. an independent telephone firm located in Gretna, Virginia, expanded its scholarship endowment in 1998 in order to provide a scholarship for a graduate of the Tech Prep program who has maintained at least a 2.50 GPA and who will continue his/her education at DCC. Preference for the scholarship will be given to a Gretna High School student or to a student from Pittsylvania County.

Shirley Day Primiano Scholarship

The Shirley Day Primiano Scholarship has been established by Dr. Shirley Primiano, a local educator. The award may be used for tuition and books, and is given to a full-time or part-time student. The selection of the recipient will be based upon financial need, scholastic ability, and good citizenship.

Robert H. Ramey, Jr. Endowed Scholarship

The Robert H. Ramey, Jr. Endowed Scholarship is available to a student in a degree, certificate or diploma program and must maintain at least a 2.5 grade point average prior to the award and during the academic year.

1. Preference will be given to a student who attends any unit of the Boys & Girls Clubs within the city limits of Danville, VA.
2. Second preference will be given to a minority student, preferably a male.
3. Third preference will be based on financial need.

Sandra Lee Riddle/RACO Endowed Honor Scholarship

This scholarship shall be awarded to a graduate of Greta Senior High School or someone who has lived within ten miles of Gretna for five years. The award may be used for tuition and books in the academic year the award is made. The recipient must be a full-time student entering a curriculum at DCC. Preference will be given in the following order:

1. A student planning to enter a registered nursing program

2. A business student

3. A student in other programs

In order to use this scholarship for a second semester; a full-time student must earn at least a 2.50 GPA for the first semester of the scholarship.

Rippe Endowed Scholarship for Women in Science and Business

Established in 1992 by Rippe's and Ben Rippe, this scholarship is awarded to a full-time female student enrolled in a college transfer program, majoring in business or science. The selection criteria is based on the educational ability of the student.

Riverdan Benevolent Fund Endowed Scholarship

The Riverdan Benevolent Fund Endowed Scholarship has been established for Dan River Inc. employees and their dependents. The award may be used for tuition, books, and fees in the academic year in which the award is made. Length of continuous employment at Dan River Inc. is a factor in determining eligibility. This award is also available to sons, daughters, and spouses of deceased employees, who at the time of death had three or more years of continuous service.

Roberts-Hunt Endowed Scholarship

The Roberts-Hunt Endowed Scholarship is awarded to a student who is a resident of South Boston or Halifax County, and is made possible by a gift of Dr. and Mrs. Lucien W. Roberts.

James A. Robertson Scholarship

The James A. Robertson Scholarship was established through the generosity of James and Ann Robertson in 1992. Upon Mr. Robertson's death in 2001, the scholarship was first awarded in 2002. Multiple scholarships are awarded annually to students who have financial need.

Ruritan National Foundation Scholarship

In partnership with the Ruritan National Foundation, the DCC Educational Foundation, Inc., offers one matching scholarship to a recipient of the Ruritan National Foundation Scholarship, who lives within the DCC service region of the City of Danville and the Counties of Halifax and Pittsylvania.

Schoolfield High School Reunion Committee Endowed Scholarship

The Schoolfield High School Reunion Committee Endowed Scholarship was established in 2001 through the generosity of members and alumni of Schoolfield High School. The scholarship will be awarded to a current high school graduate who has maintained at least a 3.00 GPA while in high school, has financial need, has been involved in community and school-related activities and demonstrated leadership potential. The student may be enrolled in any DCC program either fulltime or part time.

Wendell O. Scott Memorial Scholarship

The Scott family and the Wendell Scott Scholarship Foundation initiated the Wendell O. Scott Memorial Scholarship fund in 1994 with the first academic award presented in 1999. The award is given to a student enrolled in the automotive/auto body program or a related technical program. The student must maintain at least a 2.50 GPA and have athletic potential.

Peyton Sellers Champion Award

Peyton Sellers, a DCC 2004 motorsports management graduate, received the 2005 Dodge Late Model Weekly Championship. Because of his outstanding leadership, a $1,000 award has been established in his name and the first award made in 2006-2007. To be eligible, the recipient must be a current high school graduate from Danville, Halifax County or Pittsylvania County, majoring in a technical program. The recipient must have academic promise and possess and display leadership potential.

Obra E. and Shirley J. Spangler Endowed Scholarship

The Obra E. and Shirley J. Spangler Endowed Scholarship Fund was established in 1996. A recipient must be enrolled in the printing program; have maintained at least a 2.50 GPA; and have demonstrated good citizenship through community involvement.

Stendig-Miller Family Endowed Scholarship

Stendig-Miller Family Endowed Scholarship was established by Mr. and Mrs. Joseph Stendig and the late Mrs. Minnie Miller. It is awarded annually to a student entering DCC, enrolled full time or part time in a program. The award is to be used for tuition and

books. Selection is determined by financial need and the student's strong commitment to acquiring an education.

Christopher Daniel Turner Scholarship

The Christopher Daniel Turner Scholarship was first awarded in 1997 in memory of an outstanding young man who died tragically during his military service. The award was established by his parents and provides for tuition, books, and fees. The scholarship is given to a student who has been a Law Enforcement Explorer in Post 911, Danville, VA for at least six months, resides in Danville or Pittsylvania County, and is enrolled or enrolling in the Administration of Justice program. The recipient must demonstrate financial need and have a GPA of at least 2.50.

U.S. Military Vets M/C Patriotic Scholarship

Given by the U.S. Military Vets M/C VA 2 Chapter in 2006, this scholarship is awarded to a veteran, spouse, or child of a veteran with an Honorable, General, or Medical Discharge or Certificate of completion of ROTC from high school and have 12 or more credit hours at DCC. The recipient must maintain a 3.0 grade point average or better and complete a 500-word essay on a patriotic theme determined by USMV M/C.

Melvin C. and Jean Harper Vernon Scholarship

The Melvin C. and Jean Harper Vernon Scholarship was first awarded in 1996 by Main Street United Methodist Church in honor of Mrs. Vernon's dedication to using musical talent as a ministry. Since that time, Mrs. Vernon and her husband, Melvin, have continued to provide the award for DCC students who have an interest in choral direction or sacred musical performance. Preference will be given to a student from the service region that plans to complete a four year degree.

Virginia Bank and Trust Company Endowed Scholarship

Established by the Virginia Bank and Trust Company, this tuition scholarship is presented to a rising sophomore who has completed 30 semester hours in Business Management or Marketing at DCC. The student is required to have a 2.75 GPA or above, reside in the Danville area (within 30 miles of the main office of Virginia Bank and Trust Company), and be taking at least 12 credit hours. The award will be based on need, scholastic ability, and good citizenship.

Jack I. White Endowed Scholarships

The Jack I. White Endowed Scholarships were established by a bequest from the estate of Miss Annie E. White in memory of her sisters, Miss Elizabeth H. White and Miss Juliette I. White. Recipients must be graduates of Dan River High School who demonstrate financial need and sufficient aptitude and commitment to complete a college education. One or more full tuition scholarships will be made each year. Announcement of the recipient(s) will be made at the Dan River High School Commencement.

Whittle Family Endowed Scholarship

The Whittle Family Endowed Scholarship, established by Mr. and Mrs. Henry D. Whittle, Jr., is an award for tuition and books. Selection of the recipient is based on need, scholastic ability, and good citizenship.

Wilkins & Co. Realtors Scholarship

Mr. Hampton Wilkins with Wilkins & Co. Realtors created the scholarship in 1999 to recognize a rising sophomore enrolled in the Marketing program who demonstrates academic ability and has maintained a 2.50 or better grade point average. Wilkins & Co. Realtors also provides funding for four students to take the Virginia Real Estate Licensing Exam.

Plumer Wiseman Endowed Scholarship

The Plumer Wiseman Endowed Scholarship was established in memory of Mr. Plumer Wiseman, a dedicated volunteer at the Estelle H. Womack Museum of Natural History, by the John James Westbrook Society and the DCC Educational Foundation. The purpose of the award is to provide an opportunity for a full-time student to receive tuition assistance in return for working for three hours per week with the Estelle H. Womack Collection housed at the Danville Science Center. The student must have at least a 2.50 GPA in the major field and be working towards a degree, diploma, or certificate.

Woodward Scholarship

The Woodward Scholarship will be awarded to a high school senior who has overcome obstacles in

order to graduate and obtain a high school diploma. The recipient must have potential for success in post secondary education and future work; enroll in any certificate, diploma, or degree program at DCC; and maintain at least a 2.00 GPA while enrolled at DCC. Recommendations will be solicited from the Regional Alternative Schools in Halifax County and Danville/Pittsylvania County, the Southside Regional Group Home in Halifax; Patrick Henry Boys Home; and the directors of Social Services in Danville, Halifax County, Pittsylvania County, and Farmville.

Garland M. Wyatt Endowed Scholarship

The Garland M. Wyatt Endowed Scholarship is presented to a student enrolled in a business related curriculum at DCC who demonstrates financial need.

Wyatt-Benton Endowed Scholarship

The Wyatt-Benton Endowed Scholarship was established by Landon and Kathryn Benton Wyatt in memory of their parents. The award is made to a rising sophomore, based on need, scholarship, and good citizenship.

L. Wilson York Endowed Memorial Scholarship

The L. Wilson York Endowed Memorial Scholarship was established as a tribute to an outstanding member of the community who placed a high value on education. York served on the DCC Educational Foundation Board as treasurer, and was a member of the Scholarship Committee. The award is presented to a student who shows academic promise regardless of financial resources.

Other Programs

Other financial aid assistance and options may be added throughout the year. Students are encouraged to regularly contact the Financial Aid Office, the Educational Foundation Office, or check the DCC webpage (www.dcc.vccs.edu) for information on such programs and/or scholarships.

Full-time Academic Status

Official enrollment for each semester must be 12 semester hours or more, not audit, to permit certification of full-time student status for Veterans Administration or Social Security benefits, and most other purposes.

Veterans

Programs and courses of study at Danville Community College are approved by the State Department of Education for payment of veteran's benefits. Applications for the G.I. Bill are available from the Financial Aid Office in the Wyatt Building. Veterans Education benefits information is also available online at www.gbill.va.gov. The applications for benefits may be returned to the Financial Aid Office. Call 434.797.8567 for more information.

Career Services

The College maintains Career Service resources in the Admissions/Counseling Office. These are available to students who desire to secure part-time or full-time employment while attending college, during vacation, or after graduation. Occupational information on job requirements and opportunities is also provided. There is also a Job Placement website for students and employers. Students can post their resumes on the website. Employers can post job vacancies and review students' resumes. The site is found on the DCC homepage at www.dcc.vccs.edu/jobs. For more information, contact 434.797.8520.

Full-time Employment

The College maintains continuous contact with the State employment service, business, industry, the professions, and government for the latest information about jobs. Prior to graduation, students may interview with potential employers who recruit on campus. The Career Placement Service also provides assistance with the ethics and techniques of interviewing. For more information, contact the coordinator at 434.797.8520.

Part-time Employment

The Career Placement Office assists students in securing employment while enrolled in school. An effort is made to advise students of jobs which may relate to their college programs. The experience gained will assist them in finding permanent and satisfying positions. Students should limit themselves to approximately 15 hours per week if they are enrolled full-time. Call 434.797.8520 for information.

Student Activities

The student activities program is designed to provide a variety of meaningful educational, cultural, and social experiences. Clubs and organizations available* include:

Afro-American Culture Club
Baseball Club
Basketball Club
Better Earth and Animal Treatment Society (BEATS)
Collegiate Entrepreneurs' Organization (CEO club)
Dental Hygiene Club
Future Educator's Club
Gospel Ensemble
Graphics Club
Honors Program
International Association of Administrative Professionals (IAAP)
Justice Club (American Criminal Justice Association)
National Technical Honor Society
Phi Theta Kappa (International Honor Society)
Photography Club
Practical Nursing Club
Sigma Kappa Delta (English Honor Society)
Soccer Club
Student Government Association

All of the clubs and activities have a staff advisor and/or sponsor. Official recognition is given only to scholastic, civic, athletic, professional and religious clubs and organizations which have been approved by the Student Government Association and the Director of Student Development and Enrollment Management. Should a sufficient number of students desire a particular activity, they must petition the Student Government Association for official recognition.

*(*as of 3/1/2008)*

Student Handbook

The student handbook describes student activities and organizations as well as student rights and responsibilities. It also lists the College rules and regulations. Students are bound by the policies set forth in the Student Handbook. The handbook is widely distributed across campus and is available in the Admissions Office and on the website.

Student Conduct

Each individual is considered a responsible adult, and it is assumed that men and women of college age will maintain standards of conduct appropriate to membership in the College community.

Failure to meet standards of conduct acceptable to the College may result in disciplinary probation, depending upon the nature of the offense. The Student Handbook includes the complete College Initiated Code of Student Conduct and Discipline and explains the channels of communication available to students.

Senior Citizen Tuition and Fees Waiver

The Senior Citizens Higher Education Act of 1974, amended in 1977, 1982, and 1989, has established specific fee waiver provisions for Virginia residents who have reached 60 years of age and wish to attend classes at a state-supported institution of higher education.

1. To be eligible for free tuition and fees for CREDIT COURSES, part-time or full-time, a person must meet the following criteria:
   • be 60 years of age or older;
   • be a legal resident of Virginia
   • had a taxable income not exceeding $15,000* for Federal income tax purposes for the year preceding the year in which enrollment is sought; be admitted to the College as a student.
2. To be eligible for free tuition for AUDIT OF CREDIT COURSES or for taking NONCREDIT COURSES (not to exceed three

courses per term), a person must meet the following criteria:

- be 60 years of age or older;
- be a legal resident of Virginia;
- and be admitted to the College as a student.

Any senior citizen planning to enroll at the College should contact the Office of Admissions and Records when registering for classes under the tuition waiver program. Paragraph 23-38.56 of the Senior Citizens Higher Education Act states in part "…a senior citizen shall only be admitted to a course in which enrollment is sought after all tuition paying students have been accommodated." If eligible senior citizens wish to enroll in a course free of charge, they must wait until after the registration period for tuition paying students is over and then register on a space available basis. If they wish to reserve a place in a class, they are welcome to register in the same fashion as any fee-paying student. In doing so, the refund policy of the College shall apply the same as for any fee-paying student. Note: *Income restriction subject to change. Contact the Admissions Office for more information.

Waived Tuition

Section 23-7.1 of the Code of Virginia provides that free tuition for State-supported institutions be granted to children of: (1) deceased or permanently disabled veterans of the armed forces, or (2) prisoners of war or persons missing in action; or (3) persons who have been killed in the line of duty while employed or serving as a law enforcement officer, a fire fighter, or a member of a rescue squad. To be eligible for such aid, the student must be between the ages of 16 and 25, and the parent must have met certain State residency requirements.

If you are eligible for the waiver of tuition and required fees under items (1) or (2) above, you must present a letter of certification from the State Division of War Veterans' Claims to the DCC Business Office before tuition can be waived. Requests for applications should be directed to the Director, Division of War Veterans' Claims, Commonwealth of Virginia, 210 Franklin Road, S.W., Roanoke, VA, 24011. If possible, applications should be submitted at least four months before the expected date of matriculation.

If you are eligible for the tuition waiver under item (3) above, you must provide certification from the chief administrative officer of the law enforcement agency or the State Fire Marshall that the deceased parent was employed or serving as a

law enforcement officer or fire fighter or a member of a rescue squad and was killed in the line of duty. This certification must be submitted to the Business Office/Cashier so that a determination can be made on the request for free tuition and required fees

Bookstore

DCC's Bookstore is operated for the convenience of the students, faculty, and staff. Operating hours are posted each term. The bookstore offers a variety of products including books; supplies; and discounted computer items such as software, hardware, and other peripherals. The Bookstore also sponsors the monthly Student Spotlight and an Excellence in Academics Scholarship.

Return and Refund Policy

Cash register receipts must be submitted for a refund. All refunds are made by check. The refund will be mailed within four to six weeks of the return date. New books and related materials must be in new, resalable condition to obtain a refund. Names should not be written in books until the student is sure he/she will remain in the class. Receipts are required for state audit purposes. If a receipt is unavailable, exchanges may be permitted for equal value.

Textbooks

Textbooks may be returned for a refund until the last day of the add/drop period. An official drop form along with the dated bookstore receipt is required.

General Books

General books such as trade paperbacks, hardcover fiction, and non-fiction are non-refundable.

Calculators and Electronics

Refunds on calculators are not available. Defective items are not replaced after 30 days of purchase. Merchandise must be returned with its carton, related product materials (instructions, warranty, etc.) and the dated sales receipt. For defective merchandise purchased and held for more than 30 days, the manufacturer or local service outlet must be contacted directly.

Computer Software

Computer software that is in its original shrink-wrap and is the current version may be returned

within five days of the purchase date. There are no refunds on opened software.

General Merchandise

All merchandise purchased from the bookstore other than the above is non-refundable. Defective merchandise may be exchanged for like items.

Used Books

The Bookstore purchases and resells used books to provide more reasonable prices for students. Buy-back dates are posted around the campus prior to each book-buy. Used book purchases are based on the need for specific books.

Parking and Traffic

All student, faculty, and staff vehicles that are parked on the campus must bear a current DCC parking sticker. Spaces for the faculty and staff are clearly marked, and they are reserved for faculty and staff only. Student parking spaces are marked with white lines. Faculty and Restricted spaces are marked with yellow lines. The College provides designated parking areas to accommodate handicapped students. Students should park only in parking spaces painted white.

Parking permits are issued to students at the College Information Desk, located on the first floor of the Wyatt Building. Faculty and staff permits are available in the Office of the Vice President of Financial and Administrative Services. Parking permits for the disabled are issued in the Office of the Vice President of Academic and Student Services.

The College has a 20 mile per hour speed limit within parking areas and 25 mile per hour speed limit on Neathery Lane. These limits are strictly enforced. Anyone violating these limits will have their parking privileges revoked. Security personnel will issue tickets for all parking violations.

Individuals receiving more than one ticket will be subject to the College-Initiated Code of Student Conduct and Discipline, which includes towing.

Drug and Alcohol Abuse Policy

Danville Community College is committed to providing a drug-free environment for its employees and students. It is a violation of College rules for students to manufacture, distribute, dispense, possess, or use controlled substances while participating in College-related activities, on or off campus. Students who are using or dealing drugs

are subject to disciplinary procedures. Students who are convicted of drug-related offenses are required to notify the Vice President of Academic and Student Services within five (5) days of such conviction. Students who are involved with drugs or who have drug-related problems are encouraged to contact the Director of Student Development and Enrollment Management for assistance in obtaining treatment. (All such contacts will remain confidential.) For more information, see the Student Handbook/Calendar or contact the Director of Student Development and Enrollment Management. The College is committed to providing on-going educational information to students covering the effects and consequences of substance abuse.

Campus Security and Crime Awareness Annual Report

In compliance with the Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act (formerly known as the 1990 Student Right-to-Know and Campus Security Act), Danville Community College annually provides the following information to students, faculty, staff, the College Board, and the community:
- Procedures for Reporting Crimes and Other Emergencies
- Access to the Campus Facilities and Campus Security
- Campus Awareness Programs Relative to Safety and Security
- Vital Statistics
- College Policy on Alcohol and Illegal Drugs

The information is published in the Danville Community College Campus Security and Crime Awareness Annual Report. A printed copy of this information can be obtained from the Office of the Vice President of Financial and Administrative

Services. The report is also published on the College's website at www.dcc.vccs.edu/crime.doc.

Firearms and Other Weapons

Firearms and dangerous weapons of any type are NOT PERMITTED on or in campus facilities, except when carried by bona fide law enforcement officers in their official capacities. Intentional use, possession, or sale of firearms or other dangerous weapons is strictly forbidden and is a violation of college policy as stated in the Student Handbook and DCC Policy Manual.

Policy Statement for the Prohibition of Sexual Harassment

Danville Community College shall not tolerate any verbal or physical conduct by any member of the College community which constitutes sexual harassment of any other member of the College community as outlined in Part 1604.11 Discrimination Because of Sexual Harassment, Title VII, Sec. 703, of the Civil Rights Act of 1964, as amended; or other applicable State or federal law.

Upon receipt of a complaint of sexual harassment, the College will take action appropriate to the charge presented by the complainant. All faculty, staff, students, and administrators will be held accountable for compliance with this policy.

The complete document can be found in the College Policy Manual which is on record in the Library and available on the College's website: http://www.dcc.vccs.edu/aboutDCC/Documents/Documents.htm

Information Technology Resources

Danville Community College provides telecommunications centers, library technological infrastructure, and computing centers to support the academic programs of the College. Users of these resources are expected to abide by the established Computer Ethics Guidelines (See page 231).

PROGRAMS OF STUDY

Transfer Associate Degrees
Associate of Arts and Science

Business Administration
Liberal Arts
Humanities Specialization
Social Science Specialization
Science

Since much of the coursework taken during the first two years of a Bachelor's Degree is in the area of general education, Danville Community College offers transferable courses to meet the first two years' requirements for a variety of four-year degree programs. Listed below are several illustrations of four-year degrees with the recommended two-year program at DCC that would serve as good preparation for transfer. This list is not all-inclusive. Please contact DCC's Counseling Office at 434.797.8460 for advice on a specific program at a particular university. You can also review the online resources under "Transfer Talk" at the following link: http://www.dcc.vccs.edu/Departments/a&s/Advisement/transfer.htm

Four-Year Degree/Teaching Option	DCC Associate Degree Counterpart
Accounting	Business Administration
Actuarial Science	Business Administration
Agriculture	Science
Anthropology	Science
Archeology	Science
Business Administration	Business Administration
Chemistry	Science
Computer Science	Science
Communications	Liberal Arts – Humanities Specialization
Early Childhood Education	Liberal Arts
Economics/Finance	Business Administration
Engineering	Science (may need to transfer after one year to avoid loss of credits)
Civil, Electrical, Mechanical, Systems or any B.S.E. major	
English	Liberal Arts-Humanities Specialization
Forestry	Science
Hotel Management	Business Administration
Information Technology	Business Administration
International Relations	Liberal Arts-Social Science Specialization
Journalism	Liberal Arts-Humanities Specialization
Marine Biology	Science
Marketing	Business Administration
Nursing (B.S.)	Science
Paleontology	Science
Performing Arts	Liberal Arts-Humanities Specialization
Pharmacy	Science
Philosophy and Religion	Liberal Arts-Humanities Specialization
Physical Therapy	Science
Political Science	Liberal Arts-Social Science Specialization
Pre-Law	Liberal Arts-Any Specialization
Pre-Med	Science
Psychology	Liberal Arts-Social Science Specialization
Secondary Education	Depends on intended teaching field (see note below)
Social Work	Liberal Arts-Social Science Specialization
Sociology	Liberal Arts-Social Science Specialization
Speech Therapy	Liberal Arts
Sports Management	Business Administration
Sports Medicine	Science
Zoology	Science

Note: Persons interested in a teaching career should discuss options with a counselor or academic advisor. Also see page 59 for other options in the pre-teacher program.

Articulation Agreements

DCC students who intend to transfer to four-year colleges or universities may take advantage of DCC's Articulation or Guaranteed Admission Agreements as well as the Guaranteed Admission Agreements set up by the Virginia Community College System (VCCS). Qualified graduates seeking transfer to these schools will be admitted automatically with full third-year status upon application. Admission to a given institution does not guarantee admission to particular degree-granting programs, majors, or fields of concentration. Admission to specific programs may require, for example, a minimum grade point average and specific prerequisite courses.

Students seeking transfer must have graduated from DCC with the minimum grade point average (GPA) articulated by the four-year college or university. Students also must sign a letter of intent to transfer to the desired institution, typically during their sophomore year.

DCC has Articulation or Guaranteed Admission Agreements with these colleges and universities:

American Public University System (Criminal Justice)
Averett University (General, Criminal Justice, Early Childhood Education)
Bluefield College
Davis and Elkins College
Eastern Kentucky University (College of Justice and Safety)
Excelsior College
Ferrum College (Criminal Justice)
Founders College
Franklin University
James Madison University
J. Sargeant Reynolds Community College (JSRCC-DCC Joint Venture
    Respiratory Therapy Program)
Longwood University (General and Business & Economics)
Montreat College
Old Dominion University
Radford University (General, Computer Science and Technology,
    Information Science and Systems)
Saint Paul's College
University of Richmond
Virginia Intermont College (Criminal Justice)
Virginia State University
Virginia Union University
Virginia Western Community College (VWCC-DCC
    Joint Venture Dental Hygiene Program)

Current as of 2/11/08

The Virginia Community College System (VCCS) has Guaranteed Admission Agreements with these colleges and universities:

Christopher Newport University
College of William and Mary
ECPI College of Technology
Emory and Henry College
Hollins University
Liberty University
Longwood University
Lynchburg College
Mary Baldwin College
Norfolk State University
Old Dominion University
Radford University
Randolph College
Regent University
Regis University
Strayer University
Sweet Briar College
University of Mary Washington
University of Phoenix
University of Virginia
   UVA - Engineering
University of Virginia's College at Wise
Virginia Commonwealth University
Virginia Union University
Virginia State University
Virginia Tech
   College of Agriculture and Life Sciences
   College of Engineering
Virginia Wesleyan College

List current as of 4/04/08. For the most current list, visit http://www.vccs.edu/Default aspx?tabid=106.

Further information on transfer and Guaranteed Admission Agreements can be found at:

DCC's Student Success Center
http://www.dcc.vccs.edu/success/success2.htm
State Council for Higher Education (SCHEV)
http://www.schev.edu/Students/xfr.asp
Virginia Community College System (VCCS)
http://myfuture.vccs.edu/transfer

    Admission to a college under the Guaranteed Admission Agreement does not mean admission to a program with specific admission requirements. Please talk to a DCC transfer counselor and contact the admissions office at the college to which you intend to transfer for any special requirements applicable to your program of study.
    Transfer from VCCS colleges to public institutions is facilitated by the State Policy on Transfer. Students desiring additional information about transfer programs and courses should contact the Chief Transfer Officer at a specific institution. The State Council of Higher Education (SCHEV) monitors and coordinates statewide transfer policy and activities through the State Committee on Transfer.

Business Administration

Award: ASSOCIATE OF ARTS AND SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Arts and Science Degree in Business Administration is designed for students who plan to transfer to a four-year college or university to complete a baccalaureate degree program in Business Administration, Accounting, Business Information Systems, Economics, Finance, Marketing, or Management.

Admission Requirements: In addition to the admission requirements established by the College, entry into this program requires completion of four units of high school English, three units of college preparatory mathematics, one unit of Laboratory Science, and one unit of Social Studies. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: This program requires courses in the humanities, natural sciences and social sciences, in addition to the Principles of Economics, Principles of Accounting, Introduction to Information Systems, and Business Statistics, usually required in the first two years of a baccalaureate Business program. Courses should be selected to satisfy the requirements of the senior college or university to which you plan to transfer. You are urged to familiarize yourself with the college or university to which transfer is contemplated. A DCC counselor will help you in the initial planning of your program. You will also be assigned an academic advisor in the Business Department who will assist you in course selections at Danville Community College. In order to prepare for junior class standing at a four-year college or university, you must normally complete a program at the community college which is comparable in length and course content to the first two years of the program at the four-year institution. Upon satisfactory completion of this program at DCC, you will be awarded the Associate of Arts and Science Degree (AA&S) in Business Administration.

Program Requirements: To receive the Associate of Arts and Science Degree in Business Administration, you must complete a minimum of 62 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired sequence, except for sequence courses or others requiring prerequisites.

Business Administration

First Semester		Lecture Hours	Lab Hours	Course Credits
BIO 101	General Biology I	3	3	4
or				
CHM 101	General Chemistry			
or				
CHM 111	College Chemistry I			
ENG 111	College Composition I	3	0	3
HIS 101	History of Western Civilization I			
or				
HIS 121	U. S. History I	3	0	3
MTH 163	Precalculus I	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**13**	**3**	**14**

Second Semester		Lecture Hours	Lab Hours	Course Credits
BIO 102	General Biology II	3	3	4
or				
CHM 102	General Chemistry I			
or				
CHM 112	College Chemistry II			
ENG 112	College Composition II	3	0	3
HIS 102	History of Western Civilization II			
or				
HIS 122	U. S. History II	3	0	3
or				
Elective				
MTH 271	Applied Calculus I	3	0	3
BUS 147	Intro. to Business Info. Systems	2	2	3
PED/HLT	Physical Ed./Health	0	2	1
Total		**14**	**7**	**17**

Third Semester		Lecture Hours	Lab Hours	Course Credits
ACC 211	Principles of Accounting I	3	0	3
BUS 221	Business Statistics I	3	0	3
ECO 201	Principles of Economics I	3	0	3
EEE	Humanities Elective*	3	0	3
EEE	Social Sciences Elective*	3	0	3
PED/HLT	Physical Ed. /Health	0	2	1
Total		**15**	**2**	**16**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
ACC 212	Principles of Accounting II	3	0	3
BUS 227	Quantitative Methods	3	0	3
ECO 202	Principles of Economics II	3	0	3
EEE	Humanities Elective*	3	0	3
EEE	Elective	3	0	3
Total		**15**	**0**	**15**

Total Minimum Credits for the Associate of Arts and Science Degree in Business Administration **62**

Note: Choice of elective courses should be based on senior institution requirement. Students should contact their faculty advisor for specific requirements.

Liberal Arts

Award: ASSOCIATE OF ARTS AND SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Arts and Science degree program in Liberal Arts is designed for students who plan to transfer to a four-year college or university to complete a Bachelor of Arts degree program in any of the liberal arts. This Associate degree may also be appropriate for students who plan to complete a baccalaureate degree program with certification to teach elementary or secondary English, humanities, or social sciences.

Admission Requirements: In addition to the admission requirements established for the College, entry into this curriculum requires completion of four units of high school English; two units of college preparatory algebra; one unit of college preparatory geometry; one unit of laboratory science; and one unit of history. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: This curriculum requires courses in the humanities, natural sciences, mathematics, social sciences, and health and physical education. You are urged to acquaint yourself with the requirements of the major

department in the college or university to which transfer is contemplated. A DCC counselor will help you in the initial planning of your program. You will also be assigned an academic advisor in the Division of Arts and Sciences who will assist you in schedule preparation for the time you are enrolled in the Liberal Arts curriculum at Danville Community College. In order to prepare for junior class standing at a four-year college or university, you must complete a program at the community college which is comparable in length and course content to the first two years of the program at the four-year institution. Upon satisfactory completion of the program at Danville Community College, you will be awarded the Associate of Arts and Science Degree in Liberal Arts.

Program Requirements: : To receive an Associate of Arts and Science Degree in Liberal Arts, you must complete a minimum of 63 credits with a 2.00 or better grade point average. The following outline represents a typical order of courses taken by full-time day students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites in the course descriptions portion of this Catalog.

Focus Courses: A sequence of four Focus Courses must be selected by a Liberal Arts student for presentation to the academic advisor. Approval by the advisor is required. The Focus Courses should be related to each other and should also be accepted in transfer to the four-year program of the student's choice.

Liberal Arts

First Semester		Lecture Hours	Lab Hours	Course Credits
SDV 100	College Success Skills	1	0	1
ENG 111	College Composition I	3	0	3
MTH 163	Precalculus I	3	0	3
—	[1]Focus Course I			3-4
BIO 101	General Biology I	3	3	
or				
CHM 111	College Chemistry I	3	3	
or				
GOL 105	Physical Geology	3	3	
or				
CHM 101	General Chemistry	3	3	4
—	Approved Computer Elective	2-3		2-3
Total		**—**	**—**	**16-18**

Second Semester

		Lecture Hours	Lab Hours	Course Credits
ENG 112	College Composition II	3	0	3
MTH	Approved Mathematics Course	3	0	3
—	[1]Focus Course II			3-4
BIO 102	General Biology II	3	3	
or				
CHM 112	College Chemistry II	3	3	
or				
GOL 106	Historical Geology	3	3	
or				
CHM 102	General Chemistry II	3	3	4
—	Humanities			
or	Social Science Elective	3	0	3
Total		**—**	**—**	**16-17**

Third Semester

		Lecture Hours	Lab Hours	Course Credits
ENG	Literature I (ENG 241 or ENG 243)	3	0	3
HIS 101	History of Western Civilization I		3	0
or				
HIS 121	United States History I	3	0	3
SOC	[2]Social Science Requirement	3	0	3
—	[1]Focus Course III	3	0	3
HLT/PED	[3]Approved "Wellness" Elective	—	—	1
—	Humanities or Social Science Elective	3	0	3
Total		**—**	**—**	**16**

Fourth Semester

		Lecture Hours	Lab Hours	Course Credits
ENG	Literature II (ENG 242 or ENG 244)	3	0	3
HIS 102	History of Western Civilization II	3	0	
or				
HIS 122	United States History II	3	0	3
SOC	[2]Social Science Requirement	3	0	3
—	[1]Focus Course IV	3	0	3
HLT/PED	[3]Approved "Wellness" Elective	—	—	1
Total		**15**	**0**	**15**

Total Minimum Credits for the Associate of Arts and Science Degree in Liberal Arts.......................**63**

[1]The four Focus Courses (minimum of 12 credits) must be approved by the academic advisor. Focus Courses should be planned as preparation for transfer into the four-year degree program of choice. Examples of Focus Course sequences would include the following:
ART 101-102, MUS 121-122
HIS 121-122-266-268
HLT 100-116-200-215
PHI 100, REL 200-210-230
PSY 201-202-215-238
PSY 201-202-235-236
SCM 100-110-200-105
SOC 201-202-235-236
SPA 101-102-203-204

[2]Students must complete a full-year of social science coursework by taking one of the following sequences:
ECO 201 and ECO 202, or
PLS 211 and PLS 212, or
SOC 201 and SOC 202, or
SOC 200 and 1 sophomore level sociology course excluding SOC 202, or PSY 201 and PSY 202, or PSY 200 and one sophomore-level psychology course excluding PSY 202. Courses used to complete the social science requirement will not count as Focus Courses. (PLS 241 and PLS 242 may substitute for PLS 211 and PLS 212).

[3]This credit can be satisfied by a single 2 or more credit course in Health, Physical Education, or Recreation.

Liberal Arts - Humanities Specialization

Award: ASSOCIATE OF ARTS AND SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Arts and Science degree in Liberal Arts with the Humanities Specialization is designed for students who plan to transfer to a four-year college or university and who intend to complete a Bachelors degree in a humanities or related discipline. Humanities disciplines include English, philosophy, foreign languages, drama, religion, and speech. This program is also appropriate for students intending to pursue humanities-related fields which include communications and journalism as well as some of the fine arts such as theatre, music, and creative writing. Students interested in teaching in the above disciplines will find this program a good starting point for their careers.

Admission Requirements: In addition to the admission requirements established for the College, entry into this curriculum requires completion of four units of high school English, two units of college preparatory algebra and one unit of college preparatory geometry, one unit of laboratory science, and one unit of history. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: : This curriculum requires a broad range of general education requirements in mathematics, social science, natural science and humanities. Like the Social Science Specialization it is designed to give the student maximum flexibility in the selection of courses to meet both the interests of the student and the demands of the institution to which the student intends to transfer. It is important for students to identify their preferred transfer institution as soon as possible and to work closely with their academic advisor to ensure transferability of their selected courses. In order to prepare for junior class standing at a four-year college or university, you must ensure that the curriculum completed in the first two years at Danville Community College is comparable to the first two years of study at the four-year institution. Upon satisfactory completion of the program at Danville Community College, you will be awarded the Associate of Arts and Science Degree in Liberal Arts.

Program Requirements: To receive an Associate of Arts and Science Degree in Liberal Arts, Humanities Specialization, you must complete a minimum of 62 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by fulltime day students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites in the Course Descriptions section in this Catalog.

Humanities and Fine Arts Elective: The core of this program consists of a requirement that students complete at least three humanities courses of their choice in addition to one sophomore literature course. Further, students must take at least two courses in fine arts. The combination of the humanities and fine arts requirement is intended to promote an understanding of the connections between humanities disciplines and the arts. Students may continue to explore these connections by using the liberal arts elective requirement of six credit hours to pursue greater depth in the fine arts or humanities. Again, selection of courses should be based on the students' interests and the demands of their intended transfer institution.

Liberal Arts - Humanities Specialization

First Semester	Lecture Hours	Lab Hours	Course Credits
SDV 100 College Success Skills	1	0	1
ENG 111 English Composition I	3	0	3
MTH 151 Math for Liberal Arts I or higher Math	3	0	3
Natural Science Course With Lab	3	3	4
Approved Computer Elective	3	0	3
Health & Wellness Elec.	—	—	2
Total	**—**	**—**	**16**

Second Semester	Lecture Hours	Lab Hours	Course Credits
ENG 112 English Composition II	3	0	3
MTH Approved Transfer Level Math	3	0	3
Natural Science Course with Lab	3	3	4
HIS 101 History of Western Civ. I	3	0	3
Humanities Course I*	3	0	3
Total	**—**	**—**	**16**

Third Semester	Lecture Hours	Lab Hours	Course Credits
ENG Literature Class**	3	0	3
Humanities Course II*	3	0	3
HIS 102 History of Western Civ. II	3	0	3
Fine Arts Course I***	3	0	3
Social Science Elective I*	3	0	3
Total	**—**	**—**	**15**

Fourth Semester	Lecture Hours	Lab Hours	Course Credits
Humanities Course III*	3	0	3
Social Science Elective II	3	0	3
Fine Arts Course II	3	0	3
Liberal Arts Elective I	3	0	3
Liberal Arts Elective II	3	0	3
Total	**—**	**—**	**15**

Total Minimum Credits for the Associate of Arts and Science in Liberal Arts - Humanities Specialization **62**

*Humanities Elective: Students must take three courses in humanities disciplines, two of which must be at the sophomore level.

**Students must take one literature class from the following list: ENG 241, ENG 242, ENG 243, or ENG 244.

***Students must take two courses in fine arts (ART, MUS, PHT, Creative Writing, and Theatre).

Note: HIS 111-112, History of World Civilizations may be substituted for the History of Western Civilization sequence.

Liberal Arts -Social Science Specialization

Award: ASSOCIATE OF ARTS AND SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Arts and Science degree in Liberal Arts with the Social Science Specialization is designed for students who plan to transfer to a four-year college or university and who intend to complete a Bachelor's degree in a social science discipline. Social Science disciplines include sociology, anthropology, psychology, history, political science, and economics. This program is also appropriate for students intending to pursue social science-related fields such as communications as well as some of the helping professions that include public administration, social work and counseling. Students interested in teaching in the above disciplines will find this program a good starting point for their careers.

Admission Requirements: In addition to the admission requirements established for the College, entry into this curriculum requires completion of four units of high school English, two units of college preparatory algebra and one unit of college preparatory geometry, one unit of laboratory science, and one unit of history. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: This curriculum requires a broad range of general education requirements in mathematics, social science, natural science and humanities. Like the Humanities Specialization, it is designed to give the student maximum flexibility in the selection of courses to meet both the interests of the student and the demands of the institution to which the student intends to transfer. It is important for students to identify their preferred transfer institution as soon as possible and to work closely with their academic advisor to ensure transferability of their selected courses. In order to prepare for junior class standing at a four-year college or university, you must ensure that the curriculum completed in the first two years at Danville Community College is comparable to the first two years of study at the four-year institution. Upon satisfactory completion of the program at Danville Community College, you will be awarded the Associate of Arts and Science Degree in Liberal Arts.

Program Requirements: To receive an Associate of Arts and Science Degree in Liberal Arts, Social Science Specialization, you must complete a minimum of 62-63 credits with a grade point average of 2.00 or better grade point average. The following outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites in the Course Descriptions section of this Catalog.

Social Science Requirements and Electives: The core of this program consists of a requirement that students complete courses in history, sociology, psychology, and political science or economics. This gives the student breadth of exposure to social science disciplines. Students may then use the nine hours of required social science electives to achieve greater depth in one or more areas. Again, selection of courses should be based on the students' interests and the demands of their intended transfer institution.

Liberal Arts -Social Science Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
SDV 100	College Success Skills	1	0	1
ENG I11	English Composition I	3	0	3
BUS 147	Business Information Systems			
or	Approved Transferable Computer Elective	3	0	3
	Natural Science Course With Lab	3	3	4
MTH 151	Math for Liberal Arts I or higher Math	3	0	3
HIS 101	*History of Western Civ.			
or				
HIS 121	United States History I	3	0	3
Total		—	—	**17**

Second Semester		Lecture Hours	Lab Hours	Course Credits
ENG 112	English Composition II	3	0	3
MTH 240	Statistics			
or				
MTH 241	Statistics I			
or				
MTH 157	Elementary Statistics	3	0	3
SOC 200	Principles of Sociology			
or				
SOC 201	Intro to Sociology I	3	0	3
	Natural Science Course with Lab	3	3	4
	Liberal Arts Elective	3	0	3
Total		—	—	**16**

Third Semester		Lecture Hours	Lab Hours	Course Credits
PSY 200	Principles of Psychology			
or				
PSY 201	Intro to Psychology I	3	0	3
ECO 201	Principles of Economics			
or				
PLS 211	U. S. Government I	3	0	3
	Humanities/Fine Arts Elective	3	0	3
	Social Science Elective	3	0	3
	Liberal Arts Elective	3	0	3
Total		—	—	**15**

Fourth Semester	Lecture Hours	Lab Hours	Course Credits
Social Science Elective	3	0	3
Social Science Elective	3	0	3
Humanities/Fine Arts Elective	3	0	3
Humanities/Fine Arts Elective	3	0	3
Wellness/Health Elective			2- 3
Total	—	—	**14-15**

Total Minimum Credits for the
Associate of Arts and Science in Liberal Arts -
Social Science Specialization.................................. **62-63**

HIS 111-112 History of World Civilizations may be substituted here.

Science

Award: ASSOCIATE OF ARTS AND SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Arts and Science degree program in Science is designed for students who plan to transfer to a four-year college or university to complete a baccalaureate degree program in any of the sciences or related pre-professional programs. Students interested in pursuing pre-med or health care bachelor's programs will find this degree the best place to begin their studies. This Associate degree may also be appropriate for students who plan to complete a baccalaureate degree program with certification to teach elementary or secondary math, science, or technologies.

Admission Requirements: In addition to the admission requirements established for the College, entry into this curriculum requires completion of four units of high school English, three units of college preparatory mathematics, one unit of laboratory science, and one unit of social studies. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: Although the major emphasis in this curriculum is on mathematics, and the biological and physical sciences, the curriculum also includes a range of courses in humanities and social sciences. You have sufficient flexibility to select appropriate courses to correspond to the requirements of the senior college or university to which you plan to transfer. You are urged to familiarize yourself with the requirements of the college or university to which transfer is contemplated. A DCC counselor will assist you in the initial planning of your program. In addition, an academic advisor in the Division of Arts and Sciences will assist you on a regular basis with your program plan. In order to prepare for upper division (junior class) standing at a senior college or university, you should complete a program at the community

college that is comparable to the first two years of the program at the senior college or university. Upon satisfactory completion of this program, you will be awarded the Associate of Arts and Science degree.

Program Requirements: To receive the Associate of Arts and Science degree in Science, you must complete a minimum of 63 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired sequence, except for sequence courses or others requiring prerequisites.

Science

		Lecture Hours	Lab Hours	Course Credits
First Semester				
ENG 111	College Composition I	3	0	3
SDV 100	College Success Skills	1	0	1
HIS 101	History of Western Civ. I	3	0	
or				
HIS 121	United States History I	3	0	3
MTH 163	Precalculus I	3	0	3-5
or				
MTH 173	Calculus w/ Analytic Geometry I		5	0
	[1]Natural Lab Science	3	3	4
HLT/PED	[2]Approved "Wellness" Elective		—	1
Total		—	—	**15-17**

		Lecture Hours	Lab Hours	Course Credits
Second Semester				
ENG 112	College Composition II	3	0	3
HIS 102	History of Western Civ. II		3	0
or				
HIS 122	United States History II	3	0	3
	[5]Supportive Math Requirement	3-5	0	3-5
HLT/PED	[2]Approved "Wellness" Elective			1
	Natural Lab Science	3	3	4
	Elective	—	—	3-4
Total		—	—	**17-18**

		Lecture Hours	Lab Hours	Course Credits
Third Semester				
ENG	[3]Literature I	3	0	3
	[4]Social Science Requirement	3	0	3
	[1]Natural Lab Science	3	3	4
	Approved Elective	3	0	3
	[1]Natural Lab Science	3	3	4
Total		—	—	**17**

		Lecture Hours	Lab Hours	Course Credits
Fourth Semester				
ENG	[3]Literature II	3	0	3
	[4]Social Science Requirement II	3	0	3
	[1]Natural Lab Science	3	3	4
	Approved Elective or Field Requirements	—	—	5-8
Total		—	—	**15-18**

Total Minimum Credits for the
Associate of Arts and Science in Liberal Arts -
Social Science Specialization.......................................**63**

[1]*Students must complete 20 credit hours of lab science coursework. This work must include 8 credit hours taken at the sophomore level and must include at least one full year lab sequence. Acceptable 100-level sequences are:*
CHM 111-112 College Chemistry I-II
BIO 101-102 General Biology I-II
BIO 141-142 Human Anatomy and Physiology I-II
GOL 105 Physical Geology and GOL 106 Historical Geology
Acceptable 200-level laboratory science sequences are:
BIO 231-232 Human Anatomy and Physiology I-II
BIO 256 General Genetics and BIO 205 General Microbiology
CHM 241-242 Organic Chemistry I-II with lab
CHM 251-252 Quantitative Analysis I-II
PHY 201-202 General College Physics I-II
PHY 241-242 University Physics I-II

[2]*This credit can be satisfied by a single 2 or more credit course in Health, Physical Education, or Recreation.*

[3]*Acceptable literature sequences are:*
ENG 241-242 Survey of American Literature I-II
ENG 243-244 Survey of English Literature I-II
ENG 251-252 Survey of World Literature I-II

[4]*Students must complete a full-year of social science coursework by taking one of the following sequences:*
ECO 201 and ECO 202, or
PLS 211 and PLS 212, or
SOC 201 and SOC 202, or
SOC 200 and 1 sophomore level sociology course excluding SOC 202, or
PSY 201 and PSY 202, or
PSY 200 and 1 sophomore level psychology course excluding PSY 202 (PLS 241 and PLS 242 may substitute for PLS 211 and PLS 212).

[5]*Student must take one of the following to meet this requirement:*
MTH 271, Applied Calculus I, or
MTH 174, Calculus w/Analytic Geometry II, or
MTH 240, Statistics, or
MTH 241, Statistics I

Pre-Teacher Education Program

Danville Community College is a participant in the Virginia Community College System Chancellor's Pre-Teacher Education Program. This program consists of courses which have been agreed to by many four year colleges and universities within the Commonwealth as being adequate preparation for their teacher education programs.

The pre-teacher education program provides students with a number of benefits. First, students can be assured that their course of study in the program is approved by the transfer institution. Second, students' access to housing, communications and financial aid will be weighed equally with the institution's own students. Third, students may be able to participate in an institution's early registration. Fourth, admission of a VCCS graduate to an institution's teacher education program will be given equal consideration with native students. Fifth, SAT and ACT requirements will be waived. Sixth, students will enjoy a seamless transition to the transfer school and will be eligible for special tuition scholarships. Students at DCC who are interested in participating in this program will register in the AA&S Liberal Arts-Humanities Specialization degree program. While in that program, they must complete the courses at right.

Students must complete the courses with a 2.5 grade point average or better and pass the Praxis I examination in order to secure the benefits mentioned above. Students must also complete and sign a letter of intent to pursue the Pre-Teacher Education program which specifies the school to which they intend to transfer. This letter is signed by the transfer school's representative, the DCC Advisor (Dewitt Drinkard, Temple Building, Room 112, 434.797.8485), and the student. This announces to the transfer school your engagement in the program.

The following colleges are current participants in this program:

George Mason University
James Madison University
Liberty University
Longwood University
Mary Baldwin College
Norfolk State University
Old Dominion University
Radford University
University of Virginia -Wise
Virginia Commonwealth University
Virginia State University
Virginia Union University

Courses

1. ENG 111 College Composition I	3
2. ENG 112 College Composition II	3
3. SPD 110 Intro. to Speech Communication	3
4. One sophomore literature class selected from the list below:	3
ENG 241 Survey of American Literature I	
ENG 242 Survey of American Literature II	
ENG 234 Survey of English Literature I	
ENG 244 Survey of English Literature II	
ENG 251 Survey of World Literature I	
ENG 252 Survey of World Literature II	
5. One humanities class selected from the list below:	3
ART 101	
ART 102	
ART 105	
ART 201	
ART 202	
MUS 121	
MUS 122	
6. One of the below pairs of Math courses	6
MTH 163 and MTH 240 or	
MTH 151 and MTH 152	
7. GEO 210 People and the Land: Intro to Cultural Geography	3
8. One of the below pairs of history courses:	6
HIS 121 and HIS 122 or	
HIS 101 and HIS 102	
9. PLS 135 American National Politics	3
10. One of the below economics courses:	3
ECO 201 Principles of Macroeconomics	
ECO 202 Principles of Microeconomics	
11. Approved Computer Course	3
12. BIO 101 General Biology I	4
13. BIO 102 General Biology II	4
14. Approved health course	2
15. SDV 100 College Success Skills	1
16. EDU 200 Introduction to Teaching as a Profession	3
Total	**63 credits**

Associate of Science Degree

The **Associate of Science Degree** program is designed to prepare the student to transfer to an upper division baccalaureate degree program. It gives emphasis to those majoring in the agriculture, engineering and technology, and the sciences with substantial undergraduate requirements in mathematics and the natural sciences. It is the goal of this degree to achieve successful transfer for completion of the bachelor's degree and acceptance at the junior level. While a student may enter directly into employment upon attainment of this degree, the goal of programs that award this degree is successful transfer with junior status.

Engineering

Award: ASSOCIATE OF SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: This program is designed to prepare students for transfer to a bachelor's level engineering program. It covers foundational topics in mathematics, physics, and chemistry that are essential for success in upper level engineering courses. This degree should be chosen by students who intend to become professional engineers.

Occupational Objective: Students will be ready to transfer to a number of Engineering programs at the bachelor's level. Upon completion of the bachelors degree, students will be prepared to enter the field of engineering on which they focused at their four-year college or university,

Prerequisites:
1. High School Diploma or G.E.D.
2. Mathematics competence at the level of precalculus with trigonometry is expected. MTH 166 or MTH 163/164 should be selected by students preparing for this program.
3. Students should be non-developmental in English, reading and writing as determined by COMPASS placement testing or course completion.

Engineering

	Lecture Hours	Lab Hours	Course Credits
First Semester			
ENG 111 College Composition I	3	0	3
MTH 173 Calculus with Analytical Geometry I	5	0	5
EGR 120 Introduction to Engineering	1	0	1
CHM 111 College Chemistry I	3	1	4
SDV 100 Orientation	1	0	1
Humanities Elective	3	0	3
Total	—	—	**17**
Second Semester			
ENG 112 College Composition II	3	0	3
MTH 174 Calculus with Analytical Geometry II	5	0	5
EGR 126 Computer Programming for Engineers	3	0	3
EGR 140 Engineering Mechanics – Statics	3	0	3
CHM 112 College Chemistry II	3	1	4
Total	—	—	**18**

	Lecture Hours	Lab Hours	Course Credits
Third Semester			
MTH 277 Vector Calculus	4	0	4
PHY 241 General University Physics I	3	1	4
EGR 245 Engineering Mechanics – Dynamics	3	0	3
EGR 248 Thermodynamics for Engineers	3	0	3
HLT/PED Health or Physical Education	1	0	1
Social Sciences Elective	3	0	3
Total	—	—	**18**
Fourth Semester			
MTH 279 Ordinary Differential Equations	4	0	4
PHY 242 General University Physics II	3	1	4
EGR 246 Mechanics of Materials	3	0	3
HLT/PED Health or Physical Education	1	0	1
Social Science Elective	3	0	3
Humanities Elective	3	0	3
Total	—	—	**18**

Total Minimum Credits for the Associate of Science Degree in Engineering.. **71**

Associate of Applied Science Degrees

Accounting

Administration of Justice
> Law Enforcement Specialization
> Corrections Specialization
> Protective Services Specialization
>   (Private Security)

Administrative Support Technology
> General Office Specialization
> Legal Specialization
> Medical Office Specialization

Business Management
> Management Specialization
> Graphic Imaging Management Specialization
> Automotive Management Specialization
> Motorsports Management Specialization

Dental Hygiene (awarded by Virginia Western
> Community College)

Early Childhood Education

General Engineering Technology

Health Science
> Practical Nursing Specialization

Information Systems Technology
> Computer Programming Specialization
> Microcomputer Specialization
> Network Specialization

Marketing
> Consumer Marketing Specialization
> Warehousing and Distribution Specialization
> Electronic Commerce Specialization

Registered Nurse

Respiratory Therapy (awarded by J. Sargeant
> Reynolds Community College)

Technical Studies
> Advanced Manufacturing Engineering Technology
> Fire Science
> Polymer Manufacturing Technology

The **Associate of Applied Science Degree** is designed for the student who does not plan to pursue a four-year program of study, but still seeks an educational experience that includes courses other than those directly related to the chosen field. The AAS degree requires 65-69 credits, which can be completed in two academic years. Along with the courses that are directly related to the chosen field of study, students will take a variety of general education courses such as English, speech, psychology, science or mathematics, and physical education or wellness. The types of jobs that you might expect to obtain upon completion of the degree requirements are listed on the following catalog pages. Also included are the specific requirements for completing each program of study.

Accounting

■■■

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Applied Science Degree program in Accounting is designed for persons who seek employment in the accounting field immediately upon completion of the program. Persons seeking initial employment in the accounting field and those in accounting seeking advancement may benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:
    Accounting
    Accounting Technician
    Accounting Trainee
    Junior Accountant and many more

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of high school mathematics. If you meet the general admissions requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in your academic preparation in the College's Developmental Studies program.

Program Description: The first two semesters (first year) of the Associate of Applied Science Degree program in Accounting are similar to other programs in business. In the second year, you will pursue your specialty in Accounting. You are urged to consult with the Counseling Office and your faculty advisor in planning your program and selecting electives. Upon satisfactory completion of the four-semester program, you will be awarded the Associate of Applied Science Degree in Accounting. Some courses within this program may be applied to a four-year program at the discretion of the admitting institution. However, if your objective is to obtain a four-year degree in Accounting, you should enroll in DCC's Business Administration program.

Program Requirements: To receive the Associate of Applied Science Degree in Accounting, you must complete a minimum of 69 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students.

Accounting

▪▪▪

First Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
BUS 100	Intro. to Business	3	0	3
ITE 115	Computer Applications & Concepts	3	2	4
ENG 111	English Composition I	3	0	3
PLS	Elective			
or				
PSY	Elective	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**16**	**2**	**17**

Second Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 112	Accounting II	3	0	3
ACC 110	Introduction to Computerized Accounting-Peachtree	2	0	2
BUS 121	Business Math I	3	0	3
or				
MTH 121	[1]Fundamentals of Math I			
ITE 215	Adv. Computer Applications & Integration	3	2	4
ECO 120	Survey of Economics	3	0	3
ENG 112	College Composition II	3	0	3
Total		**17**	**2**	**18**

Third Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 221	Intermediate Accounting I	4	0	4
ACC 261	Prin. of Federal Taxation	3	0	3
BIO/NAS	or			
	[2]Science or Math Elective	3	0	3
MTH				
BUS 240	Business Law	3	0	3
HLT/PED	Health/Physical Ed.	0	2	1
HUM	Humanities Elective	3	0	3
Total		**16**	**2**	**17**

Fourth Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 222	Intermediate Accounting II	4	0	4
ELE	Elective	3	0	3
HLT/PED	Health/Phy. Education	0	2	1

Students may select 3 of the 4 following courses:

		Lecture Hours	Lab Hours	Course Credits
ACC 231	Cost Accounting	3	0	3
ACC 241	Auditing	3	0	3
ACC 262	Prin. of Federal Taxation II	3	0	3
FIN 215	Financial Management	3	0	3
Total		**16**	**2**	**17**

Total Minimum Credits for the
Associate of Applied Science Degree
in Accounting **69**

[1]One unit of high school algebra or MTH 3 is required as a prerequisite for MTH 121.

[2]Students who take MTH 121 may substitute an approved business elective for the BIO or NAS elective.

Administration of Justice

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this Program in four semesters (two years).

Purpose: The Administration of Justice (ADJ) program is designed to prepare individuals for careers in law enforcement, corrections and protective services (private security). The curriculum serves the interests of career-oriented students and provides courses to meet the needs of in-service personnel. The A.A.S. degree does not substitute for attendance at a basic police academy required by Virginia's local and state law enforcement agencies. Transferability of ADJ coursework to four-year colleges or universities is contingent on the academic credit transfer policies of those institutions. The ADJ Program Coordinator and/or Counseling personnel will facilitate inquiries of ADJ majors, including possible transfer limitations of DCC ADJ coursework, regarding four-year programs in Administration of Justice/Criminal Justice, or related academic programs.

Occupational Objectives: The following occupational titles represent examples of possible law enforcement, corrections and/or protective service (private security) civilian or military employment opportunities:

- Air Force Office of Special Investigations (AFOSI)
- Air Force Security Forces
- Commercial and Industrial Security Officer
- Correctional Officer
- Deputy Sheriff
- Dispatcher
- Insurance Investigator
- Jail Deputy
- Loss Prevention Manager
- Military Police
- Military Intelligence
- Police Officer
- Security Supervisor
- Virginia State Trooper
- Youth Care Worker

Program Requirements: To receive the Associate of Applied Science degree in Administration of Justice, a student must complete 67-69 credits with a grade point average of 2.0, or better. More than one-half of

the curriculum includes courses in administration of justice. Remaining courses are considered general education classes to be taken from disciplines such as natural science (or math), sociology, psychology and so on. Instruction includes both the theoretical concepts and practical applications needed for future success in public safety. Students who plan to transfer DCC courses into a four-year program in criminal justice/administration of justice are strongly urged to consult with the ADJ Program Coordinator and the Counseling Office as the student may be advised to substitute coursework for some classes listed in the suggested four-semester ADJ Program. The following sample program represents a typical order taken by fulltime ADJ majors. Part-time students may take courses in any desired sequence. In all cases, prerequisites must be met.

Note: Depending on the interests of the Administration of Justice major, he or she should select one of the following three specializations allowing for a concentration of coursework in:

Specialization I: Law Enforcement
Specialization II: Corrections
Specialization III: Protective Services (Private Security)

Danville Community College's ADJ Program is part of the Tech Prep Initiative. Students who have successfully completed certain high school courses may qualify for advanced standing and receive free credit in equivalent college courses. For additional details regarding Tech Prep, see your ADJ Program Coordinator and/or Tech Prep Coordinator.

Finally, the applicant must also consult with the ADJ Program Coordinator to learn if he or she would meet the specialized requirements set by criminal justice agencies. Minimal criminal justice agency requirements include:

1. Excellent physical and mental health;
2. Normal hearing and color vision. Eye functions must be normal (visual acuity must not be less than 20/40 in either eye without correction;
3. Weight should be in proportion to height;
4. Excellent moral character;
5. No conviction of any crime involving moral turpitude or conviction of any felony;

6. An excessive number of traffic citations would be cause to exclude an applicant from consideration by most all criminal justice agencies;
7. U.S. citizenship.

Note: An extensive background investigation will be conducted by the criminal justice agency to confirm the foregoing. Any student who has been convicted of a felony or any offense involving moral turpitude or violence should consult with the ADJ faculty advisor to determine if this degree is appropriate.

College Credit for Academy Training: After an ADJ student completes 35 or more credits required for graduation, 21 and 15 credits respectively will be awarded to the ADJ major, as follows:
Virginia State Police Academy:
   3 credits -ADJ 100, Survey of Criminal Justice
   3 credits -ADJ 130, Criminal Law
   3 credits -ADJ 236, Criminal Investigation
   9 credits -ADJ coursework*
   3 credits -Wellness Elective
   TOTAL: 21 credits

Virginia Department of Criminal Justice Services Regional Academies:
   3 credits -ADJ 100, Survey of Criminal Justice
   3 credits -ADJ 130, Criminal Law
   3 credits -ADJ 236, Criminal Investigation
   3 credits -ADJ coursework*
   3 credits - Wellness Elective
   TOTAL: 15 credits

*Possible ADJ coursework could include:
   ADJ 116, Special Enforcement Topics
   ADJ 227, Constitutional Law
   ADJ 215, Report Writing

Admission Requirements: In addition to DCC's admission requirements, entry into the ADJ Program requires proficiency in high school English and mathematics. Applicants with deficiencies will be required to enroll in a DCC developmental English and/or mathematics course. All applicants must consult with the ADJ Program Coordinator for assistance in planning his or her ADJ curriculum, including program options - Specializations I, II, or III (see Program Requirements). Students who are sure that they will pursue bachelor-level studies should seek guidance from the ADJ Program Coordinator and/or a DCC Counselor regarding college transfer policies.

Administration of Justice - Law Enforcement Specialization

First Semester

		Lecture Hours	Lab Hours	Course Credits
SDV 100	College Success Skills	1	0	1
ENG 111	English Composition I	3	0	3
SOC 200	Principles of Sociology or			
SOC 201	[3]Intro to Sociology I	3	0	3
ADJ 100	Survey of Criminal Justice	3	0	3
ADJ 130	Intro. to Criminal Law	3	0	3
ADJ 116	Special Enforcement Topics	3	0	3
Total		—	—	**16**

Second Semester

		Lecture Hours	Lab Hours	Course Credits
NAS 105	Natural Science Topics for Modern Society or [4]Other approved Lab or Math course	—	—	3-4
ENG 112	College Composition II	3	0	3
SOC 202	Intro to Sociology II or Approved Sophomore-Level Sociology	3	0	3
ADJ 131	Legal Evidence	3	0	3
ADJ 227	Constitutional Law for Justice Personnel	3	0	3
ADJ 236	Prin. of Criminal Investigation	3	0	3
Total		—	—	**18-19**

Third Semester

		Lecture Hours	Lab Hours	Course Credits
PSY 200	Principles of Psychology or			
PSY 201	Intro. to Psychology I	3	0	3
Elective	Non-ADJ Elective	3	0	3
SPA 103	Basic Spoken Spanish or			
SPA	[1]Appr. Spanish Course	3-4	0	3
SOC 235	Juvenile Delinquency	3	0	3
ADJ 171	Forensic Science I	3	3	4
Total		—	—	**15-16**

Fourth Semester

		Lecture Hours	Lab Hours	Course Credits
HUM 165	Controversial Issues in American Society or			
SPD 100	[2]Intro to Speech Communication	3	0	3
	[5]Approved Computer Elective	3	0	3
ADJ 296	Internship	3	0	3
SOC 236	Criminology	3	0	3
ADJ 215	Report Writing	3	0	3
PED/HLT	Approved Wellness Elective	3	0	3
Total		—	—	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Administration of Justice (Law Enforcement Specialization) **67-69**

[1]Such as SPA 150, Spanish For Law Enforcement

[2]Students may substitute SPD 110 here if it is required by the transfer school.

[3]SOC 200 includes material covered in both SOC 201 and SOC 202. The student must enroll in either the SOC 201 and SOC 202 sequence, or enroll in SOC 200 with another sophomore level, non-introductory sociology course. SOC 200 will fulfill the general sociology requirement at the four-year college/university level. Students must check the academic transfer policy of the four-year school regarding transferability of SOC 201 to fulfill the general sociology requirement.

[4]Students intending to transfer should take a lab science and at least MTH 151 (Mathematics for the Liberal Arts I).

[5]BUS 147 (Intro to Business Information Systems) is recommended if the student intends to transfer to a four-year college or university.

Administration of Justice - Corrections Specialization

	Lecture Hours	Lab Hours	Course Credits
First Semester			
SDV 100 College Success Skills	1	0	1
ENG 111 English Composition I	3	0	3
SOC 200 Principles of Sociology			
or			
SOC 201 [3]Intro to Sociology I	3	0	3
ADJ 100 Survey of Criminal Justice	3	0	3
ADJ 130 Intro. to Criminal Law	3	0	3
ADJ 140 Intro. to Corrections	3	0	3
Total	—	—	**16**

	Lecture Hours	Lab Hours	Course Credits
Second Semester			
NAS 105 [4]Natural Science Topics for Modern Society or Other approved Lab or Math course	—	—	3-4
ENG 112 College Composition II	3	0	3
SOC 202 Intro to Sociology II or Approved Sophomore-Level Sociology	3	0	3
ADJ 131 Legal Evidence	3	0	3
ADJ 227 Constitutional Law for Justice Personnel	3	0	3
ADJ 145 Corrections & Community	3	0	3
Total			**18-19**

	Lecture Hours	Lab Hours	Course Credits
Third Semester			
PSY 200 Principles of Psychology			
or			
PSY 201 Intro. to Psychology I	3	0	3
Elective Non-ADJ Elective	3	0	3
SPA 103 Basic Spoken Spanish			
or			
SPA [1]Appr. Spanish Course	3-4	0	3
SOC 235 Juvenile Delinquency	3	0	3
PSY 215 Abnormal Psychology	3	0	3
Total			**15-16**

	Lecture Hours	Lab Hours	Course Credits
Fourth Semester			
HUM 165 Controversial Issues in American Society			
or			
SPD 100 [2]Intro to Speech Communication	3	0	3
[5]Approved Computer Elective	3	0	3
ADJ 296 Internship	3	0	3
SOC 236 Criminology	3	0	3
ADJ 215 Report Writing	3	0	3
PED/HLT Approved Wellness Elective	3	0	3
Total	—	—	**18**

Total MinimumCredits for the Associate of Applied Science Degree in Administration of Justice (Corrections Specialization) **67-69**

[1]Such as SPA 150, Spanish for Law Enforcement

[2]Students may substitute SPD 110 here if it is required by the transfer school.

[3]SOC 200 includes material covered in both SOC 201 and SOC 202. The student must enroll in either SOC 201 and SOC 202 as a series, or enroll in SOC 200. SOC 200 will fulfill the general sociology requirement at the four-year college/university level. Students must check the academic transfer policy of the four-year school regarding transferability of SOC 201 to fulfill the general sociology requirement.

[4]Students intending to transfer should take a lab science and at least MTH 151 (Mathematics for the Liberal Arts I).

[5]BUS 147 (Intro to Business Information Systems) is recommended if the student intends to transfer to a four-year college or university.

Administration of Justice - Protective Services Specialization (Private Security)

First Semester	Lecture Hours	Lab Hours	Course Credits
SDV 100 College Success Skills	1	0	1
ENG 111 English Composition I	3	0	3
SOC 200 Principles of Sociology or			
SOC 201 [3]Intro to Sociology I	3	0	3
ADJ 100 Survey of Criminal Justice	3	0	3
ADJ 130 Intro. to Criminal Law	3	0	3
ADJ 150 Introduction to Security Administration	3	0	3
Total			**16**

Second Semester	Lecture Hours	Lab Hours	Course Credits
NAS 105 Natural Science Topics for Modern Society or			
Other approved Lab or			
[4]Math course			3-4
ENG 112 College Composition II	3	0	3
SOC 202 Intro to Sociology II or			
Approved Sophomore-Level Sociology	3	0	3
ADJ 131 Legal Evidence	3	0	3
ADJ 227 Constitutional Law for Justice Personnel	3	0	3
ADJ 257 Loss Prevention	3	0	3
Total			**18-19**

Third Semester	Lecture Hours	Lab Hours	Course Credits
PSY 200 Principles of Psychology or			
PSY 201 Intro. to Psychology I	3	0	3
Elective Non-ADJ Elective	3	0	3
SPA 103 Basic Spoken Spanish or			
SPA [1]Appr. Spanish Course	3-4	0	3
SOC 235 Juvenile Delinquency	3	0	3
ADJ 234 Terrorism and Counter-Terrorism	3	0	3
Total			**15-16**

Fourth Semester	Lecture Hours	Lab Hours	Course Credits
HUM 165 Controversial Issues in American Society or			
SPD 110 [2]Intro to Speech Communication	3	0	3
[5]Approved Computer Elective	3	0	3
ADJ 296 Internship	3	0	3
SOC 236 Criminology	3	0	3
ADJ 215 Report Writing	3	0	3
PED/HLT Approved Wellness Elective	3	0	3
Total			**18**

Total Minimum Credits for the Associate of Applied Science Degree in Administration of Justice Protective Services Specialization (Private Security) **67-69**

[1]Such as SPA 150, Spanish for Law Enforcement

[2]Students may substitute SPD 110 here if it is required by the transfer school.

[3]SOC 200 includes material covered in both SOC 201 and SOC 202. The student must enroll in either SOC 201 and SOC 202 as a series, or enroll in SOC 200 or another non-introductory sophomore level sociology course. SOC 200 will fulfill the general sociology requirement at the four-year college/university level. Students must check the academic transfer policy of the four-year school regarding transferability of SOC 201 to fulfill the general sociology requirement.

[4]Students intending to transfer should take a lab science and at least MTH 151 (Mathematics for the Liberal Arts I).

[5]BUS 147 (Intro to Business Information Systems) is recommended if the student intends to transfer to a four-year college or university.

Administrative Support Technology

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four to five semesters, depending upon the track chosen.

Purpose: The Associate of Applied Science Degree program in Administrative Support Technology is designed to educate and train students wishing to enter or advance in an office support career. With three tracks offered under the Administrative Support Technology umbrella, students are given the opportunity to select a course of study that will meet their occupational objectives.

Occupational Objectives: Possible employment opportunities include:

> Administrative Assistant
> Executive Secretary
> Legal Secretary/Paralegal
> Medical Secretary
> Medical Transcriptionist
> Medical Insurance Coder
> Office Manager

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of high school mathematics. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: Designed for completion in two years, all tracks of the Administrative Support Technology program combine instruction in critical areas related to successful career advancement within the office support area.

The **General Office** Specialization provides broad-based knowledge and skills needed in many different types of businesses.

The **Legal Specialization** is geared specifically to individuals who want a career as a legal secretary or an entry-level paralegal (a person capable of performing independent legal work under the supervision of an attorney). Small firms often use this qualified employee in a combination of these positions. As shown on the outline that follows, courses include general education courses, computer courses, word processing, and five legal courses. The legal courses are taught in the evening by practicing attorneys or paralegals, but all other courses may be taken in the day or evening. Any student making less than a "C" on a legal course is encouraged to repeat that course.

The **Medical Office Specialization** offers training needed to work in a medical environment with specific training in medical insurance coding and medical transcription. The medical courses are usually taught during the evenings. A coding student who makes below a "C" in a HIT course is strongly encouraged to retake the course. A transcription student who makes below a "C" in any AST or HIT course is strongly encouraged to retake the course.

Program Requirements: To receive the Associate of Applied Science Degree, you must complete a minimum of 69 credits in the General Office Track; a minimum of 69 credits in the Legal Specialization; and 67-69 credits for the Medical Office Specialization. Students must have a cumulative grade point average of 2.0 or better to graduate. The following outlines represent a typical order of courses taken by full-time day students. Part-time and/or evening students may take courses in any desired order, except for sequence courses, or courses requiring prerequisites.

Administrative Support Technology - General Office Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 101	Keyboarding I	2	0	2
AST 103	Keyboarding I Lab	0	2	1
PSY 126	Psychology for Business/Industry	3	0	3
ENG 134	Grammar for Writing & Speaking	3	0	3
BUS 121	Business Math I	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
SDV 100	College Success Skills	1	0	1
HLT/PED	Health/Physical Ed.	0	2	1
Total		**15**	**6**	**18**

Second Semester		Lecture Hours	Lab Hours	Course Credits
AST 102	Keyboarding II	2	0	2
AST 104	Keyboarding II Lab	0	2	1
AST 234	Records & Database Mgt.	3	0	3
ECO 100	Elementary Economics	3	0	3
ENG 135	Applied Grammar	3	0	3
HLT/PED	Health/Physical Ed.	0	2	1
AST/ITE	Elective	0	2	1
BIO/NAS or MTH	Science or Math Elective	3	0	3
Total		**14**	**6**	**17**

Third Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
AST 243	Office Administration I	3	0	3
AST 238	MS Word	2	0	2
AST 239	MS Word Lab	0	2	1
BUS 235	Business Letter Writing	3	0	3
AST 113	Speedbuilding	0	2	1
ITE 140	ITE Spreadsheet Software	3	0	3
Total		**14**	**4**	**16**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
ACC 110	Introduction to Computerized Acct. Peachtree	2	0	2
AST 244	Office Administration II	3	0	3
AST 201	Keyboarding III (Intern.)	2	0	2
AST 202	Keyboarding III Lab	0	2	1
AST 205	Business Communications	3	0	3
AST 253	Desktop Publishing	2	0	2
AST 255	Desktop Publishing Lab	0	2	1
SPA 103	Basic Spoken Spanish	3	0	3
SDV 106	Job Search Strategies	1	0	1
Total		**16**	**4**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Administrative Support Technology (General Office Specialization).................................... **69**

Administrative Support Technology - Legal Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 101	Keyboarding I	2	0	2
AST 103	Keyboarding I Lab	0	2	1
ENG 134	Grammar for Writing & Speaking	3	0	3
HLT/PED	Health/Physical Ed.	1	0	1
LGL 110	Intro. to Law & Legal Asst.	3	0	3
LGL 115	Real Estate Law	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**13**	**2**	**14**

Second Semester		Lecture Hours	Lab Hours	Course Credits
AST 102	Keyboarding II	2	0	2
AST 104	Keyboarding II Lab	0	2	1
BUS 121	Business Math	3	0	3
ENG 135	Applied Grammar	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
LGL 226	Real Estate Abstracting	3	0	3
Total		**14**	**4**	**16**

Third Semester		Lecture Hours	Lab Hours	Course Credits
AST 113	Speedbuilding	0	2	1
AST 238	MS Word	2	0	2
AST 239	MS Word Lab	0	2	1
HLT/PED	Health/Physical Ed.	0	2	1
PSY 126	Psychology for Business/Industry	3	0	3
Total		**5**	**6**	**8**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
AST 234	Records & Database Mgt.	3	0	3
BUS 235	Business Letter Writing	3	0	3
LGL 125	Legal Research	3	0	3
BIO/NAS or MTH	Science or Math Elective	3	0	3
Total		**15**	**0**	**15**

Fifth Semester		Lecture Hours	Lab Hours	Course Credits
SDV 106	Job Search Strategies	1	0	1
ECO 100	Elementary Economics	3	0	3
SPA 103	Basic Spoken Spanish	3	0	3
LGL 216	Trial Prep & Discovery	3	0	3
AST 265	Legal Office Procedures/ Internship	3	0	3
AST 244	Office Administration II	3	0	3
Total		**16**	**0**	**16**

Total Minimum Credits for the Associate of Applied Science Degree in Administrative Support Technology (Legal Specialization) **69**

Administrative Support Technology - Medical Office Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 101	Keyboarding I	2	0	2
AST 103	Keyboarding I Lab	0	2	1
ENG 134	Grammar for Writing & Speaking	3	0	3
BUS 121	Business Mathematics I	3	0	3
BIO 100	Basic Human Biology	3	0	3
HLT 143	Medical Terminology I	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**15**	**2**	**16**

Second Semester		Lecture Hours	Lab Hours	Course Credits
AST 102	Keyboarding II	2	0	2
AST 104	Keyboarding II Lab	0	2	1
ITE 115	Intro. to Comp. Applications & Concepts	3	2	4
ENG 135	Applied Grammar	3	0	3
HLT 144	Medical Terminology II	3	0	3
HLT/PED	Health/Physical Ed.	0	2	1
AST 245	Medical Machine Transcription I**	2	0	2
Total		**13**-**11***	**6**	**16**-**14***

Third Semester		Lecture Hours	Lab Hours	Course Credits
AST 234	Records & Database Mgt.	3	0	3
PSY 126	Psychology for Business/Industry	3	0	3
ECO 100	Elementary Economics	3	0	3
AST 113	Speedbuilding**	0	2	1
HIT 106	ICD-9-CM Coding I*	2	0	2
Total		**9**-**11***	**2**	**10**-**11***

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
HIT 100	Intro. to Health Care Del. Systems I	1	0	1
ACC 111	Accounting I **	3	0	3
AST 238	MS Word	2	0	2
AST 239	MS Word Lab	0	2	1
HIT 195	ICD-9-CM Coding II*	3	0	3
HIT 226	Legal Aspects of Record Doc.	2	0	2
AST 243	Office Administration I	3	0	3
AST 295	Medical Mach. Transcription II**	2	0	2
HLT/PED	Health/Physical Ed.	0	2	1
Total		**13**-**11***	**2**	**15**-**13***

Fifth Semester		Lecture Hours	Lab Hours	Course Credits
AST 244	Office Administration II	3	0	3
AST 201	Keyboarding III (Internship)	2	0	2
AST 202	Keyboarding III Lab	0	2	1
HIT 105	CPT Coding*	2	0	2
HIT 143	Managing Electronic Billing Medical Practice*	3	0	3
SDV 106	Job Search Strategies	1	0	1
SPA 103	Basic Spoken Spanish	3	0	3
Total		**9**-**14***	**2**	**10**-**15***

Total Minimum Credits for the Associate of Applied Science Degree in Administrative Support Technology (Medical Office Specialization) **67**-**69***

*Coding Option

** Transcription Option - students can pursue either the coding option or the transcription option. Many students take all courses for both options.

Business Management - Management Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Applied Science Degree program in Business Management is designed primarily for persons who seek employment in business immediately upon completion of the program. Both persons who are seeking their first employment position and those who are seeking promotion may benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities for graduates of the management specializations:

    Management Trainee
    Administrative Assistant
    Purchasing Agent
    Human Resource Supervisor
    Production Supervisor
    Small Business Owner/Manager
    Office Manager
    Assistant Manager

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of high school mathematics. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in your academic preparation in the College's Developmental Studies program.

Program Description: The first two semesters (first year) of the Associate of Applied Science Degree program in Business Management are similar to other curriculums in business. In the second year you will pursue your specialty in Business Management. The program includes technical courses, courses in related areas, general education courses and electives. Instruction will include both the theoretical concepts and practical applications needed for success in business. You are urged to consult with the Counseling Office and your faculty advisor in planning your program and selecting electives. Upon satisfactory completion of the four-semester program, you will be awarded the Associate of Applied Science Degree (AAS) in Business Management.

Program Requirements: To receive the Associate of Applied Science Degree in Business Management, you must complete a minimum of 69 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students.
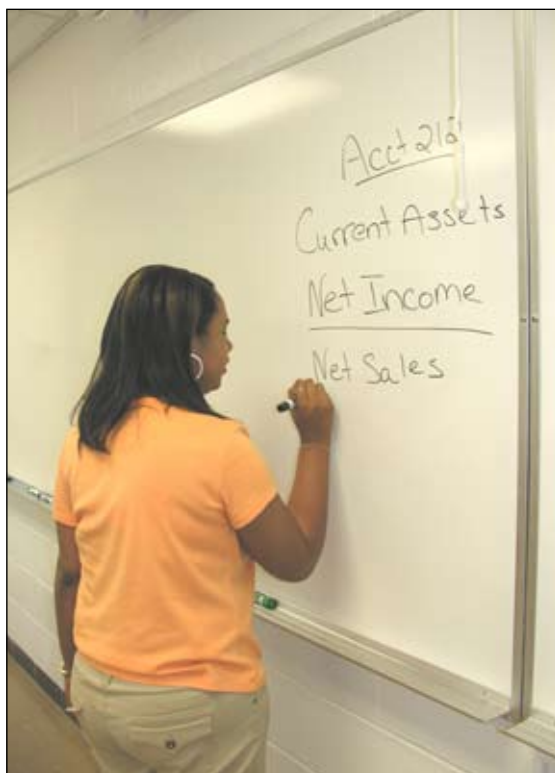
Business Management - Management Specialization

First Semester	Lecture Hours	Lab Hours	Course Credits
AST 117 [1]Keyboarding for Computer Usage	1	0	1
BUS 100 Intro. to Business	3	0	3
BUS 121 Business Mathematics I	3	0	3
ITE 115 Intro. to Computer Applications & Concepts	3	2	4
ENG 111 College Composition I	3	0	3
MKT 100 Principles of Marketing	3	0	3
SDV 100 College Success Skills	1	0	1
Total	**17**	**2**	**18**

Second Semester	Lecture Hours	Lab Hours	Course Credits
BUS 111 Principles of Supervision	3	0	3
BUS 122 Business Mathematics II	3	0	3
ITE 215 Adv. Computer Applications & Integration	3	2	4
MKT 170 Customer Service	1	0	1
SPD 100 Principles of Public Speaking	3	0	3
ECO 120 Survey of Economics	3	0	3
Total	**16**	**2**	**17**

Third Semester	Lecture Hours	Lab Hours	Course Credits
ACC 111 Accounting I	3	0	3
BUS 240 Business Law	3	0	3
BUS Approved BUS Elective	3	0	3
HLT/PED Health/Physical Ed.	0	2	1
BUS 220 Intro. Business Statistics	3	0	3
HUM Humanities Elective	3	0	3
Total	**15**	**2**	**16**

Fourth Semester	Lecture Hours	Lab Hours	Course Credits
ACC 110 Intro. to Computerized Accounting-Peachtree	2	0	2
BIO/NAS or MTH Science or Math Elective	3	0	3
BUS 205 Human Resource Mgmt.	3	0	3
BUS 236 Business Communications	3	0	3
BUS 298 Seminar & Project	3	0	3
HLT/PED Health/Physical Ed.	0	2	1
BUS 209 Continuous Quality Improvement	3	0	3
Total	**17**	**2**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Business Management, Track 1 (Management Specialization) **69**

[1]*Students having prior keyboarding training may request advanced standing.*

Business Management - Graphic Imaging Management Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in two years, which includes one summer term.

Purpose: The Business Management – Graphic Imaging Management Specialization is designed for persons who seek employment in graphic imaging management or sales and marketing positions. Both persons who are seeking their first employment in a managerial position and those presently in management who are seeking promotion may benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

> Owner - Manager
> Department Manager
> Management Trainee
> Sales/Marketing Representative

Admission Requirements: In addition to the admission requirements established for the College, entry into the Graphic Imaging Management Specialization requires completion of four units of high school English, one unit of keyboarding, one unit of high school mathematics, and one unit of vocational printing/graphics. Students with deficiencies in academic preparation may correct weaknesses in the College's Developmental Studies program or through fundamental printing courses offered by the Graphic Imaging Department.

Program Description: The Graphic Imaging Management Specialization is similar to other curriculums in business; however, the program provides opportunity for you to pursue a specialization in printing technology. Instruction will include both the theoretical concepts and practical applications needed for success in the printing management/marketing field. You are urged to consult with your faculty advisor in planning your program and selecting electives.

Program Requirements: To receive the Associate of Applied Science Degree in Business Management (Graphic Imaging Management Specialization), you must complete a minimum of 69 credits with a grade point average of 2.00 or better. The following curriculum outline represents a typical order of courses taken by full-time day students. Part-time students may take courses in any desired sequence except sequence courses or others requiring prerequisites.

Business Management - Graphic Imaging Management Specialization

First Semester

		Lecture Hours	Lab Hours	Course Credits
AST 117	[1]Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
BUS 121	Business Mathematics I	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
ENG 111	College Composition I	3	0	3
MKT 100	Principles of Marketing	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**17**	**2**	**18**

Second Semester

		Lecture Hours	Lab Hours	Course Credits
BUS 111	Principles of Supervision	3	0	3
ECO 120	Survey of Economics	3	0	3
ENG 115	Technical Writing	3	0	3
HLT/PED	Health/Physical Education	0	2	1
MKT 170	Customer Service	1	0	1
PNT 211	Electronic Publishing I	2	2	3
PNT 221	Layout and Design I	2	2	3
Total		**14**	**6**	**17**

Third Semester

		Lecture Hours	Lab Hours	Course Credits
PNT 260	Color Separation	2	3	3
Total		**2**	**3**	**3**

Fourth Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
BUS 240	Business Law	3	0	3
HLT/PED	Health/Physical Education	0	2	1
ITE 215	Adv. Computer Applications & Integration	3	2	4
HUM	Humanities Elective	3	0	3
Total		**12**	**4**	**14**

Fifth Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 110	Intro. to Computerized Accounting - Peachtree	2	0	2
BIO or NAS	Math or Science Elective	3	0	3
BUS 298	Seminar & Project	3	0	3
PNT 231	Lithographic Chemistry	2	0	2
PNT 245	Production Planning & Estimating	3	3	4
BUS 236	Business Communications	3	0	3
Total		**16**	**3**	**17**

Total Minimum Credits for the Associate of Applied Science Degree in Business Management, (Graphic Imaging Management Specialization) **69**

[1]Students having prior keyboarding training may request advanced standing.

Business Management - Automotive Management Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters and one summer term.

Purpose: The Business Management–Automotive Management Specialization is designed primarily for persons who seek employment in the automotive field immediately upon completion of the program. Both persons who are seeking their first employment position and those who are seeking promotion may benefit from the program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Automotive Management/Support
    Service Advisor
    Service Manager
    Automotive Parts Sales
    Automotive Manufacturer Representative
    Automotive Sales
    Automotive Warranty Claims
    Administrator

Admission Requirements: In addition to the general admission requirements established for the College, entry into this program requires:

    1. Four units of high school English
    2. One unit of high school mathematics

If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background as revealed by an appropriate placement test. You may correct any deficiencies in the College's Developmental Studies Program.

Program Description: The Automotive Management Program is designed for students who wish to pursue employment in management and support areas of automotive sales, repair, parts and manufacturing businesses. The program includes courses in automotive technology, general education and electives. Instruction will include both the theoretical concepts and practical applications needed for success in automotive management. You are urged to consult with the Counseling Office and your faculty advisor in planning your program and selecting electives.

Program Requirements: To receive the Associate of Applied Science Degree in Business Management–Automotive Management Specialization, you must complete a minimum of 69 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students.

Business Management - Automotive Management Specialization

First Semester	Lecture Hours	Lab Hours	Course Credits
AST 117 Keyboarding for Computer Usage	0	2	1
BIO/NAS/MTH Elective	3	0	3
BUS 100 Introduction to Business	3	0	3
BUS 121 Business Mathematics I	3	0	3
ENG 111 College Composition I	3	0	3
ITE 115 Intro. to Computer Applications & Concepts	3	2	4
SDV 100 College Success Skills	1	0	1
Total	**16**	**4**	**18**

Second Semester	Lecture Hours	Lab Hours	Course Credits
AUT 241 [1]Automotive Electricity I	3	3	4
AUT 265 [1]Auto. Braking Systems	2	3	3
ECO 120 Survey of Economics	3	0	3
ENG 115 Technical Writing	3	0	3
ITE 215 Adv. Computer Applications & Integration	3	2	4
Total	**14**	**8**	**17**

Third Semester	Lecture Hours	Lab Hours	Course Credits
AUT 242 Automotive Electricity II	3	3	4
Total	**3**	**3**	**4**

Fourth Semester	Lecture Hours	Lab Hours	Course Credits
ACC 111 Accounting I	3	0	3
BUS 240 Business Law	3	0	3
MKT 100 Principles of Marketing	3	0	3
HLT/PED Elective	0	4	2
HUM Humanities Elective	3	0	3
Total	**12**	**4**	**14**

Fifth Semester	Lecture Hours	Lab Hours	Course Credits
ACC 110 Intro to Computerized Accounting - Peachtree	2	0	2
AUT 212 Automotive Systems IV	3	3	4
BUS 111 Principles of Supervision	3	0	3
BUS 205 Human Resource Mgt.	3	0	3
BUS 236 Business Communications	3	0	3
MKT 170 Customer Service	1	0	1
Total	**15**	**3**	**16**

Total Minimum Credits for the Associate of Applied Science Degree in Business Management (Automotive Management Specialization) **69**

[1]*Students may substitute AUT courses approved by the instructor.*

Business Management - Motorsports Management Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Business Management – Motorsports Management Specialization is designed primarily for persons seeking their first job or who desire a promotion in their present position or in another field, including self employment. Students will be provided knowledge, skills, and training necessary to perform mid-management level functions in motorsports related companies. Coursework includes instruction in mathematics, critical thinking, technical writing, interpersonal relationships, communications, team building, motorsports industry, safety regulations, motorsports transportation, management, law, hospitality management, computer applications, accounting, marketing, and other areas related to the motorsports industry.

Occupational Objectives: Completion of this program may lead to employment or career advancement in a variety of positions including the following:

Distribution Specialist
Hospitality Manager
Media Specialist
Motorsports Activity Manager
Motorsports Event Manager
Motorsports Team Manager
Public Relations Specialist
Sales Representative
Transportation Specialist

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies Program.

Program Description: The Motorsports Management Specialization is designed for students who wish to pursue employment in management and support areas of Motorsports related companies. The program includes courses in motorsports technology and management, general education and electives. Instruction will include both the theoretical concepts and practical applications needed for success in motorsports management. Some courses may be taught as web-based courses. You are urged to consult with the Counseling Office and your faculty advisor in planning your program and selecting electives.

Program Requirements: To receive the Associate of Applied Science Degree in Business Management — Motorsports Management Specialization, you must complete a minimum of 69 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students.

Business Management - Motorsports Management Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 117	Keyboarding for Computer Usage	0	2	1
BIO/NAS/MTH	Science or Math Elective	3	0	3
BUS 100	Introduction to Business	3	0	3
BUS 121	Business Mathematics I	3	0	3
ENG 111	College Composition I	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
SDV 100	College Success Skills	1	0	1
Total		**16**	**4**	**18**

Second Semester		Lecture Hours	Lab Hours	Course Credits
MTS 100	Intro. to Motorsports Management	3	0	3
AUT 265	[1]Braking Systems	3	0	3
ECO 120	Survey of Economics	3	0	3
BUS 122	Business Math II		0	3
ITE 215	Adv. Computer Applications & Integration	3	2	4
HLT/PED	Health/Physical Ed. Elective	0	2	1
Total		**15**	**4**	**17**

Third Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
BUS 240	Business Law	3	0	3
HLT/PED	Health/Physical Ed. Elective	0	2	1
HUM	Humanities Elective	3	0	3
MTS 205	Motorsports Safety, Environmental, Transportation Issues	3	0	3
AUT 127	[1]Lubrication and Cooling Systems	3	0	3
Total		**15**	**2**	**16**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
Elective	Approved Business Elective	3	0	3
ACC 110	Intro to Computerized Accounting - Peachtree	2	0	2
BUS 111	Principles of Supervision	3	0	3
BUS 236	Business Communications	3	0	3
MKT 170	Customer Service	1	0	1
MTS 110	Motorsports Marketing	3	0	3
SPD 100	Principles of Public Speaking	3	0	3
Total		**18**	**0**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Business Management Track 4 (Motorsports Management Specialization) **69**

[1]*Students may substitute AUT courses approved by the instructor.*

Dental Hygiene

Award: ASSOCIATE OF APPLIED SCIENCE
(awarded by Virginia Western Community College)

Danville Community College is a cooperating institution for the Virginia Western Community College two-year program in Dental Hygiene. This Joint Venture Dental Hygiene program accepted its first class of students in the Fall Semester 1997. The next class will begin in Fall Semester 2009. Prospective students are encouraged to apply to DCC and enroll in related coursework.

It is recommended that students complete a preparatory curriculum for dental hygiene students such as the First-Year Studies/Certificate program. A recommended curriculum for dental hygiene students may be found on the DCC website (www.dcc.vccs.edu) in the Arts and Science Division section.

A student may complete this Associate of Applied Science Degree without moving from the Danville area. Applicants to the Dental Hygiene Program must have completed four units of high school English, one unit each of high school or college biology and chemistry, two units of high school or college social studies, and Algebra II or MTH 4. After a student is accepted by VWCC into the program, core courses in DNH are offered at Danville via distance learning technology, while clinical experiences are conducted by DNH instructors at the George Washington High School site. The contact person at Virginia Western Community College is Pam Woody, 540.857.7307. Students must submit a complete application packet in one envelope. This envelope must be submitted to Pam Woody, VWCC Health Technology Office, P.O. Box 14007, Roanoke, VA 24038.

Additional information about this program may be obtained from the DCC Site Coordinator, Lynn Turner, who may be reached on the DCC campus at 434.797.6427, or the site clinic at 434.791.5353.

Dental Hygiene

First-Year Curriculum

First Semester

		Lecture Hours	Lab Hours	Course Credits
BIO 141	*Human Anatomy & Physiology I	3	2	4
DNH 111	Oral Anatomy	2	0	2
DNH 115	Histology/Head & Neck Anatomy	3	0	3
DNH 120	Management of Emergencies	2	0	2
DNH 141	Dental Hygiene I	3	6	5
SDV 108	*College Survival Skills (or SDV 100)	1	0	1
Total		**14**	**8**	**17**

Second Semester

		Lecture Hours	Lab Hours	Course Credits
DNH 142	Dental Hygiene II	2	9	5
DNH 145	General & Oral Pathology	2	0	2
DNH 146	Peridontics for the Dental Hygienist	2	0	2
DNH 216	Pharmacology	2	0	2
ENG 111	*College Composition (or ENG 101)	3	0	3
NAS 185	*Microbiology	3	2	4
Total		**14**	**11**	**18**

Summer Session

		Lecture Hours	Lab Hours	Course Credits
BIO 142	*Human Anatomy & Physiology II	3	2	4
DNH 130	Oral Radiography for The Dental Hygienist	1	3	2
DNH 150	[2]Dental Hygienist	2	0	2
DNH 190	Coordinated Practice	2	3	3
Total		**8**	**8**	**11**

Second-Year Curriculum

Third Semester

		Lecture Hours	Lab Hours	Course Credits
DNH 214	[2]Practical Materials For Dental Hygiene	1	2	2
DNH 226	[3]Public Health Dental Hygiene I	2	0	2
DNH 244	Dental Hygiene IV	1	12	5
PSY 230	*Developmental Psychology	3	0	3
Total		**7**	**14**	**12**

Fourth Semester

		Lecture Hours	Lab Hours	Course Credits
DNH 227	Public Health Dental Hygiene II	0	3	1
DNH 230	Office Practices & Ethics	1	0	1
DNH 245	Dental Hygiene V	1	12	5
ITE 102	*Computers and Information Systems	1	0	1
	*Humanities Fine Arts Elective	3	0	3
SPD 100	*Principles of Public Speaking	3	0	3
Total		**9**	**15**	**14**

Total Minimum Credits for the Associate of Applied Science Degree in Dental Hygiene..............................**72**

[1]Health and Wellness are emphasized throughout the Dental Hygiene Program, but specifically in DNH 150 Nutrition.

[2]Includes instruction in fundamental mathematical skills.

[3]SPD 105 may be substituted.

*Courses may be taken at Danville Community College prior to admission to the AAS Dental Hygiene program. DCC and Virginia Western Community College have agreed to a sequence of courses that will satisfy all non-DNH coursework requirements. This sequence may be taken through DCC's First Year Studies program.

Early Childhood Education

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full time student may complete this program in four semesters. Students who have developmental requirements may need more semesters to complete this program.

Purpose: The Early Childhood Education curriculum is designed for students who plan to work with children from birth through age eight years using developmentally appropriate practices. This curriculum provides the student with skills in areas documented by Virginia Competencies for Early Childhood Professionals. The Associate of Applied Science Degree program is primarily designed to benefit persons interested in employment in the care and education of young children immediately after completion of community college studies. However, several adjustments in program schedules are available to enable a student to prepare for transfer to a baccalaureate degree program in Early Childhood Education.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Child Care Center Director
    Child Care Center Teacher
    Teacher Aide/Assistant
    Child Care Center Teacher Assistant
    Recreation Aide or Program Leader
    Substitute Teacher

Admission Requirements: In addition to the admission requirements established by the College, entry into this curriculum requires a high school diploma or the equivalent. Students with academic weaknesses, as determined by the college's placement test, can correct these weaknesses by enrolling in Developmental Studies. Entry into the Associate of Applied Science degree program in Early Childhood Education also requires the following:

1. A personal interview with a representative of the Early Childhood Education Department.
2. Special Requirement: Students who wish to enroll in the Early Childhood Education curriculum with the objective of obtaining employment in early childhood education settings are advised that excellent moral character is generally considered prerequisite to such employment. Background investigations will be conducted by employing agencies to confirm that potential employees have not been convicted of a crime involving moral turpitude or any felony.
3. Program placed students must present documentation of a negative Tuberculosis screening.

Program Description: The Early Childhood Education curriculum prepares individuals to work in services for children from birth through age eight years. The program includes courses in child education, behavior management, methods of teaching children, general education and electives. Instruction will include both theoretical concepts and practical applications needed for success in providing high quality services for children. Upon successful completion of the four-semester program, you will be awarded the Associate of Applied Science Degree (AAS) in Early Childhood Education.

Program Requirements: To receive the Associate of Applied Science Degree in Early Childhood Education you must complete a minimum of 67 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full time students.

Early Childhood Education

	Lecture Hours	Lab Hours	Course Credits
First Semester			
SDV 100 College Success Skills	1	0	1
ENG 111 College Composition I	3	0	3
CHD 120 Intro. Early Childhood Education	3	0	3
SPD 100 Public Speaking	3	0	3
CHD 145 Methods in Art, Music & Movement	2	2	3
CHD 165 Obs. & Part. In Early Childhood/Primary Settings	1	6	3
Total	**13**	**8**	**16**
Second Semester			
ENG 112 College Composition II	3	0	3
ENG 150 Children's Literature or HUM/FA elective	3	0	3
CHD 118 Language Arts for Young Children	2	2	3
CHD 166 Infant & Toddler Programs	3	0	3
PSY 235 Child Psychology	3	0	3
Total	**14**	**2**	**15**
Third Semester			
CHD 146 Math, Science & Social Studies for Children	2	2	3
CHD 117 Intro. To Reading Meth.	3	0	3
EDU 235 Health, Safety, & Nutrition for Children	3	0	3
CHD 210 Intro. to Exceptional Children	3	0	3
CHD 205 Guiding the Behavior of Children	3	0	3
CHD 216 Early Childhood Prog., Schools & Social Change	3	0	3
Total	**17**	**2**	**18**

	Lecture Hours	Lab Hours	Course Credits
Fourth Semester			
CHD 215 Models of Early Childhood Programs	3	0	3
CHD 270 Adm. Of Early Childhood Programs	3	0	3
CHD 265 Adv. Obs. & Part. In Early Childhood/Primary Settings	1	6	3
CHD 298 Portfolio Development	1	0	1
HLT 105/106 First Aid & Infant/Child CPR	2	0	2
BUS 121 Business Mathematics	3	0	3
SOC 215 Sociology of the Family	3	0	3
Total	**16**	**6**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Early Childhood Education **67**

All students are recommended to take ITE 115 (Introduction to Computer Applications and Concepts) in addition to courses required for the AAS degree.

Students planning to transfer to a four-year institution should make the following additions/changes in their curriculum:

MTH 151 Mathematics for Liberal Arts I is recommended for students planning to transfer to four-year institutions. Students may need to complete MTH 2, MTH3 and MTH 4 prior to enrolling in this course, depending on placement scores.

The addition of BIO 101 General Biology is recommended for students planning to transfer to four-year institutions.

The addition of PSY 200 Principles of Psychology is recommended for students planning to transfer to four-year institutions.

The addition of ITE 115(Introduction to Computer Applications and Concepts) is recommended for students planning to transfer to four-year institutions.

The addition of EDU 200 (Introduction to Teaching as a Profession) is recommended for students planning to transfer to four-year institutions.

General Engineering Technology

Award: ASSOCIATE OF APPLIED SCIENCE

Length: Two years. Part-time students determine their own pace.

Purpose: The Associate of Applied Science Degree in General Engineering Technology is designed to provide a broad base of math, science, and engineering knowledge which will prepare the graduate to enter the technical workforce upon graduation. Entry into the workplace would be at the Engineering Assistant level. The graduate will have knowledge in areas of Engineering Technology such as engineering materials, design drafting, engineering mechanics, manufacturing methods, electronics, and computer programming.

> Occupational Objectives:
> Engineering Technician
> Quality Control Technician
> Industrial Engineering Technician
> Material Testing Technician
> Technical Salesperson

Admission Requirements: In addition to the admission requirements established for the College, this curriculum requires successful completion of four units of high school English; three units of high school mathematics (Algebra I, Algebra II and Geometry); two units of high school social studies; one unit of laboratory science, and one unit of

Technical Drafting. If a student meets the general admission requirements, a counselor will discuss the student's academic strengths and weaknesses. Any academic deficiencies may be corrected in the College's Developmental Studies program.

Program Description: General Engineering is a two-year curriculum combining a basic core of engineering courses. These courses are drawn from the field of Mechanical, Industrial, and Electronic Engineering. The first year includes studies in science, math, English, drafting, and general education courses. Although the first year is composed almost exclusively of engineering technology courses, these courses will prepare the student to enter the engineering field as an engineering technician upon graduation.

Program Requirements: To receive an Associate of Applied Science Degree in General Engineering Technology you must complete a minimum of 67 credits with a 2.00 or better grade point average. The 67 credits are distributed according to the following outline. The outline represents a typical order of courses taken by full-time day students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.
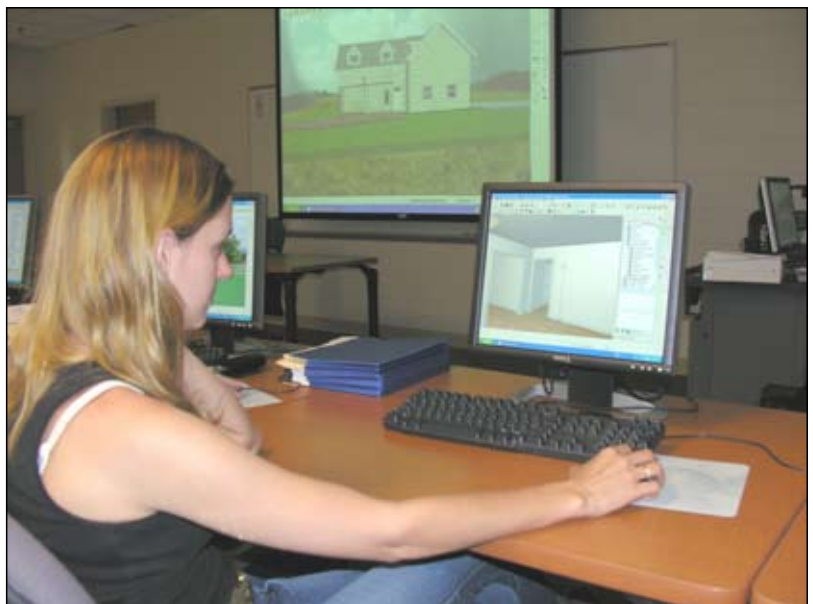
General Engineering Technology

First Semester		Lecture Hours	Lab Hours	Course Credits
EGR 115	Engineering Graphics	1	3	2
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
MAC 131	Machine Lab I	1	3	2
MEC 100	Intro. to Engineering Technology	1	2	2
MTH 271	Applied Calculus I	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**10**	**10**	**14**

Second Semester		Lecture Hours	Lab Hours	Course Credits
ENG 111	English Composition I	3	0	3
MEC 111	Materials	3	0	3
MEC 126	Computer Programming	2	0	2
MTH 272	Applied Calculus II	3	0	3
SPD 100	Principles of Public Speaking	3	0	3
HLT/PED	Physical Ed. Elective	0	2	1
Total		**14**	**2**	**15**

Summer Term I		Lecture Hours	Lab Hours	Course Credits
DRF 201	Comp. Aided Drafting and Design I	3	2	4
MAC 126	Introduction to CNC	2	3	3
MEC 131	Mechanics I	3	0	3
Total		**8**	**5**	**10**

Third Semester		Lecture Hours	Lab Hours	Course Credits
ETR 115	DC and AC Fundamentals	3	0	3
MEC 132	Mechanics II	3	0	3
PHY 201	College Physics I	3	3	4
SOC	Social Science Elective	3	0	3
Total		**12**	**3**	**13**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
PHY 202	College Physics II	3	3	4
HUM	Humanities Elective	3	0	3
HLT/PED	Physical Ed. Elective	0	2	1
EEE	[1]Elective	3	0	3
MEC 211	Machine Design I	3	3	4
Total		**12**	**8**	**15**

Total Minimum Credits for the Associate of Applied Science Degree in General Engineering Technology **67**

All students are recommended to take ITE 115 (Introduction to Computer Applications and Concepts) in addition to courses required for the AAS degree.

[1]Technical Elective must be applicable to career objectives and approved by faculty advisor.

Health Science - Practical Nursing Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters (two years)

Purpose: The Health Science program with a Specialization in Practical Nursing is designed to prepare students for careers as practical nurses. In addition, this program requires students to develop a firmer foundation in positive health practices, anatomy and physiology, and applied mathematics than is required in typical practical nursing certificates. This degree should be chosen by students who wish to develop professionally in directions of health care education, community health, or more advanced nursing training and supervision. Upon completion of the program, graduates will be eligible to take the National Council Licensure Examination (NCLEX-PN).

Occupational Objectives: Opportunities for the Licensed Practical Nurse include employment in hospitals, nursing homes, clinics, day care centers, doctor's offices, industry, hospice, and private duty nursing.

Prerequisites/Admission Requirements:
1. High School diploma or GED
2. Non-developmental placement in English (writing and reading) and strong competence in basic arithmetic.
3. Successful completion of the Nursing Entrance examination
4. Current C.P.R. certification at the American Heart Association professional rescuer level.
5. Priority consideration will be given to students who have completed a sequence of preparatory college-level courses with a grade of "B" or better. These courses are specified on the DCC web site (www.dcc.vccs.edu). Go to Academic Information, Catalog, 2008-2009 Catalog, AAS Programs and scroll down to First Year Studies. The courses are indicated under the First Year Studies Certificate for LPNs. The First Year Studies Certificate for LPNs is beneficial for certain students but not required.

Note: This program is academically rigorous and there are more applicants than available seats. Therefore, admission is on a selective, not first-come, first-served basis. The selection process will focus on the student's past academic performance and the results of the entrance examination. It is recommended that students enroll initially in the First-Year Studies program and then apply to this degree.

Individuals who are currently licensed as practical nurses may register for this program without applying for admission by contacting the Admissions Office. Transcripts from the institution where the student graduated in a practical nursing program are required.

Readmission Requirements: Students desiring to be readmitted to the program will follow the same procedures outlined above. Once a student is readmitted, there are additional requirements regarding repetition of previous coursework. A copy of these additional requirements may be obtained from the Practical Nursing Department following readmission. Students are allowed readmission once.

Program Requirements: To receive the Associate of Applied Science Degree in Health Science with a Specialization in Practical Nursing, students must complete a minimum of 67 credits with a grade point average of 2.00 or better. In order to advance to the next semester, you must earn a grade of "C" or better in BIO, HLT, MTH 126 and individual components of all PNE courses. You must also demonstrate satisfactory attendance and performance in nursing clinical areas.

Health Science - Practical Nursing Specialization

First Year Fall Semester	Lecture Hours	Lab Hours	Course Credits
SDV 100 College Success Skills	1	0	1
MTH 126 Math for Allied Health	3	0	3
BIO 141 Anatomy & Physiology I	3	3	4
HLT 141 Terminology	1	0	1
PNE 173 Pharmacology for PN	2	0	2
PNE 161 Nursing in Health Changes	4	6	6
Total			**17**

Spring Semester	Lecture Hours	Lab Hours	Course Credits
PNE 151 Medical Surgical Nursing I	3	3	4
PNE 174 Applied Pharmacology	0	3	1
BIO 142 Anatomy & Physiology II	3	3	4
ITE 116 Survey of Computer Software Applications	2	0	2
ENG 111 College Composition	3	0	3
HLT 160 Personal Health & Fitness	2	2	3
Total			**17**

Second Year Fall Semester	Lecture Hours	Lab Hours	Course Credits
PNE 152 Medical Surgical Nursing II	3	6	5
PNE 135 Maternal Child	4	3	5
PSY 230 Developmental Psychology	3	0	3
HLT 230 Principles of Nutrition & Human Development	3	0	3
PNE 158 Mental Health & Psychiatric Nursing	1	0	1
Total			**17**

Spring Semester	Lecture Hours	Lab Hours	Course Credits
PNE 163 Nursing in Health Changes III	4	15	9
HUM 165 Controversial Issues	3	0	3
PNE 145 Trends	1	0	1
PSY 200 Principles of Psychology	3	0	3
Total			**16**

Total Minimum Credits for the Associate of Applied Science Degree in Health Science — Practical Nursing Specialization **67**

Information Systems Technology - Computer Programming Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Applied Science Degree program in Information Systems Technology is designed primarily for persons who seek employment in the information processing field immediately upon graduation. Persons seeking initial employment in an information processing position and those in information processing who are seeking advancement will benefit from the program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Computer Programmer
    Data Analyst
    Data Base Administrator
    Information Systems Trainer
    Junior Systems Analyst
    System Manager
    Technical Writer

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of college preparatory high school algebra. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in your academic preparation in the College's Developmental Studies program.

Program Description: Approximately one-half of the program includes courses in Information Systems Technology. The program includes technical courses in Information Systems Technology, courses in related areas, and general education. Instruction includes both the theoretical concepts and practical applications needed for success in Information Systems Technology. "Hands-on" training in an interactive setting is achieved through exercises and assignments. You are urged to consult with the Counseling Office and your faculty advisor in planning your program. Upon satisfactory completion of the four-semester program, you will be awarded the Associate of Applied Science Degree (AAS) in Information Systems Technology.

Program Requirements: To receive the Associate of Applied Science Degree, you must complete a minimum of 66 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses planned for fulltime students.

Information Systems Technology - Computer Programming Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 117	Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
ENG 131	Technical Report Writing	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
ITP 100	Software Design	3	0	3
MTH 121	Fundamentals of Math I			
or				
	Approved Math Elective	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**17**	**2**	**18**

Second Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
ECO 120	Survey of Economics	3	0	3
HUM	Humanities Elective	3	0	3
ITP 120	Java Programming I	3	2	4
ITP 134	C++ Programming	3	2	4
Total		**15**	**4**	**17**

Third Semester		Lecture Hours	Lab Hours	Course Credits
BUS 220	Intro. to Business Statistics	3	0	3
HLT/PED	Elective	0	2	1
ITE 150	Desktop Database Software	3	2	4
ITE 221	PC Hardware and OS Architecture	3	2	4
ITP 112	Visual Basic: Net 1 Programming	3	2	4
Total		**12**	**6**	**16**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
ETR 149	PC Repair	3	0	3
HLT/PED	Elective	0	2	1
ITN114	Windows XP Pro.	3	2	4
ITP 212	Visual Basic NET II			
or				
ITP 234	Visual C++ Programming II	3	2	4
SPD 100	Principles of Public Speaking	3	0	3
Total		**12**	**4**	**15**

Total Minimum Credits for the Associate of Applied Science Degree in Information Systems Technology – Computer Programming **66**

Information Systems Technology - Microcomputer Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Information Systems Technology - Microcomputer Specialization program is designed primarily for persons who seek employment immediately upon graduation. Persons seeking initial employment in a microcomputer processing position and those in microcomputer processing who are seeking advancement may benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

- Microcomputer Operator
- Microcomputer Technician
- Productivity Software Specialist
- Technical/Software Support Specialist
- PC Helpdesk Specialist

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of college preparatory high school algebra. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may improve any deficiencies in your academic preparation in the College's Developmental Studies program.

Program Description: Approximately one-half of the program includes courses in microcomputer software and systems applications. The program offers technical courses in microcomputer software and operations, courses in related areas, and in general education. Instruction includes both the theoretical concepts and practical applications needed for success using microcomputers. "Hands on" training in an interactive setting is achieved through exercises and assignments. You are urged to consult with the Counseling Office and your faculty advisor in planning your program. Upon satisfactory completion of the four-semester program, you will be awarded the Associate of Applied Science Degree (AAS) in Information Systems Technology Track II - Microcomputer Specialist.

Program Requirements: To receive the Associate of Applied Science Degree, you must complete a minimum of 65 credits with a grade point average of 2.00 or better. The following outline represents the typical order in which courses are planned for full-time students.

Information Systems Technology - Microcomputer Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 117	Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
ENG 131	Technical Report Writing	3	0	3
HLT/PED	Elective	0	2	1
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
MTH 121	Fundamentals of Math I or			
	Approved Math Elective	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**14**	**4**	**16**

Second Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
AST 238	Microsoft Word	2	0	2
AST 239	Microsoft Word Lab	0	2	1
ECO 120	Survey of Economics	3	0	3
HLT/PED	Elective	0	2	1
ITE 140	Spreadsheet Software	3	0	3
SPD 100	Principles of Public Speaking	3	0	3
Total		**14**	**4**	**16**

Third Semester		Lecture Hours	Lab Hours	Course Credits
ACC 110	Intro. to Comp. Accounting - Peachtree	2	0	2
BUS 220	Intro Business Statistics	3	0	3
HUM	Elective	3	0	3
ITE 221	PC Hardware and OS Architecture	3	2	4
ITP 112	Visual Basic NET I Programming	4	0	4
Total		**15**	**2**	**16**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
AST 253	Desktop Publishing	2	0	2
AST 255	Desktop Publishing - Lab	0	2	1
ETR 149	PC Repair	3	0	3
ITE 150	Desktop Database Software	3	2	4
ITN 114	Windows XP Pro.	3	2	4
ITX	IT Elective	3	0	3
Total		**14**	**6**	**17**

Total Minimum Credits for the Associate of Applied Science Degree in Information Systems Technology Track II - Microcomputer Specialist **65**

Information Systems Technology - Network Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Associate of Applied Science Degree program in Information Systems Technology - Network Specialization is designed for those persons seeking employment in the field of network communications upon graduation. Persons currently employed in another field of information processing and seeking advancement will benefit from this program. In addition, persons already employed in the networking field and preparing for certification examinations will find the material in this program helpful.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

     PC Support Specialist
     PC Support Technician
     Network Administrator
     Network Support Specialist
     Network Engineer
     Data Communications Specialist

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of college preparatory high school algebra. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in your academic preparation in the College's Developmental Studies program.

Program Description: This program contains courses which provide an emphasis on designing, creating and maintaining local area networks and wide area networks. Courses providing instruction in Microcomputer Software Management, Voice Telephony Services, Switches, Firewalls, Routers, Servers, Workstations, and basic Electronics concepts are an integral part of the curriculum. Students will learn how to operate the newest networking equipment and software available today that will prepare them for numerous employment opportunities. General education and business-related courses provide the student with a perspective on the role of technology in today's society. Upon satisfactory completion of the four semester program, the Associate of Applied Science Degree in Information Systems Technology Track III - Network Specialist will be awarded.

Program Requirements: To receive the Associate of Applied Science Degree, you must complete a minimum of 66 credits with a grade point average of 2.00 or better. The following outline represents the typical order of courses planned for full-time students.

Information Systems Technology - Network Specialization

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 117	Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
ETR 115	D.C. and A.C. Fundamentals	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
ITN 154	Networking Fundamentals CISCO	3	2	4
MTH 121 or	Fundamentals of Math I			
	Approved Math Elective	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**17**	**4**	**19**

Second Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
ENG 131	Technical Report Writing	3	0	3
ITN 114	Windows XP Pro	3	2	4
ITP 112 or	Visual Basic .NET I Programming			
ITN 155	Introductory Routing CISCO	3	2	4
SPD 100	Principles of Public Speaking	3	0	3
Total		**15**	**4**	**17**

Third Semester		Lecture Hours	Lab Hours	Course Credits
BUS 220	Intro Business Statistics	3	0	3
HLT/PED	Elective	0	2	1
HUM	Elective	3	0	3
ITN 115	Windows 2003 Server	3	2	4
ITE 221 or	PC Hardware and OS Architecture			
ITN 156	Basic Switching and Routing CISCO	3	2	4
Total		**12**	**6**	**15**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
ECO 120	Survey of Economics	3	0	3
ETR 149	PC Repair	3	0	3
HLT/PED	Elective	0	2	1
ITN 116	Windows 2003 Network Infrastructure Adm.	3	2	4
ITN 157	WAN Technologies CISCO	3	2	4
Total		**12**	**6**	**15**

Total Minimum Credits for the Associate of Applied Science Degree in Information Systems Technology Track III - Network Specialist **66**

Marketing

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Marketing program is designed for students who are preparing for full-time employment in merchandising, retailing or related marketing occupations. Persons seeking initial employment in Marketing or those already employed in Marketing and seeking advancement may benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

  Sales Representative
  Buyer and Assistant Buyer
  Manager/Manager Trainee
  Department Manager
  Real Estate/Insurance Sales
  Small Business Management/Owner
  Other Related Marketing Occupations

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of high school mathematics. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background as well as your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program includes technical courses in marketing, related business courses and general education courses. Instruction will include both the theoretical concepts and practical applications needed for further success in Marketing. You are urged to consult with the Counseling Office and a faculty advisor in planning your program and selecting electives. Upon satisfactory completion of the program, you will be awarded the Associate of Applied Science in Business Management (Major: Marketing).

Program Requirements: To receive the Associate of Applied Science in Business Management (Major: Marketing) you will need to complete 69 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students.

Marketing

First Semester		Lecture Hours	Lab Hours	Course Credits
AST 117	Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
BUS 121	Business Mathematics I	3	0	3
ENG 111	College Composition I	3	0	3
ITE 115	Intro to Computer App. & Concepts	3	2	4
MKT 100	Principles of Marketing	3	0	3
SDV 100	College Success Skills	1	0	1
TOTAL		**17**	**2**	**18**

Second Semester		Lecture Hours	Lab Hours	Course Credits
BUS 111	Principles of Supervision I	3	0	3
BUS 122	Business Mathematics II	3	0	3
ITE 215	Adv. Computer App. & Integration	3	2	4
MKT 110	Principles of Selling	3	0	3
MKT 170	Customer Service	1	0	1
SPD 100	Principles of Public Speaking	3	0	3
TOTAL		**16**	**2**	**17**

Third Semester		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
BIO/NAS or MTH	Math or Science Elective	3	0	3
ECO 120	Survey of Economics	3	0	3
HLT/PED	Health/Physical Education	0	2	1
MKT 216	Retail Organization & Management	3	0	3
MKT 228	Promotion	3	0	3
TOTAL		**15**	**2**	**16**

Fourth Semester		Lecture Hours	Lab Hours	Course Credits
ACC 110	Intro. Computerized Accounting	2	0	2
BUS 236	Communication in Mgt.	3	0	3
HLT/PED	Health/Physical Education	0	2	1
HUM	Humanities Elective	3	0	3
MKT 227	Merchandise Buying & Control	3	0	3
MKT 298	Seminar & Project	3	0	3
MKT 281	Principles of Internet Mktg.	3	0	3
TOTAL		**17**	**2**	**18**

Total Minimum Credits for Associate of Applied Science Degree in Business Management
(Major: Marketing) **69**

Marketing - Warehousing and Distribution Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Marketing – Warehousing and Distribution Specialization program is designed for students who are preparing for full-time employment in a career field involving the care and control of stock, dispatching goods and materials, and assembling bulk orders for distribution. Persons seeking initial employment in marketing, warehousing and/or distribution of goods and services or those already employed in these fields and seeking advancement may benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Shipping
Receiving
Logistics/Traffic
Warehouse Manager/Manager Trainee
Department Manager
Purchasing
Other Related Marketing Occupations

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires completion of four units of high school English and one unit of high school mathematics. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background as well as your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program includes technical courses in marketing, related business courses and general education courses. Instruction will include both the theoretical concepts and practical applications needed for further success in Marketing. You are urged to consult with the Counseling Office and a faculty advisor in planning your program and selecting electives. Upon satisfactory completion of the program, you will be awarded the Associate of Applied Science Degree (AAS) in Business Management (Major: Marketing with a Warehousing and Distribution Specialization).

Program Requirements: To receive the Associate of Applied Science in Business Management (Major: Marketing with a Warehousing and Distribution Specialization), you will need to complete 69 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students.

Marketing - Warehousing and Distribution Specialization

First Semester

		Lecture Hours	Lab Hours	Course Credits
AST 117	Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
BUS 121	Business Mathematics I	3	0	3
ENG 111	College Composition I	3	0	3
ITE 115	Intro./Computer App. & Concepts	3	2	4
MKT 100	Principles of Marketing	3	0	3
SDV 100	College Success Skills	1	0	1
TOTAL		**17**	**2**	**18**

Second Semester

		Lecture Hours	Lab Hours	Course Credits
BUS 111	Principles of Supervision I	3	0	3
BUS 122	Business Mathematics II	3	0	3
ITE 215	Adv. Computer App. & Integra	3	2	4
MKT 110	Principles of Selling	3	0	3
MKT 170	Customer Service	1	0	1
SPD 100	Principles of Public Speaking	3	0	3
TOTAL		**16**	**2**	**17**

Third Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 111	Accounting I	3	0	3
BIO/NAS or MTH	Math or Science Elective	3	0	3
ECO 120	Survey of Economics	3	0	3
HLT/PED	Health/Physical Education	0	2	1
MKT 216	Retail Organization & Management	3	0	3
BUS 223	Distribution & Transportation	3	0	3
TOTAL		**15**	**2**	**16**

Fourth Semester

		Lecture Hours	Lab Hours	Course Credits
ACC 110	Comp. Accounting	2	0	2
BUS 236	Communication in Management	3	0	3
HLT/PED	Health/Physical Education	0	2	1
HUM	Humanities Elective	3	0	3
MKT 227	Merchandise Buying & Control	3	0	3
MKT 297	Cooperative Education	3	0	3
BUS 255	Inventory & Warehouse Management	3	0	3
TOTAL		**17**	**2**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Business Management (Major: Marketing with a Warehousing and Distribution Specialization) **69**

Marketing - Electronic Commerce Specialization

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in four semesters.

Purpose: The Marketing – Electronic Commerce Specialization program is designed for students who are interested in employment in the fields of Web design and Internet marketing in business-to-business (B2B) and business-to-consumer (B2C) transactions. This degree program is a blend of business, marketing, and information technology courses. Persons seeking initial employment in the electronic commerce field or already employed in a related area and seeking advancement may benefit from this program.

Occupational Objectives: Students completing the marketing degree with a concentration in electronic commerce will have the skills needed to take a leadership role in the development and/or management of electronic commerce activities in a variety of workplace settings. In addition to being trained specifically in electronic commerce, graduates of this program will be prepared for possible employment opportunities in a variety of management and marketing positions. The following occupational titles represent examples of possible employment opportunities for graduates with an electronic commerce specialization:

Web Designer / Developer
Sales Representative
E-Business Account Manager
Management Trainee
Internet Service Provider
Department Manager
Web Sales Support Coordinator
Direct Marketer
Administrative Assistant
Internet Entrepreneur
Web Site Development and Maintenance Specialist
Production Supervisor
Internet Marketer / Search Engine Optimization
Small Business Owner/Manager
Other Related E-Commerce Occupations
Other Related Marketing Occupations Office Manager

Admission Requirements: In addition to the requirements established for the College, entry into this program requires completion of four units of high school English and one unit of high school mathematics. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's developmental studies program.

Program Description: The program includes technical courses in marketing, information technology, business management, and general education courses. Instruction will include both theoretical concepts and practical applications needed for further success in marketing and e-commerce. You are urged to consult with the counseling office to plan your program. Since this program has several elective courses, you must work with your academic advisor in planning your program and selecting electives. Upon satisfactory completion of the program, you will be awarded the Associate of Applied Science Degree (AAS) in Business Management (Major: Marketing with an Electronic Commerce Specialization).

Program Requirements: To receive the Associate of Applied Science in Business Management (Major: Marketing with an Electronic Commerce Specialization), you will need to complete 69 credits with a grade point average of 2.00 or better. The outline on the following page represents a typical order of courses taken by full-time students.

Marketing - Electronic Commerce Specialization

		Lecture Hours	Lab Hours	Course Credits
First Semester				
AST 117	Keyboarding for Computer Usage	1	0	1
BUS 100	Introduction to Business	3	0	3
BUS 121	Business Mathematics I	3	0	3
ENG 111	College Composition I	3	0	3
ITE 115	Intro/Comp. Appl. & Concepts	3	2	4
MKT 100	Principles of Marketing	3	0	3
SDV 100	College Success Skills	1	0	1
TOTAL		**17**	**2**	**18**

		Lecture Hours	Lab Hours	Course Credits
Second Semester				
BUS 111	Principles of Supervision I	3	0	3
ITD 110	Web Design I	3	0	3
ECO 120	Survey of Economics	3	0	3
Elective	E-Commerce Elective*	3	0	3
HLT/PED	Health/Physical Education	0	2	1
MKT 281	Principles of Internet Mktg.	3	0	3
MKT 170	Customer Service	1	0	1
TOTAL		**16**	**2**	**17**

		Lecture Hours	Lab Hours	Course Credits
Third Semester				
ACC 111	Accounting I	3	0	3
BIO/NAS/ MTH	Math or Science Elective	3	0	3
MKT 216	Retail Organization & Management	3	0	3
HLT/PED	Health/Physical Education	0	2	1
Elective	E-Commerce Elective*	3	0	3
MKT 228	Promotion	3	0	3
TOTAL		**15**	**2**	**16**

		Lecture Hours	Lab Hours	Course Credits
Fourth Semester				
Elective	E-Commerce Elective	3	0	3
HUM	Humanities Elective	3	0	3
MKT 110	Principles of Selling	3	0	3
BUS 236	Communication in Management	3	0	3
Elective	E-Commerce Elective*	3	0	3
MKT 298	Seminar & Project	3	0	3
TOTAL		**17**	**2**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Business Management (Major: Marketing with an Electronic Commerce Specialization) **69**

E-Commerce Electives:
With approval of their advisor, students will be allowed to select from the following classes as long as the prerequisite course(s) have already been taken:

Number	Course Title	Prerequisite(s)
AST 195	Microsoft FrontPage Web Design	ITE 115
ENG 123	Writing for the World Wide Web	ENG 111 or 115
ITD 112	Designing Web Page Graphics	ITD 110
ITD 210	Web Page Design II	ITD 110
ITD 212	Interactive Web Design	ITD 110
ITE 130	Intro to Internet Services	None
ITE 150	Desk Top Database Software	ITE 115
ITE 182	User Support / Help Desk Princ.	ITE 115
ITP 100	Software Design	ITE 115
ITP 140	Client Side Scripting	ITP 100
MKT 282	Principles of E-Commerce	MKT 100

Registered Nurse

Award: ASSOCIATE OF APPLIED SCIENCE

Length: A full-time student may complete this program in five semesters.

Purpose: The RN program at DCC is designed to prepare students for careers as registered nurses. The program is affiliated with Virginia's Commonwealth Nursing program. This degree should be chosen by students who wish to work in a variety of occupations where the skills and knowledge of the registered nurse are either required or desirable, including direct patient care, healthcare management and supervision, and health education. Upon successful completion of the program, students will be eligible to take the National Licensure Examination leading to licensure as a Registered Nurse (RN).

Occupational Objectives: Opportunities for the Registered Nurse include employment as clinicians, supervisors or educators in colleges, hospitals, clinics, industry, adult homes, day care centers and schools, doctor's offices, and home health companies.

Admission Requirements: : The following are admissions requirements:
- High School graduate or G.E.D.
- High School or College Algebra, Biology and Chemistry with a grade of C or better. Students who have not taken high school biology may take BIO 101. (Please note that BIO 101 is a prerequisite for BIO 231.) Students who have not taken high school chemistry may that CHM 101 or CHM 111. Students who have not taken algebra in high school need to take the algebra class indicated by their placement scores.
- Any developmental courses identified as indicated by placement tests.
- Pre-admission nursing test with acceptable scores (NLN 50 or better in Verbal and Math; NET 60 or better in reading and math; HESI 50 or better).

- The following general education courses with a C or better:

Course		Credits
BIO 231 Human Anatomy	and Physiology	4 credits
ENG 111 College	Composition	3 credits
PSY 230 Developmental	Psychology	3 credits
SDV 100 College Success	Skills	1 credit
TE EEE Information Technology	Elective	3 credits

Note: This program is academically rigorous. Students should have a strong familiarity with web-based applications since instruction will involve significant on-line requirements.

Readmission Requirements and Bridge Students:

Students seeking readmission should contact Tammy McKinney, Program Coordinator for Nursing. Individuals who are currently licensed practical nurses may be eligible for a bridge program to RN and should also contact Mrs. McKinney at 434.797.8416 or 434.797.8512.

Program Requirements: To receive the Associate of Applied Science Degree in Registered Nursing, students must complete 69 credit hours with a 2.00 GPA or better. In addition, students must pass all courses with at least a C. Attendance and satisfactory performance in clinical portions of each class is mandatory.

Registered Nurse

	Lecture Hours	Lab Hours	Course Credits
First Semester			
NUR 111 Nursing I	5	6	7
NUR 135 Drug Dosage Calculations	1	0	1
BIO 231 Human Anatomy & Physiology I	3	3	4
ENG 111 College Composition I	3	0	3
ITE EEE ITE Elective	3	0	3
TOTAL			**18**
Second Semester			
NUR 112 Nursing II	4	12	8
BIO 232 Human Anatomy & Physiology II	3	3	4
ENG 112 College Composition II	3	0	3
NUR 226 Health Assessment	2	1	3
TOTAL			**18**
Third Semester			
NUR 247 Psychiatric/Mental Health Nursing	2	1	3
PSY 230 Developmental Psychology	3	0	3
SDV 100 College Success Skills	1	0	1
TOTAL			**7**

	Lecture Hours	Lab Hours	Course Credits
Fourth Semester			
NUR 202 Medical/Surgical Nursing I	2	2	4
NUR 245 Maternal/Newborn Nursing	2	1	3
NUR 246 Parent/Child Nursing	2	1	3
HLT 250 General Pharmacology	3	0	3
TOTAL			**13**
Fifth Semester			
NUR 208 Acute Medical Surgical Nursing	3	2	5
NUR 254 Dimensions of Professional Nursing	2	0	2
HUM EEE Humanities Elective	3	0	3
SOC 200 Principles of Sociology	3	0	3
TOTAL			**13**

Total Minimum Credits for the Associate of Applied Science Degree in Registered Nursing **69**

Respiratory Therapy

Award: ASSOCIATE OF APPLIED SCIENCE
(awarded by J. Sargeant Reynolds Community College)

Danville Community College is a cooperating institution for the J. Sargeant Reynolds Community College program in Respiratory Therapy.

A student may complete this Associate of Applied Science Degree without moving from the Danville area. Approximately 30 credits in specified DCC courses must be completed prior to acceptance by JSRCC in the Respiratory Therapy program. After a student is accepted by JSRCC into the program, core courses in RTH are offered in the Danville area via distance learning technology, while clinical experiences are coordinated through area hospitals.

Below is the J. Sargeant Reynolds Community College curriculum for the Associate of Applied Science Degree in Respiratory Therapy. For more details about this program, please call DCC's Division of Arts and Sciences at 434.797.8402.

First Semester

	Lecture Hours	Lab Hours	Course Credits
RTH 102 Integrated Sciences for Respiratory Care	3	0	3
RTH 110 Fundamental Theory & Procedures for Respiratory Care	2	6	4
RTH 121 Cardiopulmonary Science I	3	0	3
RTH 135 Diagnostic Therapeutic Procedures I	1	3	2
RTH 145 Pharmacology for Respiratory Care I	1	0	1
ENG 111 *College Composition I	3	0	3
SDV 100 *College Success Skills	1	0	1
*Health or Physical Ed.	0	0	1
Total	**14**	**9**	**18**

Second Semester

	Lecture Hours	Lab Hours	Course Credit
RTH 113 Pathophysiology of the Cardiopulmonary System	3	3	4
RTH 131 Respiratory Care Theory & Procedures I	3	3	4
RTH 190 Coordinated Practice in Respiratory Care	0	20	6
RTH 199 Supervised Study in Respiratory Care	1	0	1
ENG 112 *College Composition I	3	0	3
Total	**10**	**26**	**18**

Third Semester

	Lecture Hours	Lab Hours	Course Credit
RTH 132 Respiratory Care Theory & Procedures II	3	3	4
RTH 222 Cardiopulm. Science II	3	0	3
RTH 190 Coordinated Practice in Respiratory Care	0	10	3
RTH 215 Pulmonary Rehabilitation	1	0	1
RTH 265 Current Issues in Respiratory Care	2	0	2
NAS 161 Health Science I	3	3	4
Total	**12**	**16**	**17**

Fourth Semester

	Lecture Hours	Lab Hours	Course Credit
RTH 290 Coordinated Practice in Respiratory Care	0	20	6
RTH 299 Supervised Study in Respiratory Care	1	0	1
NAS 162 Health Science II	3	3	4
*Social Science Elective	6	0	6
*Health or Physical Education	0	0	1
Total	**10**	**26**	**18**

Total Minimum Credits for the Associate of Applied Science Degree in Respiratory Therapy........................**71**

Note: Students may prepare for the above program by taking this course while registered in DCC's First Year Studies program. Please contact an academic advisor in the Arts and Sciences Division to discuss this program, 434.797.8402.

Technical Studies

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Award: ASSOCIATE OF APPLIED SCIENCE

Purpose: The State Council for Higher Education in Virginia (SCHEV) has approved an Associate of Applied Science degree in Technical Studies for the Virginia Community College System to respond to the training and employment needs of local and regional industries. The program can be used as a general (or individualized) studies degree to enhance the education and training of current employees or to ensure basic technical and general work-based skills for new employees. The basic structure of the curriculum includes four components – general education, a technical core, occupational-technical content area(s), and work-based learning.

Program Description: Each Virginia Community College determines the specific majors for their respective areas and reports these to the VCCS Chancellor. The Technical Studies majors at Danville Community College include the following:
- Advanced Manufacturing Engineering
  Technology
- Fire Science
- Polymer Manufacturing Technology

Length: These programs are designed for employees of existing and new industries. The length of time required to complete the program varies.

Admission Requirements: Students must meet the general admission requirements of the College. All students who are not proficient in communication and computation skills will be required to correct deficiencies through developmental courses.

Technical Studies - Advanced Manufacturing Engineering Technology

Award: ASSOCIATE OF APPLIED SCIENCE

Purpose: The Advanced Manufacturing Engineering Technology program is designed to prepare the student to function as an advanced manufacturing engineering technology technician. It provides the student with the general knowledge and technical foundation skills necessary to function and advance in an advanced manufacturing field.

Objectives: The program will prepare the student to function effectively as an advanced manufacturing technician or serve in a supervisory position in a manufacturing setting.

Program Description: The program includes four educational components: namely, general education, technical foundations, content skills and knowledge, and work-based learning. The content skills and knowledge and work-based learning components are specific to the field of advanced manufacturing.

Program Requirements: To receive the Associate of Applied Science Degree in Technical Studies – Advanced Manufacturing Engineering Technology, you must complete a minimum of 69 credits with a grade point average of 2.0 or better.

General Education		Course Credits 18 Crs.
ENG 111	College Composition I	3
PHI 100	Introduction to Philosophy	3
or		
REL 230	Religions of the World	
PSY 126	Psychology for Business and Industry	3
or		
PSY 201	Introduction to Psychology I	
ECO 120	Survey of Economics	3
or		
PSY 231	Life Span Human Development I	
or		
SOC 201	Introduction to Sociology I	
MTH 103	Applied Technical Mathematics	3
or		
MTH 163	Precalculus I	
HLT 116	Personal Wellness	2
SDV 100	College Success Skills	1

Technical Foundations		19 Crs.
ETR 115	D.C. and A.C. Circuits	3
ITE 115	Intro. to Computer Applications & Concepts	4
MAC 150	Introduction to Computer Aided Manufacturing	3
ENG 115	Technical Writing	3
or		
ENG 131	Technical Report Writing I	
IND 235	Statistical Quality Control	3
IND 137	Teamwork and Problem Solving	3

Content, Skills and Knowledge		26 Crs.
BUS 195	Topics in Business Ethics	1
MEC 111	Materials for Industry	3
DRF 130	Introduction to Electrical/Electronic Drafting	2
DRF 160	Machine Blueprint Reading	3
DRF 195	Introduction to CAD	2
IND 145	Introduction to Metrology	3
IND 181	World Class Manufacturing	3
IND 216	Plant Layout and Materials Handling	3
SAF 246	Hazardous Chemicals, Material, Waste in the Workplace	3
MEC 210	Machine Design	3

Work-Based Learning		6 Crs.

Total Minimum Credits for the Associate of Applied Science Degree in Technical Studies — Advanced Manufacturing Engineering Technology **69**

Technical Studies - Fire Science

■■■

Award: ASSOCIATE OF APPLIED SCIENCE

Purpose: The Technical Studies - Fire Science program is designed to prepare you for advancement in the fire service field. It provides you with the general and fire protection knowledge necessary to function and advance in the fire service profession. It is for the in-service student.

Occupational Objectives: The program will prepare you to function effectively as a firefighter or manager in a fire department or related field.

Program Description: The program includes four educational components: namely, general education, technical foundations, content skills and knowledge and work-based learning. The content skills and knowledge and work-based learning components are specific to the field of fire service.

Program Requirements: To receive the Associate of Applied Science Degree, you must complete a minimum of 69 credits with a grade point average of 2.0 or better.

		Course Credits
General Education		**18 Crs.**
ECO 120	Survey of Economics	3
ENG 111	English Composition I	3
HLT 116	Personal Wellness	2
HUM 165	Controversial Issues	3
MTH 120	Introduction to Mathematics	3
PSY 126	Psychology for Business and Industry	3
SDV 100	College Success Skills	1

Technical Foundations		**12 Crs.**
ENG 115	Technical Writing	3
ITE 115	Intro. Computer Appl. & Concepts	3
ITE 130	Intro to Internet Services	3
NAS 110	Elementary Physical Science	3

Content, Skills and Knowledge		**24 Crs.**
FST 100	Principles of Emergency Services	3
FST 110	Fire Behavior and Combustion	3
FST 112	Hazardous Materials Chemistry	3
FST 115	Fire Prevention	3
FST 205	Fire Protection Hydraulics & Water Supply	3
FST 210	Legal Aspects of Fire Science	3
FST 215	Fire Protection Systems	3
FST 220	Building Construction for Fire Protection	3
FST 235	Strategy and Tactics	3
FST 240	Fire Administration	3
FST 245	Fire Risk and Analysis	3

Work-Based Learning		**6 Crs.**
EMS 112	Emergency Medical Tech. — Basic I	3
EMS 113	Emergency Medical Tech. — Basic II	3

Total Minimum Credits required for the Associate of Applied Science Degree in Technical Studies — Fire Science..**69**

Technical Studies - Polymer Manufacturing Technology

Award: ASSOCIATE OF APPLIED SCIENCE

Purpose: The Polymer Manufacturing Technology program is designed to prepare students for jobs in the plastics and polymers manufacturing industry. Its purpose is to provide technical knowledge and the skills necessary to function as a Polymer Manufacturing Technician in an injection molding or extrusion environment.

Occupational Objectives: The program will prepare the student to function effectively as polymer and plastics technicians in a manufacturing setting.

Program Description: The program includes four educational components: namely, general education, technical foundations, content skills and knowledge, and work-based learning. The content skills and knowledge components are specific to the polymer processing industry and the work-based learning component provides experience in the workplace through an internship with a local manufacturer.

Program Requirements: To receive the Associate of Applied Science Degree in Technical Studies – Polymer Manufacturing Technology, you must complete a minimum of 69 credits with a grade point average of 2.0 or better.

General Education   18 Crs.

		Course Credits
ENG 111	College Composition I	3
PHI 100	Introduction to Philosophy	3
or		
REL 230	Religions of the World	
One of the following:		
PSY 126	Psychology for Business and Industry	3
PSY 200	Principles of Psychology I	
PSY 230	Developmental Psychology	
PSY 231	Life Span Human Development I	
One of the following:		
ECO 120	Survey of Economics	3
or		
ECO 201	Principles of Macro Economics I	
MTH 103	Applied Technical Mathematics I	3
or		
MTH 163	Precalculus I	
HLT 116	Personal Wellness	2
SDV 100	College Success Skills	1

Technical Education   18 Crs.

CHM 100	Intro to Chemistry	3
or		
CHM 111	College Chemistry I	
ITE 115	Intro. to Computer Applications & Concepts	4
or		
BUS 147	Intro. to Business Info Systems	
MAC 131	Machine Lab I	2
ENG 115	Technical Writing	3
or		
ENG 131	Technical Report Writing I	
IND 235	Statistical Quality Control	3
IND 137	Teamwork and Problem Solving	3

Content, Skills and Knowledge   27 Crs.

IND 180	Introduction to Plastics and Plastics Processing	3
IND 185	Plastics Processing	3
IND 188	Intro. to Injection Molding	2
IND 195	Polymeric Materials	3
IND 195	Mold Maintenance & Design	3
IND 195	Moldflow	3
IND 195	Extrusion	3
IND 195	Adv. Injection Molding	4

Work-Based Learning   6 Crs.

Total Minimum Credits for the Associate of Applied Science Degree in Technical Studies - Polymer Manufacturing Technology.. **69**

Diploma Programs

Air Conditioning and Refrigeration
Automotive Analysis and Repair
Computer-Aided Drafting & Design
Electrical/Electronic Equipment Servicing
Electrical-ElectronicsTechnology
> Analyst Electronics Technology
> General Electronics Technology

Graphic Imaging Technology
Industrial Maintenance Technology
Precision Machining Technology

The Diploma programs differ from the Associate Degree programs in several ways. They may be presented at a different educational level and are developed in response to specific local employment needs, as identified by the programs' lay advisory committees and the College's Curriculum Committee. Their specific objective is to give students a variety of hands-on training experiences to prepare them for immediate employment. The diploma programs do not require the same level of general education training as the associate degree programs, so more of the required courses are directly related to the chosen field of study. There is no limit on the maximum number of credits required in these programs, but they are designed to be completed after one or two years of full-time study. The types of jobs that you might expect to obtain upon completion of the degree requirements are listed on the following catalog pages which also outline the specific courses for completing each program of study.
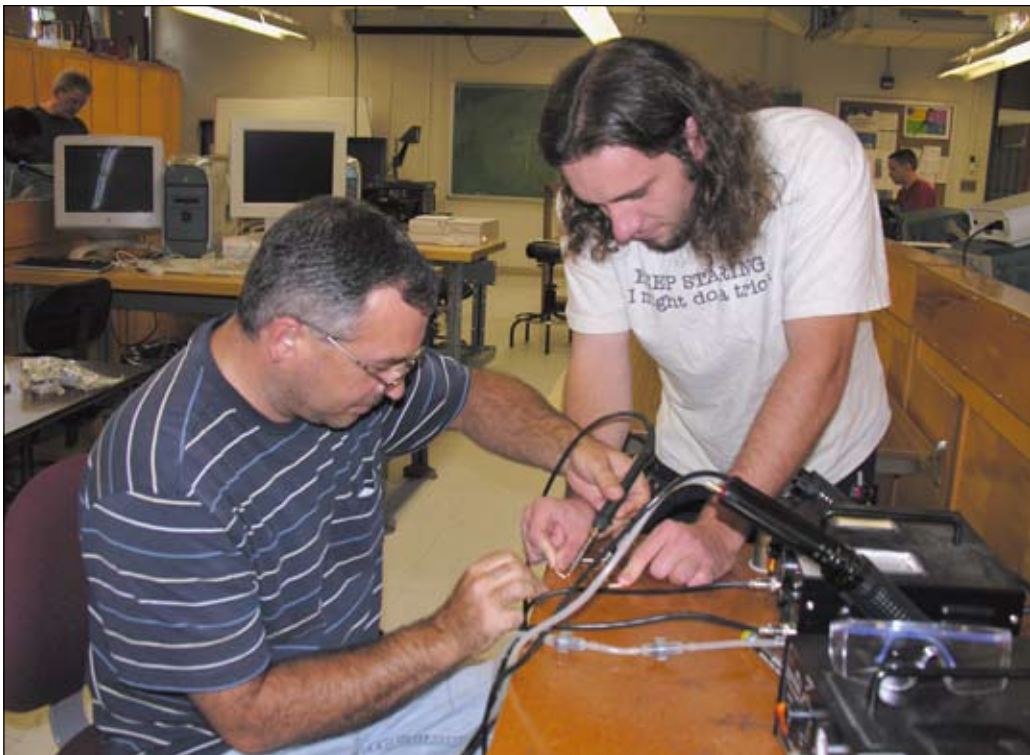
Air Conditioning & Refrigeration

Award: DIPLOMA

Length: A full-time student may complete this program in two years.

Purpose: The Air Conditioning & Refrigeration Diploma program is designed to prepare you for employment as an air conditioning and refrigeration technician upon completion of the program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Air Conditioning/Heating Technician
    Sales Engineer
    Installation and Service
    Sales and Design Engineer

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program. Program Description: The Air Conditioning & Refrigeration program is designed to provide both the practical experience and technical knowledge required for competence as a technician in the air conditioning industry. Laboratory experience, field trips and specialized seminars give you the skill and know-how you need in order to plan, install and service air conditioning equipment. The program contains general education courses to assist you in social and business communications and to prepare you to meet the obligations of a citizen in the American democratic society.

Program Requirements: To receive a Diploma in Air Conditioning & Refrigeration, you must complete a minimum of 96 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time day students. Part-time students may take courses in any desired order, except for hyphenated courses or others requiring prerequisites.

Air Conditioning & Refrigeration

		Lecture Hours	Lab Hours	Course Credit
First Semester				
AIR 117	Metal Layout I	1	6	3
AIR 134	Circuits & Controls I	2	3	3
AIR 154	Heating Systems I	2	2	3
AIR 161	Heating, Air Cond. & Refrig. Calculations I or approved substitute	3	0	3
AIR 165	Air Conditioning Sys. I	2	3	3
ITE 116	Survey of Computer Software Applications	2	0	2
Total		**12**	**14**	**17**
Second Semester				
AIR 118	Metal Layout II or Approved Substitute	1	6	3
AIR 135	Circuits & Controls II	2	3	3
AIR 155	Heating Systems II	2	2	3
AIR 162	Heating, Air Cond. & Refrig. Calculations II or approved substitute	3	0	3
AIR 166	A/C Systems II	2	3	3
PHY 130	Survey of Applied Physics (or approved elective)	2	2	3
Total		**12**	**16**	**18**
Summer Term I				
AIR 136	Circuits & Controls III	2	3	3
AIR 156	Heating Systems III	2	2	3
AIR 195	Customer Relations	1	0	1
HIS 268	The American Constitution or approved substitute	3	0	3
ENG 131	Technical Report Writing I	3	0	3
Total		**11**	**5**	**13**

		Lecture Hours	Lab Hours	Course Credit
Third Semester				
AIR 167	Air Cond. Systems III	3	3	4
AIR 181	Planning & Estimating I	1	3	2
AIR 231	Circuits & Controls IV	4	3	5
AIR 271	Refrigeration I	4	6	6
Total		**12**	**15**	**17**
Fourth Semester				
AIR 137	Air Cond. Electronic Survey or approved substitute	1	3	2
AIR 182	Planning &Estimating II	1	3	2
AIR 232	Circuits and Controls V	2	3	3
AIR 254	Air Cond. Systems IV	2	3	3
AIR 272	Refrigeration II	3	6	5
ENG 115	Technical Writing or approved substitute	3	0	3
Total		**12**	**18**	**18**
Summer Term II				
AIR 233	Circuits and Controls VII	2	3	3
AIR 255	Air Cond. Systems VI	2	3	3
AIR 273	Refrigeration III	2	3	3
AIR 195	Refrigerant Certification	1	0	1
ECO 100	Elementary Economics or approved substitute	3	0	3
Total		**10**	**9**	**13**

Total Minimum Credits for a Diploma in Air Conditioning & Refrigeration **96**

Note: SDV 100 - College Success Skills is required for graduation and should be taken during the first semester the student is enrolled in the curriculum.

Automotive Analysis & Repair

Award: DIPLOMA

Length: A full-time student may complete this program in two years.

Purpose: The Automotive Analysis and Repair curriculum is designed to train persons for employment in the many occupations available in servicing motor transportation vehicles.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Automotive Technician
Auto Parts Counter Clerk
Diagnostician
Automotive Machinist
Service Manager
Automotive Dealer
Service Representative

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Automotive Analysis and Repair program includes theoretical and practical experiences in engine overhaul, engine tune up, emission control servicing, automatic transmission servicing, power train servicing, front-end alignment, computerized fuel systems, electrical system diagnosis, and maintenance. Diagnosis of problems with the ability to correct the specific problem located is emphasized. The program contains general education courses to assist you in social and business communications and to prepare you to meet the obligations of a citizen in the American democratic society.

Program Requirements: To receive a Diploma in Automotive Analysis and Repair, you must complete a minimum of 80 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time day students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

Automotive Analysis & Repair

First Semester	Lecture Hours	Lab Hours	Course Credit
AUT 111 Automotive Engines	3	3	4
AUT 113 Cylinder Block Service	2	3	3
AUT 114 Cylinder Head Service	2	3	3
AUT 127 Automotive Lubrication & Cooling Systems	2	3	3
ENG 131 Tech. Report Writing I	3	0	3
SDV 100 College Success Skills	1	0	1
WEL 120 Fund. of Welding	1	3	2
Total	**14**	**15**	**19**

Second Semester	Lecture Hours	Lab Hours	Course Credit
AUT 121 Automotive Fuel Systems	3	3	4
AUT 236 Auto. Climate Control	3	3	4
AUT 241 Automotive Electricity I	3	3	4
AUT 265 Auto. Braking Systems	2	3	3
PSY 126 Psychology for Business/Industry	3	0	3
Total	**14**	**12**	**18**

Summer Term I	Lecture Hours	Lab Hours	Course Credit
AUT 215 Emission Systems Diagnosis & Repair	2	0	2
AUT 242 Electricity II	3	3	4
AUT 266 Auto Alignment, Suspension & Steering	3	3	4
Total	**8**	**6**	**10**

Third Semester	Lecture Hours	Lab Hours	Course Credit
AUT 122 Auto Fuel Systems II	3	3	4
AUT 136 Auto. Vehicle Inspection	1	2	2
AUT 211 Automotive Systems III	3	3	4
AUT 237 Auto. Accessories	3	0	3
AUT 295 Topics in Automotive or approved sub.	2	0	2
HUM 165 Controversial Issues	3	0	3
Total	**15**	**8**	**18**

Fourth Semester	Lecture Hours	Lab Hours	Course Credit
AUT 178 Auto. Final Drive & Manual Trans. Systems	3	3	4
AUT 212 Automotive Systems IV	3	3	4
AUT 251 Automatic Trans. I	2	6	4
ECO 100 Elementary Economics or approved sub.	3	0	3
Total	**11**	**12**	**15**

Total Minimum Credits for a Diploma in Automotive Analysis and Repair...**80**

Note: SDV 100 - College Success Skills is required for graduation and should be taken during the first semester the student is enrolled in the curriculum.

Computer-Aided Drafting and Design

Award: DIPLOMA

Length: A full-time student may complete this program in two years.

Purpose: The Computer-Aided Drafting and Design curriculum is designed to train persons for employment in the many occupations available in the field of drafting and design. Graduates of this program will be prepared to go into one of the following occupations.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Drafting Technician
Drafting Supervisor
Fixture Design Technician
Machine Design Technician
Engineering Assistant
Piping Designer
Numerical Control Technician

Admission Requirements: In addition to the admission requirements established for this College, this curriculum requires completion of four units of high school English and two units of high school mathematics. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Computer-Aided Drafting and Design program offers instruction in the drafting procedures, materials, manufacturing processes, and science and mathematics that is needed by the technician or engineering assistant in the field. You will receive theoretical and practical experiences in drafting principles, drafting skills, CAD Drafting (AUTOCAD) manufacturing processes, and machine and tool design. The program contains general education courses to assist you in social and business communications and to prepare you to meet the obligations of a citizen in the American democratic society.

Program Requirements: To receive a Diploma in Computer-Aided Drafting and Design you must complete a minimum of 90 credits with a grade point average of 2.00 or better. The 90 credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time day students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

Computer-Aided Drafting and Design

First Semester		Lecture Hours	Lab Hours	Course Credit
SDV 100	College Success Skills	1	0	1
ITE 115	Intro to Comp. Appl. & Concepts	2	2	4
DRF 114	Drafting I	1	9	4
MEC 100	Intro. to Engineering	1	2	2
MAC 131	Mach. Technology	1	3	2
ENG 131	Tech. Report Writing	3	0	3
Total		**9**	**16**	**16**

Second Semester		Lecture Hours	Lab Hours	Course Credit
DRF 115	Drafting II	1	9	4
*MTH 195	Math for Drafting I	3	0	3
MEC 111	Materials for Industry	3	0	3
MEC 126	Computer Programming	2	0	2
CIV 170	Principles in Surveying	2	3	3
Total		**11**	**12**	**15**

Summer Term I		Lecture Hours	Lab Hours	Course Credit
DRF 201	Comp. Aided Design I	3	2	4
MEC 131	Mechanics I	3	0	3
MTH 295	Math for Drafting II	3	0	3
PHY 130	Technical Physics	2	2	3
Elective	Approved Elective	1	0	1
Total		**12**	**4**	**14**

Third Semester		Lecture Hours	Lab Hours	Course Credit
SPD 110	Public Speaking	3	0	3
DRF 116	Drafting III	1	6	3
MEC 132	Mechanics II	3	0	3
MEC 265	Fluid Mechanics	3	0	3
DRF 233	Computer Aided Drafting III/Solidworks	3	0	3
Elective	Approved Elective	3	0	3
Total		**16**	**6**	**18**

Fourth Semester		Lecture Hours	Lab Hours	Course Credit
DRF 210	Adv. Technical Drafting	1	9	4
MEC 211	Machine Design I	3	3	4
MEC 133	Dynamics	3	0	3
ARC 115	Architecture/Chief Arch.	2	0	2
Elective	Approved Elective	3	0	3
Total		**12**	**12**	**16**

Summer Term II		Lecture Hours	Lab Hours	Course Credit
DRF 202	Comp. Aided Design II	3	2	4
MAC 126	Intro to CNC Prog./featurecam	2	3	3
MEC 212	Machine Design II	3	3	4
Total		**8**	**8**	**11**

Total Minimum Credits for a Diploma in Computer- Aided Drafting and Design..**90**

* MTH 2 is a prerequisite for MTH 195.

Note: SDV 100 - College Success Skills is required for graduation and should be taken during the first semester the student is enrolled in the curriculum.

Electrical / Electronic Equipment Servicing

Award: DIPLOMA

Length: A full-time student may complete the program in two years. The actual time required to complete this program may vary depending upon the schedule of some course offerings and the student's schedule. Students enrolled in this program may be required to take some evening courses in order to complete the program requirements.

Purpose: The purpose of the Electrical/Electronic Equipment Servicing program is to train, upgrade and increase technical competence of qualified personnel to operate, maintain and service electrical-electronic equipment.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Electronic Equipment Technician
    Equipment Service Technician
    Instrument Technician
    Laboratory Technician

Admission Requirements: To enter this curriculum requires that an individual meet the general admission requirements of the college. If you meet the general admissions requirements, a counselor will discuss with you the strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the college's Developmental Studies program. A student may enroll in sophomore-level courses only after completing all freshman courses or with the permission of the instructor of each course.

Program Description: The Electrical/Electronic Equipment Servicing program is a specialized and concentrated work-study program including specialized field trips and seminars. The program has been designed for the full- or part-time student and provides maximum flexibility for the business and industrial worker. The first year includes common core courses. These courses provide for a general foundation in electrical-electronic concepts, devices, networks and fundamental circuits/systems. Technical electives are provided to reinforce the career objectives and must be approved by the student's faculty advisor. Students working in related areas may receive 2 to 4 credits per semester by choosing the Coordinated Internship electives.

Program Requirements: To receive a Diploma in Electrical/Electronic Equipment Servicing, you must complete a minimum of 85-86 credits with a cumulative grade point average of 2.00 or better.

Electrical/Electronic Equipment Servicing

First Semester		Lecture Hours	Lab Hours	Course Credit
SDV 100	College Success Skills	1	0	1
ITE 116	Survey of Computer Software Application	2	0	2
ELE 113	Electricity I	3	0	3
ELE 123	Electrical Appl.	1	2	2
ELE 152	E/E Calculations I	4	0	4
ENG 131	Technical Report Writing I or approved substitute	3	0	3
ELE 100	Electrical-Elect. Skills	3	3	4
Total		**17**	**5**	**19**

Second Semester		Lecture Hours	Lab Hours	Course Credit
ELE 114	Electricity II	3	0	3
ELE 124	Electrical Applications II	1	2	2
ELE 201	Instruments & Inst. Anal. I	0	3	1
ELE 153	E/E Calculations II	4	0	4
ETR 141	Electronics I	3	0	3
ETR 151	Electronic Circuits and Troubleshooting	2	0	2
PSY 126	Psychology for Bus./Industry or Approved Elective	3	0	3
Total		**16**	**5**	**18**

Summer Term I		Lecture Hours	Lab Hours	Course Credit
ELE 156	Electrical Control Sys.	2	2	3
ELE 154	E/E Calculations III	2	0	2
ETR 142	Electronics II	3	0	3
ETR 152	Electronic Circuits & Troubleshooting II	2	0	2
ETR 124	ETR Applications II	1	2	2
Total		**10**	**4**	**12**

Third Semester		Lecture Hours	Lab Hours	Course Credit
ELE 216	Industrial Electricity	2	3	3
ETR 282	Digital Systems I	2	3	3
*ELE 131	National Electric Code I	3	0	3
or				
ELE 190	Coordinated Internship			3
*ENG 115	Technical Writing	3	0	3
Total				**12**

Fourth Semester		Lecture Hours	Lab Hours	Course Credit
ETR 218	Industrial Elect. Circuits	3	3	4
ETR 283	Digital Systems II	2	3	3
*ELE 132	National Electric Code II	3	0	3
or				
*ELE 190	Coordinated Internship			2-3
HUM 165	Controversial Issues	3	0	3
Total				**12-13**

Summer Term II		Lecture Hours	Lab Hours	Course Credit
ETR 136	Gen. Industrial ETR Sys.	2	3	3
*ELE 235	Industrial Comm.	2	3	3
*MEC 161	Basic Fluid Mechanics	3	3	4
or				
*ELE 190	Coordinated Internship or Approved Elective			4
ELE/ETR	Elective			2
Total				**12**

Total Minimum Credits required for a Diploma in Electrical/Electronic Equipment Servicing **85-86**

or an Approved Elective

Electrical/Electronics Technology

Award: DIPLOMA

Length: A full-time student may complete these programs in six semesters, which includes two summers.

Purpose: The purpose of the Electrical/Electronics Technology program is to train persons for employment in the technical positions available in business and industry related to electricity and electronics.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Automation Control Engineering
Biomedical Electronics Technician
Communications Technician
Computer Technician
Electrical/Electronics Technician
Electric Power Utility Technician
Laboratory Technician
Maintenance Technician
Robotics Technician
Service Technician
Telecommunications Technician

Admission Requirements: To enter this curriculum requires that an individual meet the general admission requirements of the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program is designed to develop a general foundation in electricity, electronics, theorems, networks, and fundamental circuits. The first three semesters of the Electrical/Electronics Technology curriculum includes common core courses. Prior to the fourth semester, with the aid of your faculty advisor, you will select either Analyst Electronics Technology or General Electronics Technology. The Analyst Electronics Technology major offers a practical, "hands on" approach to the student's electronics education and training, while General Electronics Technology offers a theoretical and practical approach to the student's electronics education and training. To receive the diploma, you must complete the required credits with a grade point average of 2.00 or better. The courses are distributed according to the following outlines. These outlines represent a typical order of courses taken by full-time day students.

Electrical/Electronics Technology (with major options)

First Semester

		Lecture Hours	Lab Hours	Course Credit
SDV 100	College Success Skills	1	0	1
ITE 116	Survey of Computer Software Applications	2	0	2
ELE 113	Electricity I	3	0	3
ELE 123	Electrical Applications	1	2	2
ELE 152	Calculations I	4	0	4
ENG 131	Technical Report Writing I or approved substitute	3	0	3
ELE 195	Computer Hardware	1	2	2
ELE 198	Projects in Robotics	1	2	2
Total		**17**	**5**	**19**

Second Semester

ELE 114	Electricity II	3	0	3
ELE 124	Electrical Applications II	1	2	2
ELE 201	Instru. & Inst. Anal. I	0	3	1
ELE 153	Calculations II	4	0	4
ETR 141	Electronics I	3	0	3
ETR 151	Electronic Circuits Troubleshooting	2	0	2
PSY 126	Psychology for Business/Industry or Approved Elective	3	0	3
Total		**16**	**5**	**18**

Summer Term I

ELE 156	Electrical Control Systems	2	2	3
ELE 154	Calculations III	2	0	2
ETR 142	Electronics II	3	0	3
ETR 152	Electronic Circuits Troubleshooting II	2	0	2
ETR 124	Electronic Applications II	1	2	2
Total		**10**	**4**	**12**

Electrical/Electronics Technology

Electrical/Electronics Option - Analyst Electronics Technology

	Lecture Hours	Lab Hours	Course Credit
Third Semester			
ECO 100 Elementary Economics or Approved Substitute	3	0	3
ETR 112 Math for E/E Analysis	1	2	2
ETR 211 Electronic Diagnostics I	2	6	4
ETR 241 Elec. Communications I	3	3	4
ETR 255 Active Devices & Circuits	2	3	3
ETR 295 Electric Power Utilities	1	2	2
Total			**17-18**
Fourth Semester			
ENG 115 Technical Writing or Approved Substitute	3	0	3
ETR 206 Logic Circuits & Sys. I	1	3	2
ELE 143 Programmable Controllers I	3	3	4
ETR 242 Electronic Comm. II	2	3	4
ETR 247 Display Systems	2	3	3
HUM 165 Controversial Issues or Approved Substitute	3	0	3
Total	**13**	**18**	**19**
Summer Term II			
ELE 235 Industrial Communications	2	3	3
ETR 207 Logic Circuits & Sys. II	1	2	2
ETR 295 Topics in ETR	2	3	3
ETR 225 Data Communications	3	3	4
Total			**12**

Total Minimum Credits for a Diploma in Analyst Electronics Technology **97-98**

Electrical/Electronics Option - General Electronics Technology

	Lecture Hours	Lab Hours	Course Credit
Third Semester			
ECO 100 Elementary Economics or Approved Substitute	3	0	3
ELE 216 Industrial Electricity	2	3	3
ETR 148 Amplifiers & IC's	3	3	4
ETR 282 Digital Systems I	2	3	3
ENG 115 Technical Writing or Approved Substitute	3	0	3
ETR 248 Instruments & Measurements	1	3	2
Total	**14**	**12**	**18**
Fourth Semester			
ETR 243 Digital, Analog & Data Comm. Systems I	3	3	4
INS 230 Instrumentation I	2	3	3
INS 210 Principles of Instrumentation	2	3	2
ELE 239 Programmable Controllers	2	2	3
ETR 295 Electric Power Utilities	1	2	2
ETR 218 Industrial ETR Circuits	3	3	4
HUM 165 Controversial Issues or Approved Substitute	3	0	3
Total	**13**	**13**	**18**
Summer Term II			
ETR 136 Industrial Electronic Systems	2	3	3
ETR 241 Electronic Comm. I	2	3	3
ETR 247 Display Systems	2	3	3
ELE 240 Advanced Programmable Logic Controllers	2	2	3
Total	**—**	**—**	**12**

Total Minimum Credits for a Diploma in General Electronics Technology **97**

Note: SDV 100 — College Success Skills is required for graduation and should be taken during the first semester the student is enrolled in the curriculum.

Graphic Imaging Technology

Award: DIPLOMA

Length: A full-time student may complete this program in two years, which includes one summer term.

Purpose: The Graphic Imaging Technology program is designed to prepare you for full-time employment in occupations related to the Graphics Arts Industry.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Camera Operator
Color Separator
Computer Design Artist
Digital Photographer
Desktop Publisher
Estimator
Film Assembler
Manager
Platemaker
Press Operator
Salesperson

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Graphic Imaging Technology program provides both the practical experience and technical knowledge required for a career in the many phases of graphics. Laboratory experiences give you the skills and understanding of the complexities of the graphic imaging trades. The curriculum includes basic courses in the humanities to assist you in social and business communications and to prepare you to meet the obligations of a citizen in the American democratic society.

Program Requirements: To receive a Diploma in Graphic Imaging Technology, you must complete a minimum of 80 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time day students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.
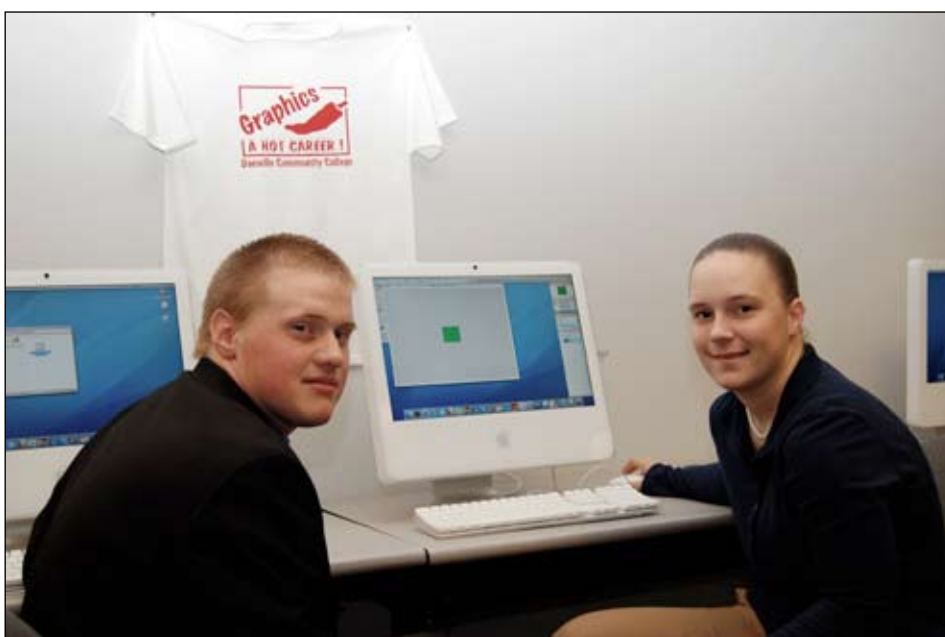
Graphic Imaging Technology

	Lecture Hours	Lab Hours	Course Credit
First Semester			
BUS 121 Business Mathematics I	3	0	3
HUM 165 Controversial Issues or Approved Substitute	3	0	3
ITE 116 Survey of Computer Software Applications	2	0	2
PNT 110 Survey of Reproduction Processes	2	3	3
PNT 131 Principles of Lithography I	3	3	4
PNT 135 Print Imaging	1	3	2
SDV 100 College Success Skills	1	0	1
Total	**15**	**9**	**18**

	Lecture Hours	Lab Hours	Course Credit
Second Semester			
ENG 111 College Composition I	3	0	3
PNT 132 Princ. of Lithography II	3	3	4
PNT 141 Printing Applications I	1	4	3
PNT 211 Electronic Publishing I	2	2	3
PNT 221 Layout & Design I	2	3	3
Total	**11**	**12**	**16**

	Lecture Hours	Lab Hours	Course Credit
Summer Term I			
PNT 212 Electronic Publishing II	2	2	3
PNT 222 Layout & Design II	2	3	3
PNT 260 Color Separation	2	3	3
Technical Elective	2	0	2
Total	**8**	**8**	**11**

	Lecture Hours	Lab Hours	Course Credit
Third Semester			
PNT 213 Electronic Publishing III	2	2	3
PNT 223 Layout & Design III	2	3	3
PNT 241 Advanced Printing App. I	1	4	3
PNT 251 Offset Press Operations I	3	3	4
PNT 264 Color Image Assembly	3	3	4
Total	**11**	**15**	**17**

	Lecture Hours	Lab Hours	Course Credit
Fourth Semester			
ECO 100 Elementary Economics or Approved Substitute	3	0	3
ENG 115 Technical Writing or Approved Substitute	3	0	3
PNT 231 Lithographic Chemistry	2	0	2
PNT 245 Production Planning and Estimating	3	3	4
PNT 252 Offset Press Operations II	3	3	4
Technical Elective	2	0	2
Total	**16**	**6**	**18**

Total Minimum Credits for the Diploma in Graphic Imaging Technology..**80**

Industrial Maintenance Technology

Award: DIPLOMA

Length: A full-time student may complete this program in two years.

Purpose: South Central Virginia, in its significant industrial growth, has a need for highly skilled personnel to maintain heating and air conditioning systems as well as systems that are controlled by electrical, hydraulic, pneumatic, and mechanical devices. The industrial maintenance technology curriculum is designed to prepare students to repair and maintain machinery, electrical wiring and fixtures, hydraulic and pneumatic devices, and program logic controller systems found in industrial establishments. The curriculum is built upon a balanced program of studies drawn from a variety of disciplines in the electrical, mechanical, hydraulics and pneumatics and industrial fields and a solid core of general courses.

Occupational Opportunities: The following occupational titles represent examples of possible employment opportunities:

    Industrial Maintenance Technician
    Maintenance Mechanics

Admissions Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the college. If you meet the general admission requirements, a counselor will discuss with you the strengths and weakness of your academic background and your strengths and weakness as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College Developmental Studies program.

Program Description: The Industrial Maintenance Technology program is designed to provide both the practical experience and technical knowledge required for competence as a maintenance technician. In addition to courses in a variety of technical fields, the program also contains general education courses to assist students in developing social and business communications skills.

Program Requirements: To receive a Diploma in Industrial Maintenance Technology, you must complete a minimum of 75 credits with a 2.00 grade point average or better. The 75 credits are distributed according to the outline below. The outline represents a typical order of courses taken by full-time day students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.
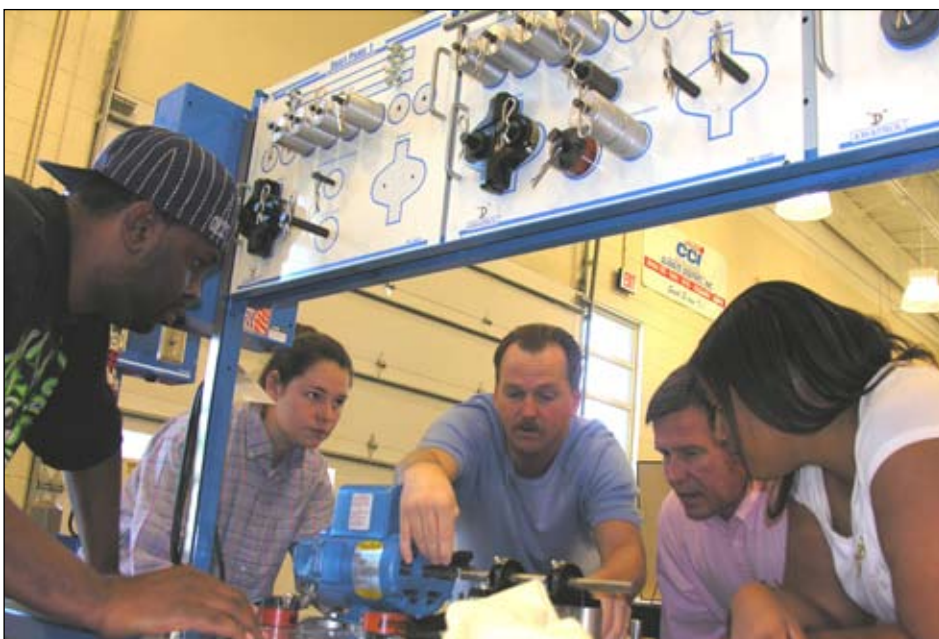
Industrial Maintenance Technology

First Semester		Lecture Hours	Lab Hours	Course Credit
DRF 120	Intro to Graphic Repres.	2	3	3
ELE 113	Electricity I	3	0	3
ELE 123	Electrical Applications I	1	2	2
ITE 116	Survey, Comp. Software	2	0	2
MAC 161	Fund. Shop Procedures	2	2	3
MTH 103	Basic Tech. Math I	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**14**	**7**	**17**

Second Semester		Lecture Hours	Lab Hours	Course Credit
DRF 160	Mach. Blueprint Reading	3	0	3
ELE 114	Electricity II	3	0	3
ELE 124	Electrical Appl. II	1	2	2
AIR 155	Heating Systems II	2	2	3
MTH 104	Basic Tech. Math II or			
	Approved substitute	3	0	3
PHY 130	Survey of Applied Phys.	2	2	3
Total		**14**	**4**	**17**

Summer Term I		Lecture Hours	Lab Hours	Course Credit
ENG 131	Technical Report Writing	3	0	3
ECO 100	Elementary Economics or			
	approved substitute	3	0	3
PSY/SOC/				
HUM	Humanities Elective	3	0	3
WEL 120	Fundamentals			
	of Welding	1	3	2
Total		**10**	**3**	**11**

Third Semester		Lecture Hours	Lab Hours	Course Credit
AIR 121	[1]Air Conditioning			
	and Refrigeration I	2	2	3
AIR 213	[1]Air Conditioning and			
	Refrig. Controls III	2	2	3
ELE 216	Industrial Electricity	2	3	3
ETR 195	Introduction to PLCs	3	0	3
IND 195	Mechanical Systems	2	2	3
Total		**11**	**9**	**15**

Fourth Semester		Lecture Hours	Lab Hours	Course Credit
ETR 218	Industrial Elect. Circuits	3	3	4
ETR 283	Digital Systems II	2	3	3
*ELE 132	National Electric Code II	3	0	3
or				
*ELE 190	Coordinated Internship			2-3
HUM 165	Controversial Issues	3	0	3
Total				**12-13**

Summer Term II		Lecture Hours	Lab Hours	Course Credit
MEC 295	Basic Fluid Mechanics - Hydraulics			
	& Pneumatics	2	2	3
BUS 111	Principles of Supervision	3	0	3
SAF 126	Principles of			
	Industrial Safety	3	0	3
Elective	Technical Elective	3	0	3
IND 125	Installation and Preventive			
	Maintenance	2	2	3
Total		**13**	**4**	**15**

Total Minimum Credits for the Diploma in Industrial
Maintenance Technology..**75**

[1] AIR 271 will substitute for AIR 121

Precision Machining Technology

Award: DIPLOMA

Length: A full-time student may complete the program in two years.

Purpose: The Precision Machining Technology program is designed to train persons for employment in the many occupations available in industrial manufacturing shops.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Machine Tool Operator
    Machinist
    Mold Maker
    Shop Manager
    Tool and Die Maker

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Precision Machining Technology program provides training in basic machine shop operations, materials, and manufacturing processes. You will receive theoretical and practical experiences in the care and use of tools, care and use of machines, working to proper tolerances, technical drafting, computer numerical control programming, CAD-CAM training, metallurgy, tool making, jig and fixture design, precision measurements, and the development of leadership qualities. The program contains general education courses to assist you in social and business communications and to prepare you to be a leader and team player in high-tech manufacturing industries.

Program Requirements: To receive a Diploma in Precision Machining Technology you must complete a minimum of 81 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time day students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

Precision Machining Technology

First Semester	Lecture Hours	Lab Hours	Course Credit
DRF 120 Intro. to Graphic Rep.	2	3	3
ENG 131 Technical Report Writing I	3	0	3
MAC 101 Machine Shop I	5	9	8
MTH 103 Basic Tech. Math I	3	0	3
SDV 100 College Success Skills	1	0	1
Total	**14**	**12**	**18**

Second Semester	Lecture Hours	Lab Hours	Course Credit
DRF 160 Mac. Blueprint Reading	3	0	3
MAC 102 Machine Shop II	4	9	7
MAC 121 Numerical Control I	1	2	2
MTH 104 Basic Tech. Math. II	3	0	3
ITE 116 Survey of Computer Software Applications	2	0	2
SAF 195 Shop Safety	1	0	1
Total	**14**	**11**	**18**

Summer Term I	Lecture Hours	Lab Hours	Course Credit
MAC 221 Adv. Machine Tool Operations I	4	9	7
MEC 226 Practical Metallurgy	3	0	3
Total	**7**	**9**	**10**

Third Semester	Lecture Hours	Lab Hours	Course Credit
HUM 165 Controversial Issues or Social Science Elective	3	0	3
IND 230 Applied Quality Control	2	2	3
MAC 122 Numerical Control II	1	2	2
MAC 222 Adv. Machine Tool Operations II	4	9	7
WEL 120 Fundamentals of Welding	1	3	2
Total	**11**	**16**	**17**

Fourth Semester	Lecture Hours	Lab Hours	Course Credit
MAC 127 Adv. Comp. Num. Contr.	3	0	3
MAC 123 Numerical Control III	1	2	2
MAC 150 Intro. to Computer-Aided Manufacturing	2	3	3
MAC 223 Adv. Machine Tool Operations III	4	9	7
SPD 100 Principles of Public Speaking or Approved Substitute	3	0	3
Total	**13**	**14**	**18**

Summer Term II	Lecture Hours	Lab Hours	Course Credit
MEC 295 Basic Fluid Mechanics - Hydraulics & Pneumatics	2	2	3
BUS 111 Principles of Supervision	3	0	3
SAF 126 Principles of Industrial Safety	3	0	3
Elective Technical Elective	3	0	3
IND 125 Installation and Preventive Maintenance	2	2	3
Total	**13**	**4**	**15**

Total Minimum Credits for the Diploma in Precision Machining Technology **81**

CERTIFICATE PROGRAMS

Air Conditioning & Refrigeration Servicing
Auto Body Mechanics
Child Care
Corrections
Drafting Technology
First Year Studies
General Education
Industrial Electrical Principles
Industrial Electronic Principles
Law Enforcement
Maintenance Mechanics
Office Information Processing
Practical Nursing
Protective Services (Private Security)
Residential Design & Estimation
Summer Air Conditioning and Refrigeration Servicing
Winter Air Conditioning Servicing

The Certificate programs differ from the Associate Degree programs in several ways. They may be presented at a different educational level and are developed in response to specific local employment needs, as identified by the programs' lay advisory committees and the College's Curriculum committee. Their specific objective is to give students a variety of hands-on training experiences to prepare them for immediate employment. The certificate programs do not require the same level of general education training as the associate degree programs, so more of the required courses are directly related to the chosen field of study. There is no limit on the maximum number of credits required in these programs, but they are all designed to be completed in one year of full-time study. The types of jobs which you might expect to obtain upon completion of the certificate requirements are listed on the following catalog pages. Specific courses for completing each program of study are also included.

Air Conditioning and Refrigeration Servicing

Award: CERTIFICATE

Length: Variable

Purpose: The Air Conditioning & Refrigeration Servicing Certificate program is designed to train persons to service equipment currently in the field and to give them a background that will enable them to cope with new developments as they occur.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Air Conditioning Technician
    Circuits & Controls Service Technician
    Air Conditioning/Heating Technician
    Installation and Service Technician
    Refrigeration Service Technician

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program is designed for both beginners and persons presently employed in the air conditioning and refrigeration field. It provides the practical experience and the technical knowledge required for competence as a service technician in the air conditioning and refrigeration field. The student will receive specialized seminars, theoretical and practical training in basic electricity, circuits and controls (electric, electronic, and pneumatic), combustion devices (oil burners and gas burners), refrigeration and air conditioning (residential and commercial).

Program Requirements: To receive a Certificate in Air Conditioning & Refrigeration Servicing, you must complete a minimum of 50 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

Air Conditioning and Refrigeration Servicing

First Semester		Lecture Hours	Lab Hours	Course Credit
AIR 111	Air Conditioning & Refrig. Controls I	2	2	3
AIR 121	Air Conditioning & Refrigeration I	2	2	3
AIR 161	Heating, Air Conditioning & Refrigeration Calculations I			
or	Approved Substitute	3	0	3
ENG 131	Technical Report Writing or Approved Substitute	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**11**	**4**	**13**

Second Semester		Lecture Hours	Lab Hours	Course Credit
AIR 112	Air Conditioning & Refrig. Controls II	2	2	3
AIR 122	Air Conditioning & Refrigeration II	2	2	3
AIR 154	Heating Systems I	2	2	3
ECO 100	Elementary Economics or approved substitute	3	0	3
Total		**9**	**6**	**12**

Third Semester		Lecture Hours	Lab Hours	Course Credit
AIR 112	Air Conditioning & Refrig. Controls II	2	2	3
AIR 122	Air Conditioning & Refrigeration II	2	2	3
AIR 154	Heating Systems I	2	2	3
ECO 100	Elementary Economics or approved substitute	3	0	3
Total		**9**	**6**	**12**

Fourth Semester		Lecture Hours	Lab Hours	Course Credit
AIR 124	Air Conditioning & Refrigeration IV	2	2	3
AIR 156	Heating Systems III	2	2	3
AIR 214	Air Conditioning & Refrig. Controls IV	2	2	3
ITE 116	Survey of Computer Software Applications	2	0	2
Total		**8**	**6**	**11**

Total Minimum Credits for the Certificate in
Air Conditioning & Refrigeration Servicing **50**

Auto Body Mechanics

▪▪▪

Award: CERTIFICATE

Length: A full-time student may complete this program in one year.

Purpose: The program in Auto Body Mechanics is designed to provide the student with the knowledge and skill necessary to obtain full-time employment upon completion of the program of studies.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Auto Body Mechanic
Painter
Service Manager
Insurance Adjuster

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Auto Body Mechanics program is designed to provide training in all phases of auto body mechanics. Emphasis is placed on the solution of every day problems that arise in auto body repair, such as blistering, chipping, cracking, blushing, pin holes, panel replacement, and the use of plastics. You will be taught to use up-to-date equipment and materials that are being constantly developed, as well as new methods for detecting and repairing damage. The program contains general education courses to assist you in social and business communications and to prepare you to meet the obligation of a citizen in the American democratic society.

Program Requirements: To receive a Certificate in Auto Body Mechanics, you must complete a minimum of 48 credits with a 2.00 grade point average or better. The credits are distributed

according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
AUB 111	Automobile Body Theory & Shop Pract. I	5	9	8
AUB 116	Auto Body Repair	3	3	4
ENG 131	Technical Report Writing I	3	0	3
SDV 100	College Success Skills	1	0	1
WEL 116	Welding I (Oxyacetylene)	1	3	2
Total		**13**	**15**	**18**

Second Semester				
AUB 112	Automobile Body Theory & Shop Pract. II	5	9	8
AUB 198	Seminar & Project			
or				
AUB 190	Coordinated Internship			2
AUB 206	Automotive Body Component Service	1	3	2
ECO 100	Elementary Economics	3	0	3
PSY 126	Psy. for Business/Industry			
or	Approved Substitute	3	0	3
Total			**—**	**18**

Third Semester				
AUB 113	Automobile Body Theory & Shop Pract. III	3	9	6
AUB 115	Damage Repair Estimating	1	3	2
AUB 298	Adv. Seminar & Project			
or				
AUB 290	Coordinated Internship	—	—	4
Total			**—**	**12**

Total Minimum Credits for a Certificate in Auto Body Mechanics **48**

Child Care

Award: CERTIFICATE

Length: A full-time student may complete this program in one year.

Purpose: The Child Care curriculum is designed both for persons already working in the field and for students preparing for initial employment in child care and human services facilities. The curriculum also allows appropriate course substitutions for those students interested in pursuing academic programs beyond the Certificate in Child Care.

Admission Requirements: All applicants must have a high school diploma or the equivalent for admission to the Child Care program. Students with academic weaknesses, as determined by the college-wide placement test, can correct these in the College's Developmental Studies program.

Program Description: This curriculum requires coursework in the areas of humanities, social sciences, education, and health. Students will be given the opportunity to talk with an academic advisor about goals and will be assisted by an advisor in preparing the necessary schedules to fulfill these goals. Appropriate optional courses may be substituted in the curriculum to coincide with the student's goals if approved by the Division Dean.

Program Requirements: To receive a Certificate in Child Care, the student must complete a minimum of 49 credits with a grade point average of 2.00 or better. The following outline represents a typical order of courses taken by full-time students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites as outlined in the Course Descriptions section of this Catalog.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
SDV 100	College Success Skills	1	0	1
CHD 120	Intro. to Early Childhood Ed.	3	0	3
ENG 111	College Composition I	3	0	3
HLT 135	Child Health & Nutrition	3	0	3
CHD	Elective	3	0	3
PSY 126	Psych. for Bus./Industry	3	0	3
SOC 200	Principles of Sociology	3	0	3
Total				**19**
Second Semester				
CHD 125	Creative Activities for Children	2	2	3
CHD 205	Guiding the Behavior of Children	3	0	3
BUS 121	Business Mathematics I	3	0	3
HLT 100	First Aid & CPR	3	0	3
PSY 235	Child Psychology	3	0	3
SOC 215	Sociology of the Family	3	0	3
Total				**18**
Third Semester				
LGL 116	Domestic Relations and Consumer Law	3	0	3
CHD	Elective	3	0	3
CHD 298	Seminar and Project	1	6	3
	Approved Elective	3	0	3
Total				**12**

Total Minimum Credits for a
Certificate in Child Care...**49**

The Seminar and Project (SOC 298 or CHD 298) must be taken during the final semester. Requests for exceptions should be addressed to the academic advisor, who will forward the request to the Dean.

Corrections

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Award: CERTIFICATE

Length: Four-semesters, can be completed part-time.

Purpose: The Certificate in Corrections is designed for practitioners in corrections and associated fields who desire to take only those courses which relate directly to their employment needs. Students who are deficient in meeting academic standards may be advised to enroll in appropriate classes which are designed to provide the background necessary for academic proficiency.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Corrections Officer

    Jailer

Admission Requirements: In addition to the admission requirements established for the College, entry into this program requires proficiency in English, mathematics, and reading. Students with academic weaknesses, as determined by the College's placement test, can correct these deficiencies by enrolling in Developmental Studies courses in English, mathematics, and/or reading. These developmental course credits do not apply toward degrees or certificates. If you are required to take two or more developmental courses you will need additional semesters to complete the program.

Program Requirements: The Certificate in Corrections Program is designed to improve the job-related skills of the person engaged in corrections-related duties. You will be advised as to which courses are most applicable in your field of interest. You must complete at least 44 credits in the curriculum, to be awarded a Certificate in Corrections.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
ENG 111	College Composition I	3	0	3
ADJ 100	Survey of Criminal Justice	3	0	3
SOC 200	Principles of Sociology	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**10**	**0**	**10**
Second Semester				
ADJ 130	Introduction to Criminal Law	3	0	3
SOC 235	Juvenile Delinquency	3	0	3
ENG 112	College Composition II	3	0	3
SOC 215 or 268	Sociology of the Family Social Problems	3	0	3
Total		**12**	**0**	**12**
Third Semester				
ADJ 140	Introduction to Corrections	3	0	3
PSY 200	Principles of Psychology	3	0	3
ITE 115	Introduction to Computer Applications and Concepts	3	2	4
Total		**9**	**2**	**10**
Fourth Semester				
ADJ 227	Constitutional Law	3	0	3
ADJ 145	Corrections & the Community	3	0	3
SOC 236	Criminology	3	0	3
HLT 116	Personal Wellness	3	0	3
Total		**12**	**0**	**12**

Total Minimum Credits for the Certificate in Corrections **44**

Note: All courses must be approved by the Administration of Justice Program Advisor. Graduates of Corrections Officer's and Jailer's Training Academy Programs may receive advanced standing credit for some program requirements. Additional course credits may be received for relevant and qualified in-service corrections officer's/jailer's training courses. Students must be enrolled in the Administration of Justice Program in order to have previous corrections officer/jailer training evaluated.

Drafting Technology

Award: CERTIFICATE

Length: A full-time student may complete this program in one year.

Purpose: The certificate in Drafting Technology is designed to provide the student with the knowledge and skill necessary to obtain full-time employment upon completion of the program courses.

Occupational Objectives: The following occupational titles represent examples of possible employment.opportunities:

Draftsman
Surveying Assistant

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weakness of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program is designed for both beginning draftsmen and those with drafting dual credit from local high schools. It could also be beneficial to those in the drafting field looking to gain experience with new software and new fabrication technologies. It provides extensive computer application training, instruction in the areas of board and computer drafting techniques, and an introduction to surveying. The student will receive specialized training in the use of 2D and 3D mechanical design software and will be exposed to 3D residential design software. Students will complete a variety of lab exercises which are designed to focus on mechanical design and construction-related applications.

Program Requirements: To receive the Certificate in Drafting Technology, you must complete a minimum of 43 credits with a grade point average of 2.0 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
SDV 100	College Success Skills	1	0	1
Elective	Technical Elective	3	0	3
DRF 114	Drafting I	1	9	4
DRF 233	Drafting III:	2	2	3
MEC 100	Intro Eng. Tech,	1	2	2
MAC 131	Mach Lab 1	1	3	2
ENG 131	Technical Writing	3	0	3
TOTAL		**12**	**16**	**18**

Second Semester				
DRF 115	Drafting II	1	9	4
MEC 111	Materials for Industry	3	0	3
CIV 170	Prin. of Surveying	2	3	3
DRF 200	Survey of Comp. Drafting	2	2	3
MTH 103	Applied Tech. Math	3	0	3
Total		**11**	**14**	**16**

Summer Term				
DRF 201	Comp. Aid Drafting & Design I	3	2	4
DRF 199	Supervised Study	1	2	2
ARC 121	Architectural Drafting I	2	3	3
TOTAL		**6**	**7**	**9**

Total Minimum Credits for the Certificate in Drafting Technology **43**

First Year Studies

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Award: CERTIFICATE

Length: A full-time student may complete this program in one year.

Purpose: The First Year Studies Certificate program is designed for students who desire or need to complete one year of academic studies in preparation for admission to medical, dental or other fields requiring a firm foundation in college-level, academic courses. Students who wish to pursue associate degrees, advanced certificates, or bachelor's degrees in nursing, dental hygiene, medical laboratory technology, radiography and related fields may enroll in this certificate program to complete academic coursework typically required by programs in these areas. Course selection in consultation with an academic adviser is required to ensure that students complete courses required in their projected program of study.

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. Students must take developmental coursework as required by placement testing, long-term educational goals, and the college-level coursework which they would like to pursue.

Program Description: This program consists of a minimum of 30 credit hours of instruction distributed into general education and elective course areas. In the general education area, students must take college composition, a 100-level or above math course, one social science course, one natural science course, and one humanities or arts course. Students are then allowed to select 12 credit hours of coursework which prepares them directly for the program to which they would like to transfer. Students are also required to take a computer elective and the college's orientation course. All courses should be selected in consultation with an academic advisor in the Arts and Science Division who will have recommended sequences of coursework for various medical and dental programs. Completion of the appropriate sequence of courses for particular programs may benefit students by decreasing their course load on a semester-by-semester basis in their projected programs as well as prepare them for the specialized coursework in many fields of study.

Program Requirements: To receive a Certificate in First Year Studies, students must complete a minimum of 30 credits with a grade point average of 2.00 or better. Credits for this certificate may be distributed according to the sequence of courses below:

		Lecture Hours	Lab Hours	Course Credit
First Semester				
SDV 100	College Success Skills	1	0	1
ENG 111	College Composition	3	0	3
MTH	Math course at 100-level or above	3	0	3
	Approved Computer Elective	2-3	0	2-3
	Elective	3	0	3
	Elective	3	0	3
Total		**15-16**	**0**	**15-16**

Second Semester				
	College-level Natural Science	3	0-3	3-4
	College-level Social Science	3	0	3
	College-level Humanities or Arts	3	0	3
	Elective	3	0	3
	Elective	3	0	3
Total		**15**	**0-3**	**15-16**

Total Minimum Credits for the Certificate in First Year Studies **30**

General Education

Award: CERTIFICATE

Length: A full-time student may complete this program in one year.

Purpose: The Certificate in General Education is designed for students who are preparing to transfer to a four-year institution after one year of study at DCC. The program may also be attractive to students who intend to transition into one of DCC's transfer degrees. Course selection should be made in consultation with an academic advisor to ensure that students complete courses required by their transfer institution.

Admission Requirements: Entry into this curriculum may be obtained by meeting the admission requirements established by the College. Students must take development coursework as required by placement testing.

Program Description: This program consists of a minimum of 32 credit hours of instruction distributed into general education and elective course areas. Only courses which are transfer level college courses may be counted in this degree. This curriculum is roughly equivalent to the first year of study in a DCC transfer degree and it may be tailored to meet the requirements of most transfer degree programs at four-year institutions.

Program Requirements: Program requirements are listed in the curriculum below.

First Semester

		Lecture Hours	Lab Hours	Course Credit
SDV 100	College Success Skills	1	0	1
ENG 111	College Composition I	3	0	3
MTH	Transfer Level Math	3	0	3
HIS 121 or				
HIS 101	U. S. History I or History of Western Civilization I	3	0	3
HLT/PED	Health/Physical Education	1	0	1
Science	Transfer Level Science	3	3	4
Total		**14**	**3**	**15**

Second Semester

		Lecture Hours	Lab Hours	Course Credit
HUM	Transfer Level Humanities	3	0	3
SPD 110 or	Intro. to Speech Communication	3	0	3
or				
ENG 112	College Composition II			
HIS 122, 102	U. S. History II			
or				
PLS	History of Western Civilization II or PLS elective	3	0	3
PSY 200	Principles of Psychology	3	0	3
or				
SOC 200	Principles of Sociology			
HLT/PED	Health/Phys. Education	1	0	1
Science Elec.	Transfer-Level Science	3	3	4
Total		**16**	**3**	**17**

Total Minimum Credits for the Certificate in General Education.. **32**

Industrial Electrical - Electronic Principles

Awards:
CERTIFICATE IN INDUSTRIAL ELECTRICAL PRINCIPLES or
CERTIFICATE IN INDUSTRIAL ELECTRONIC PRINCIPLES

Length: A full-time student may complete either program in three semesters, which includes one summer term.

Purpose: The purpose of the Industrial Electrical Principals and the Industrial Electronic Principals curricula are designed to train industrial workers who have the need or desire to keep up with occupational requirements or to learn a necessary skill in the Electrical-Electronic field.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Assembler
    Electrical Helper
    Electrician
    Electrical-Electronic Tester
    Salesperson/or Serviceperson

Admission Requirements: To enter these curricula require that an individual meet the general admission requirements for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Industrial Electrical Principals and the Industrial Electronic Principals curricula are designed for full-time or part-time students and allow flexibility for the industrial worker. These programs will prepare you for industrial employment and are also designed to aid those who need to keep abreast of occupational changes and requirements. The two programs offer a variety of field trips and seminars. You must complete the Industrial Electrical Principles Certificate requirements or have had equivalent courses and/or occupational experience prior to entering the Industrial Electronic program.

Program Requirements: To receive the Certificate in Industrial Electrical Principles, you must complete a minimum of 39 credits with a grade point average of 2.00 or better. To receive the Certificate in Industrial Electronic Principles, you must complete a minimum of 37 credits with a 2.00 or higher grade point average. The credits are distributed according to the following outlines. These outlines represent a typical order of courses taken by full-time day students.

Industrial Electrical-Electronic Principles

Industrial Electrical Principles

	Lecture Hours	Lab Hours	Course Credit
First Semester			
SDV 100 College Success Skills	1	0	1
ELE 113 Electricity I	3	0	3
ELE 123 Electrical Applications I	1	2	2
ELE 190 *Coordinated Internship	—	—	2-4
ELE 199 Calculations I	3	0	3
ENG 131 Technical Report Writing I or			
Approved Substitute	3	0	3
Total			**14-16**
Second Semester			
PSY 126 Psy. for Business/Industry or			
Approved Substitute	3	0	3
ELE 114 Electricity II	3	0	3
ELE 124 Electrical Applications II	1	2	2
ELE 190 *Coordinated Internship	—	—	2-4
ELE 199 Calculations II	3	0	3
Total	**—**	**—**	**13-15**
Summer Term I			
ELE 190 *Coordinated Internship	—	—	2-3
ELE 156 Electrical Control			
Systems	2	2	3
ELE/ETR Approved Elective	—	—	2-3
ECO 100 Elementary Economics or			
Approved Substitute	3	0	3
ITE 116 Survey of Computer			
Software Applications	2	0	2
Total			**12-14**

Total Minimum Credits for the Certificate in Industrial Electrical Principles **39**

You may receive 2 to 4 credits per term if actively working in related job. If not employed in related area, you must complete equivalent credits in ELE/ETR approved elective.

Industrial Electronic Principles

	Lecture Hours	Lab Hours	Course Credit
First Semester			
SDV 100 College Success Skills	1	0	1
ENG 131 Technical Report Writing I or			
Approved Substitute	3	0	3
ETR 141 Electronics I	3	0	3
ETR 190 *Coordinated Internship	—	—	2-4
ELE/ETR Approved Elective	—	4	6
Total			**13-17**
Second Semester			
PSY 126 Psychology for			
Business/Industry or			
Approved Substitute	3	0	3
ETR 142 Electronics II	3	0	3
ETR 190 *Coordinated Internship	—	—	2-4
ETR/ELE Approved Elective			4-6
Total			**12-16**
Summer Term I			
ETR 136 Industrial Electronic Sys.	2	3	3
ETR 190 *Coordinated Internship			2-3
ECO 100 Elementary Economics or			
Approved Substitute	3	0	3
ELE/ETR Approved Elective			2-3
ITE 116 Survey of Computer			
Software Applications	2	0	2
Total			**12-14**

Total Minimum Credits for the Certificate in Industrial Electronic Principles **37**

You may receive 2 to 4 credits per term if actively working in related job. If not employed in related area, you must complete equivalent credits in ELE/ETR approved elective.

Law Enforcement

Award: CERTIFICATE

Length: Four-semesters, can be completed on a part time basis.

Purpose: The Certificate in Law Enforcement is designed for practitioners in law enforcement and associated fields who desire to take only those courses which relate directly to their employment needs. Students who have academic deficiencies may be advised to enroll in appropriate classes which are designed to provide the background necessary for academic proficiency.

Occupational Objectives: The following titles represent examples of possible employment opportunities:
- Police Officer
- Deputy Sheriff
- Game Warden
- Virginia State Trooper

Admission Requirements: In addition to the admission requirements established by the College, entry into this curriculum requires proficiency in English, mathematics, and reading. If you do not meet entry requirements or your placement test scores indicate a need for further preparation, you will be placed in the appropriate developmental studies courses in English, mathematics, and/or reading. These developmental course credits do not apply toward degrees or certificates. Students required to take two or more developmental courses may need additional semesters to complete the program.

Program Requirements: The Law Enforcement Certificate program is designed to improve the job-related skills of the person engaged in law enforcement duties. You will be advised as to which courses are most applicable in your field of interest. To receive the Certificate, you must successfully complete 45 credits in the curriculum.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
ENG 111	College Composition I	3	0	3
ADJ 100	Survey of Criminal Justice	3	0	3
SOC 200	Principles of Sociology	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**10**	**0**	**10**
Second Semester				
ADJ 130	Introduction to Criminal Law	3	0	3
SOC 235	Juvenile Delinquency	3	0	3
ENG 112	College Composition II	3	0	3
SOC 215	Sociology of the Family or			
or				
SOC 268	Social Problems	3	0	3
Total		**12**	**0**	**12**
Third Semester				
ADJ 236	Principles of Criminal Investigation	3	0	3
PSY 200	Principles of Psychology	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
Total		**9**	**2**	**10**
Fourth Semester				
ADJ 227	Constitutional Law	3	0	3
ADJ 171	Forensic Science I	3	3	4
SOC 236	Criminology	3	0	3
HLT 116	Personal Wellness	3	0	3
Total		**12**	**3**	**13**

Total Minimum Credits for the Certificate in Law Enforcement..**45**

Note: *All courses must be approved by the Administration of Justice Program Advisor. Graduates of the "Law Enforcement Officers Training Standards Course" and the Virginia State Police "Basic Training Academy" may receive advanced standing credit for some program requirements. Additional course credits may be received for relevant and qualified in-service criminal justice seminars and training courses. Students must be enrolled in the Administration of Justice Program in order to have previous law enforcement training evaluated.*

Maintenance Mechanics

Award: CERTIFICATE

Length: Variable

Purpose: The Maintenance Mechanics program provides training in the mechanical and electrical fields. The program provides training for persons seeking employment, preparing for promotion, or desiring a broader knowledge of the industrial maintenance field.

Occupational Opportunities: The following occupational titles represent examples of possible employment opportunities:

　　Maintenance Mechanic
　　Maintenance Assistant

Admission Requirements: See a college counselor for the admissions requirements for this program. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The curriculum is designed to assist students in entering technical careers in industrial maintenance. Academic and technical instruction and laboratory experiences provide a balance between theory and practice. The program contains general education courses to assist you in social and business communications and to prepare you to meet the obligations of a citizen in the American democratic society.

Program Requirements: To receive a Certificate in Maintenance Mechanics you must complete a minimum of 45 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. The part-time and/or evening student may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
DRF 160	Machine Blueprint Reading	3	0	3
ELE 113	Electricity I	3	0	3
ELE 123	Electrical Applications I	1	2	2
MAC 161	Machine Shop Practices I	2	3	3
MTH 103	Basic Technical Math I or equivalent	3	0	3
SAF 126	Principles of Industrial Safety	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**16**	**5**	**18**

		Lecture Hours	Lab Hours	Course Credit
Second Semester				
AIR 121	Air Conditioning & Refrigeration I	2	2	3
AIR 155	Heating Systems or approved substitute	2	2	3
ELE 114	Electricity II	3	0	3
ELE 124	Electrical Applications II	1	2	2
ENG 131	Technical Report Writing I	3	0	3
ITE 116	Survey of Computer Software Applications	2	0	2
Total		**13**	**6**	**16**

		Lecture Hours	Lab Hours	Course Credit
Third Semester				
ELE 156	Electrical Control Systems	2	2	3
MEC 295	Basic Fluid Mech.-Hyd. & Pneumatics	3	0	3
PSY 126	Psychology for Business/Industry or Approved Substitute	3	0	3
WEL 120	Fundamentals of Welding	1	3	2
Total		**9**	**5**	**11**

Total Minimum Credits for the Certificate in Maintenance Mechanics **45**

Office Information Processing

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Award: CERTIFICATE

Length: A full-time student may complete this program in one year, which includes one summer term.

Purpose: The Office Information Processing program is designed for persons who are seeking employment in the information processing field immediately upon completion of the community college program. Persons who are seeking initial employment and those presently employed in information processing who are seeking advancement, or who want to improve or update skills, will benefit from this program.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Bill and Account Collector
Billing, Cost or Rate Clerk
Cashier
Customer Service Representative – Utilities
Data Keyer (except Composing)
Dispatcher – Police, Fire or Ambulance
Computer Operator
Counter or Rental Clerk
File Clerk
Hotel, Motel, or Resort Desk Clerk
Human Resources Assistant (except Payroll and
    Timekeeping)
Interviewing Clerk
Loan and Credit Clerk
Mail Clerk or Mail Machine Operator
Messenger
Office Clerk – General
Order Clerk – Materials, Merchandise and
    Service
Payroll and Timekeeping Clerk
Receptionist or Information Clerk
Shipping, Receiving and Traffic Clerk
Switchboard Operator
Teller
Word Processor or Typist

Admission Requirements: You may be admitted to this program by meeting the admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The Office Information Processing program includes technical courses in related areas and general education courses. Instruction includes both the theoretical concepts and practical applications needed for success in information processing.

Program Requirements: To receive the Certificate in Office Information Processing you must complete a minimum of 50 credits with a cumulative grade point average of 2.0 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired order, except for sequence courses or courses requiring prerequisites.

Office Information Processing

First Semester		Lecture Hours	Lab Hours	Course Credit
AST 101	Keyboarding I	2	0	2
AST 103	Keyboarding I Lab	0	2	1
AST 243	Office Administration I	3	0	3
BUS 121	Business Mathematics I	3	0	3
ENG 134	Grammar for Writing & Speaking	3	0	3
ITE 115	Intro. to Computer Applications & Concepts	3	2	4
SDV 100	College Success Skills	1	0	1
Total		**15**	**4**	**17**

Second Semester		Lecture Hours	Lab Hours	Course Credit
ACC 111	Accounting I	3	0	3
ENG 135	Applied Grammar II	3	0	3
AST 102	Keyboarding II	2	0	2
AST 104	Keyboarding II Lab	0	2	1
AST 238	MS Word	2	0	2
AST 239	MS Word Lab	0	2	1
AST 244	Office Administration II	3	0	3
HUM	Approved Humanities or Social Science Elective	3	0	3
Total		**16**	**4**	**18**

Third Semester		Lecture Hours	Lab Hours	Course Credit
AST 113	Speedbuilding	0	2	1
AST 234	Records & Database Mgt.	3	0	3
AST 253	Desktop Publishing	2	0	2
AST 255	Desktop Publishing Lab	0	2	1
ECO 100	Elementary Economics	3	0	3
ITE 140	Spreadsheet Software	3	0	3
SDV 106	Job Search Strategies	1	0	1
EEE	Approved Elective		0	1
Total		**13**	**4**	**15**

Total Minimum Credits for the Certificate in Office Information Processing...**50**

Practical Nursing

Award: CERTIFICATE

Length: A full-time student may complete this program in three semesters.

Purpose: The Practical Nursing curriculum is designed to prepare beginning practitioners with the knowledge and skills to care for clients of all age groups. In Virginia, a state license is required for this profession. For more information please contact the Virginia Board of Nursing. Upon completion of the program, graduates are eligible to take the National Council Licensure Examination (NCLEX-PN). Utilizing the nursing process, graduates will:

1. Assist in assessing the client's physical and mental health.
2. Participate in planning and implementing the health care plan.
3. Record and report the nursing care rendered and the client's response to care.
4. Communicate effectively with clients, their families, and other members of the health care team.
5. Recognize legal and self-limitations in the provision of patient care.
6. Serve as contributing members in the community.
7. Develop professionally to their fullest potential by taking advantage of available educational opportunities.

Occupational Objectives: Opportunities for the Licensed Practical Nurse include employment in hospitals, nursing homes, clinics, day care centers, doctor's offices, industry, hospice, and private duty nursing.

Prerequisites/Admission Requirements:

1. High School diploma or GED
2. Non-developmental placement in English (writing and reading) and strong competence in basic arithmetic.
3. Successful completion of the Nursing Entrance examination
4. Current C.P.R. certification at the American Heart Association professional rescuer level.
5. Priority consideration will be given to students who have completed a sequence of preparatory college-level courses with a grade of "B" or better. These courses are

specified on the DCC web site (www.dcc. vccs.edu). Go to Academic Information, Catalog, 2008-2009 Catalog, Certificate Programs and scroll down to First Year Studies. The courses are indicated under the First Year Studies Certificate for LPNs. The First Year Studies Certificate for LPNs is beneficial for certain students but not required.

6. Admission into the program is based upon meeting required courses listed under Program Requirements.

Note: This program is academically rigorous and there are more applicants than available seats. Therefore, admission is on a selective, not first-come, first-served basis. The selection process will focus on the student's past academic performance and the results of the entrance examination. It is recommended that students enroll initially in the First Year Studies program and then apply to this certificate.

Readmission Requirements: Students wishing to be readmitted to the program will follow the same procedures outlined above. Once a student is readmitted, there are additional requirements regarding repetition of previous coursework. A copy of these additional requirements may be obtained from the Practical Nursing Department following readmission. Students are allowed readmission once.

Program Requirements: To receive the Certificate in Practical Nursing, you must complete a minimum of 54 credits with a grade point average of 2.00 or better. In order to advance to the next semester, you must earn a grade of "C" or better in BIO, HLT, MTH 126, and individual components of all PNE courses. You must also demonstrate satisfactory attendance and performance in nursing clinical areas.

Practical Nursing

		Lecture Hours	Lab Hours	Course Credit
First Semester				
SDV 100	College Success Skills	1	0	1
ENG 111	College Composition	3	0	3
PNE 161	Nursing in Health Changes I	4	6	6
HLT 141	Terminology	1	0	1
PNE 173	Pharmacology for PN	2	0	2
BIO 141	Human Anatomy & Physiology I	3	3	4
HLT 130	Nutrition & Diet Therapy	1	0	1
Total				**18**

		Lecture Hours	Lab Hours	Course Credit
Second Semester				
PNE 162	Nursing Health Chg. II	5	15	10
PNE 174	Applied Pharmacology	0	3	1
PNE 158	Mental Health & Psychiatric Nursing	1	0	1
ITE 116	Survey of Computer Software Applications	2	0	2
BIO 142	Anatomy & Physiology II	3	3	4
Total				**18**

		Lecture Hours	Lab Hours	Course Credit
Third Semester				
PNE 163	Nursing in Health Changes III	4	15	9
PNE 135	Maternal Child	4	3	5
PSY 230	Developmental Psychology	3	0	3
PNE 145	Trends	1	0	1
Total				**18**

Total Minimum Credits for the Certificate in Practical Nursing **54**

Protective Services (Private Security)

Award: CERTIFICATE

Length: Four-semesters, Can be completed on a part-time basis.

Purpose: The Certificate in Protective Services (Private Security) is designed for practitioners in protective services and private security who desire to take only those courses which relate directly to their employment needs. Students who are deficient in meeting academic standards may be advised to enroll in appropriate classes which are designed to provide the background necessary for academic proficiency.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

Security Officer
Private Investigator
Insurance Investigator

Admission Requirements: In addition to the admission requirements established for the College, entry into the Protective Services (Private Security) Certificate program requires proficiency in English, mathematics, and reading. If you do not meet entry requirements or if placement test scores indicate a need for further preparation, you will be placed in the appropriate developmental studies course(s) in English, mathematics, and/or reading. These developmental course credits do not apply toward degrees or certificates. If you are required to take two or more developmental courses you will need additional semesters to complete the program.

Program Requirements: The Certificate in Protective Services (Private Security) is designed to improve the job-related skills of the person engaged in protective services duties. You will be advised as to which courses are most applicable in your field of interest. You must complete a minimum of 44 credits in the curriculum to be awarded a Certificate in Protective Services (Private Security).

Note: All courses must be approved by the Administration of Justice Program Advisor. Graduates of Protective Services and Private Security Training Programs may receive advanced standing credit for some program requirements. Additional course credits may be received for relevant and qualified in-service protective services training courses. Students must be enrolled in the Administration of Justice Program in order to have previous protective services/private security training experiences evaluated.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
ENG III	College Composition I	3	0	3
ADJ 100	Survey of Criminal Justice	3	0	3
SOC 200	Principles of Sociology	3	0	3
SDV 100	College Success Skills	1	0	1
Total		**10**	**0**	**10**
Second Semester				
ADJ 130	Introduction to Criminal Law	3	0	3
SOC 235	Juvenile Delinquency	3	0	3
ENG 112	College Composition II	3	0	3
SOC 215	Sociology of the Family or			
SOC 268	Social Problems	3	0	3
Total		**12**	**0**	**12**
Third Semester				
ADJ 150	Introduction to Security Admin.	3	0	3
PSY 200	Principles of Psychology	3	0	3
ITE 115	Introduction to Computer Applications and Concepts	3	2	4
Total		**9**	**2**	**10**
Fourth Semester				
ADJ 227	Constitutional Law	3	0	3
ADJ 257	Loss Prevention	3	0	3
SOC 236	Criminology	3	0	3
HLT 116	Personal Wellness	3	0	3
Total		**12**	**0**	**12**

Total Minimum Credits for the Certificate in Protective Services (Private Security) **44**

Note: In selecting courses, students should seek the advice of the ADJ Program Advisor in order to ensure courses taken are consistent with transfer or career goals.

Residential Design and Estimation

Award: CERTIFICATE

Length: A full-time student may complete this program in three semesters.

Purpose: The Certificate in Residential Design and Estimation is designed to provide the student with the knowledge and skill necessary to obtain employment upon completion of the program courses.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

- Draftsman
- Construction Estimator
- Construction Planner
- Sales Technician
- Surveying Assistant
- Site Inspector

Admission Requirements: You may be admitted to this program by meeting the admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background and your strengths and weaknesses as revealed by an appropriate placement test. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program is designed for both beginners and persons already employed in the construction field. It provides extensive computer application training, instruction in the areas of residential design and construction techniques, an introduction into site surveys as well as plan development and layout. The student will receive specialized training in the use of 3D residential design software, construction mathematics, construction estimation and materials, as well as extensive lab exercises which are designed to focus on construction-related applications.

Program Requirements: To receive the Certificate in Residential Design and Estimation, you must complete a minimum of 42 credits with a cumulative grade point average of 2.0 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired order, except for sequence courses or courses requiring prerequisites.

First Semester

		Lecture Hours	Lab Hours	Course Credit
SDV 100	College Success Skills	1	0	1
ITE 115	Intro. Comp. Applications and Concepts	3	2	4
DRF 114	Drafting I	1	9	4
DRF 195	Construction Mathematics	3	0	3
DRF 161	Arch. Blueprint Reading	1	3	2
ENG 131	Technical Report Writing	3	0	3
Total		**12**	**14**	**17**

Second Semester

MEC 111	Materials and Processes	3	0	3
DRF 200	Survey of CAD	2	2	3
CIV 170	Surveying	2	3	3
ARC 115	Architecture I	1	3	3
ENG 115	Technical Writing	3	0	3
Total		**11**	**8**	**15**

Third Semester

DRF 202	Computer Aided Design II	3	2	4
ARC 195	Architecture II	3	0	3
ARC 255	Construction Estimation	2	0	3
Total		**8**	**2**	**10**

Total Minimum Credits for the Certificate in Residential Design and Estimation.. **42**

Summer Air Conditioning and Refrigeration Servicing

Award: CERTIFICATE

Length: Variable

Purpose: The Summer Air Conditioning and Refrigeration Servicing program is designed to train persons to service equipment currently in the field and to give them a background that will enable them to cope with new developments as they occur.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:
- Air Conditioning Technician
- Circuits and Controls Service Technician
- Installation and Service Technician
- Refrigeration Service Technician

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background as revealed by an appropriate placement assessment. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program is designed for both beginners and persons presently employed in the air conditioning and refrigeration field. It provides the practical experience and technical knowledge required for competence as a service technician in the air conditioning and refrigeration field. The student will receive specialized seminars, theoretical and practical training in basic electricity, circuits and controls (electric and pneumatic), refrigeration and air conditioning (residential and commercial).

Program Requirements: To receive the Certificate in Summer Air Conditioning and Refrigeration Servicing, you must complete a minimum of 45 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

First Semester

		Lecture Hours	Lab Hours	Course Credit
AIR 167	Air Cond. Systems III	3	3	4
AIR 231	Circuits & Controls V	4	3	5
AIR 271	Refrigeration I	4	6	6
*SDV 100	College Success Skills	1	0	1
Total		**12**	**12**	**16**

Second Semester

		Lecture Hours	Lab Hours	Course Credit
AIR 232	Circuits & Controls VI	2	3	3
AIR 254	Air Cond. Systems IV	2	3	3
AIR 272	Refrigeration II	3	6	5
ENG 131	Technical Writing or Approved Substitute	3	0	3
ITE 116	Sur. Of Comp. Software Applications	2	0	2
Total		**12**	**12**	**16**

Third Semester

		Lecture Hours	Lab Hours	Course Credit
AIR 233	Circuits & Controls VIII	2	3	3
AIR 255	Air Cond. Systems V	2	3	3
AIR 273	Refrigeration III	2	3	3
AIR 195	Refrigerant Certification	1	0	1
ECO 100	Elementary Economics or approved substitute	3	0	3
Total		**10**	**9**	**13**

Total Minimum Credits for the Certificate in Summer Air Conditioning and Refrigeration Servicing **45**

*SDV 100 College Success Skills is required for graduation and should be taken during the first semester the student is enrolled in the curriculum.

Winter Air Conditioning Servicing

Award: CERTIFICATE

Length: Variable

Purpose: The Winter Air Conditioning Servicing program is designed to train persons to service equipment currently in the field and to give them a background that will enable them to cope with new developments as they occur.

Occupational Objectives: The following occupational titles represent examples of possible employment opportunities:

    Winter Air Conditioning (Heating) Technician

    Circuits and Controls Service Technician

    Installation and Service Technician

Admission Requirements: Entry into this curriculum may be attained by meeting the general admission requirements established for the College. If you meet the general admission requirements, a counselor will discuss with you the strengths and weaknesses of your academic background as revealed by an appropriate placement assessment. You may correct any deficiencies in academic preparation in the College's Developmental Studies program.

Program Description: The program is designed for both beginners and persons presently employed in the air conditioning and refrigeration field. It provides the practical experience and technical knowledge required for competence as a service technician in the air conditioning and refrigeration field. The student will receive specialized seminars, theoretical and practical training in basic electricity, circuits and controls (electric), combustion devices (oil burners and gas burners), and boilers (residential and commercial).

Program Requirements: To receive the Certificate in Winter Air Conditioning Servicing, you must complete a minimum of 43 credits with a grade point average of 2.00 or better. The credits are distributed according to the following outline. This outline represents a typical order of courses taken by full-time students. Part-time and/or evening students may take courses in any desired sequence, except for hyphenated courses or others requiring prerequisites.

		Lecture Hours	Lab Hours	Course Credit
First Semester				
AIR 117	Metal Layout I	1	6	3
AIR 134	Circuits & Controls I	2	3	3
AIR 154	Heating Systems I	2	2	3
AIR 161	Heating, Air Cond. & Refrig. Calculations I Or approved substitute	3	0	3
AIR 165	Air Cond. Systems I	2	3	3
ITE 116	Survey of Computer Software Applications	2	0	2
*SDV 100	College Success Skills	1	0	1
Total		**13**	**14**	**18**
Second Semester				
AIR 118	Metal Layout II or Approved substitute	1	6	3
AIR 135	Circuits & Controls II	2	3	3
AIR 155	Heating Systems II	2	2	3
AIR 166	A/C Systems II	2	3	3
Total		**7**	**14**	**12**
Third Semester				
AIR 136	Circuits & Controls III	2	3	3
AIR 156	Heating Systems III	2	2	3
AIR 195	Customer Relations	1	0	1
ECO 100	Elementary Economics or approved substitute	3	0	3
ENG 131	Technical Report Writing or approved substitute	3	0	3
Total		**11**	**5**	**13**

Total Minimum Credits for the Certificate in Winter Air Conditioning Servicing **43**

*SDV 100 College Success Skills is required for graduation and should be taken during the first semester the student is enrolled in the curriculum.

CAREER STUDIES

Award: CERTIFICATE

Advanced Manufacturing Concepts
Advanced Nurse Aide
Advanced Phlebotomy
American Sign Language
Basic Dental Assisting*
Building Construction Trades
Commercial Art
Cosmetology
Educational Interpreter Training
Electrical Concepts
Electronic Concepts
Emergency Medical Services
Gerontology
Graphic Communications
Horticulture
Interior Decorating
Legal Assisting
Manufacturing Leadership
Manufacturing Technician
Medical Coding

Medical Terminology
Medical Transcription
Metal Processing
Microcomputer Software
Motorsports Management
Network Technology
Networking with CISCO
Nurse Aide
PC Upgrade and Repair
Pharmacy Technician
Phlebotomy
Polymer Processing Technician
Programming
Real Estate Abstracting
Sheet Metal Layout and Installation
Spanish Fluency
Web Site Design
Welding
Workplace Readiness

*Fall 2009

Length: Variable for part-time students. The options available represent the equivalent of one or more semesters of full-time community college work.

Purpose: Danville Community College has a significant percentage of part-time students who are taking courses during evening hours. Many students seek post-secondary programs of study that are less than the conventional one- or two-year programs designed primarily for the College's full-time student population. Many occupational, industrial, or student interest content areas within the DCC region do not typically require pre-service or in-service post-secondary preparation extending to one- and two-years of full-time studies. The Career Studies Certificate Program is a response to the non-conventional short-term program of study needs of many students within the College's region.

The programs are designed as a series of specialized program options. These options represent a variety of career and academic interest course areas. They are intended to represent the minimum amount of college coursework considered representative of these fields of study. Each of the program options is designed as a distinct "mini-curriculum" to meet minimum vocational skills. Typically, the credits in the Career Studies programs are less than the one-year Certificate programs (ie., less than 30 semester hours).

Admission Requirements: Admission to these Career Studies Certificate programs is based upon the general requirements for admission to the College. Deficiencies in general education may require enrollment in Developmental Studies. The student is expected to select one of the available program options during admission and registration.

ADVANCED MANUFACTURING CONCEPTS

Purpose: The Advanced Manufacturing Concepts Career Studies Certificate is designed to provide a program of study in modem manufacturing methods, quality and teamwork skills. The occupational objective is Engineering Technician I.

Admission Requirements: Admission to the Advanced Manufacturing Concepts Career Studies Certificate is based upon the general requirements for the college. If a student meets the general admission requirements, a counselor will discuss the student's academic strengths and weaknesses. Any academic deficiencies may be corrected in the College's Developmental Studies program.

Program Requirements: To receive an Advanced Manufacturing Concepts Career Studies Certificate you must complete 15 credits of the listed courses.

IND 145 Introduction to Metrology	3
IND 137 Teamwork and Problem Solving	3
IND 181 World Class Manufacturing	3
IND 235 Statistical Quality Control	3
IND 298 Capstone Project	3
Total Minimum Credits	**15**

ADVANCED NURSE AIDE

Occupational Objectives: The Advanced Nurse Aide Career Studies Program is designed to prepare students for employment as licensed nurse aides who possess foundational skills that allow for more training in health care occupations.

	Course Credit
*BIO 141 Human Anatomy and Physiology I	4
BIO 142 Human Anatomy and Physiology II	4
**MTH 126 Math for Allied Health	3
ENG 111 College Composition I	3
HLT 141 Introduction to Medical Terminology	1
NUR 25 Nursing Assistant	3
NUR 27 Nursing Assistant Advanced	3
NUR 98 Seminar and Project	3
Total Minimum Credits	**24**

Students must have completed MTH 2 and be non-developmental in Reading and Writing to take this course.

**Successful completion of MTH 2 is required for this course.*

ADVANCED PHLEBOTOMY

Occupational Objectives: The Advanced Phlebotomy Career Studies Program is designed to prepare students to become certified Phlebotomists with foundational skills that allow for more advanced training in health care. Phlebotomists are employed in all levels of health care facilities to collect blood for laboratory analysis. Upon successful completion of the didactic and clinical course work, students may be eligible to sit for nationally recognized certification or registration exams. The didactic courses are taught on the DCC campus. The clinical work will be done at area health care facilities.

Admission Requirements: Admission to the Phlebotomy Career Studies Certificate Program is based on the general requirements for admission to the college. The student is required to have a GED or standard high school diploma. Deficiencies in general education may require enrollment in Developmental Studies. The courses needed for the Advanced certificate should transfer into other allied health programs. Check with your advisor and consider you future plans when considering the courses.

Program Description: The art of drawing blood will be taught through intensive supervised hands-on practice using artificial arms and volunteers. Students will collect venous and capillary specimens. The skill level of the student will be assessed using competency standards utilized by the certification agencies such as CLSI and ASCP. The clinical hours will begin ONLY after the student has acquired the appropriate skill level and has satisfactorily passed the didactic portion of the program. To be eligible to sit for national certification exams the student must complete 120-150 hours of clinical time with 100-150 successful collections. Passing a national exam is an additional employment asset; sitting for an exam is not required for completion of the college's program, but preparedness for the exam will be stressed. The certificate awarded by the College will warrant successful completion of the college's program and does not guarantee that the student will pass the national exams.

		Course Credit
*BIO 141	Human Anatomy and Physiology I	4
BIO 142	Human Anatomy and Physiology II	4
**MTH 195	Topics in Math for Allied Health	3
ENG 111	College Composition I	3
HLT 141	Introduction to Medical Terminology	1
MDL 105	Phlebotomy	4
MDL 106	Clinical Phlebotomy	4
Total Minimum Credits		**23**

Students must have completed MTH 2 and be non-developmental in Reading and Writing to take this course.

** *Successful completion of MTH 2 is required for this course.*

AMERICAN SIGN LANGUAGE

Occupational Objectives: The American Sign Language (ASL) Certificate Program is designed to train members of the community to communicate proficiently in ASL as well as enable them to develop an understanding of Deaf Culture. The ASL Career Studies Certificate Program prepares students, parents, educators, social workers, etc. to serve people who are Deaf or Hard of Hearing in the workforce. The program will also assist in making the work environment "Deaf friendly" and accommodating to those who are Deaf or Hard of Hearing.

		Lecture Hours	Lab Hours	Course Credit
SDV 100	College Success Skills	1	0	1
ASL 101	American Sign Language I	3	0	3
ASL 102	American Sign Language II	3	0	3
ASL 201	American Sign Language III	3	0	3
ASL 202	American Sign Language IV	3	0	3
ASL 125	History of U.S. Deaf Community	3	0	3
ASL 115	Fingerspelling and Number Use in ASL	2	0	2
Total Minimum Credits				**18**

BASIC DENTAL ASSISTING*

Purpose: This Career Studies Certificate is designed to prepare students for work as a dental assistant in private practice dental offices. This Certificate is currently limited to George Washington High School students in dual enrollment, but will be available to other residents pending construction of DCC's new Allied Health Building.

		Lecture Hours	Lab Hours	Course Credit
DNA 100	Intro to Oral Health Professions	1	0	1
DNA 103	Introduction to Oral Health	1	0	1
DNA 110	Dental Materials	2	3	3
DNA 113	Chairside Assisting I	2	3	3
DNA 134	Dental Radiology and Practicum	2	3	3
HLT 105	Cardiopulmonary Resuscitation	1	0	1
Total Minimum Credits				**12**

Fall 2009

BUILDING CONSTRUCTION TRADES

Purpose: The Career Studies program in Building Construction Trades is designed to help entry-level employees in construction-related trades obtain job-specific knowledge and skills to improve their work performance and career status within the industry. The curriculum provides an understanding of the common principles and practices of the modern construction industry, as well as specific knowledge and skills in a trade area selected by the student. Five specializations are available: Electrical, HVAC, Plumbing, Carpentry and Masonry. The courses contained in these programs are applicable to fulfilling the related education requirements that are prerequisite to taking the Journeyman or Master Certification tests. Information on specific trade certification requirements may be obtained from the National Assessment Institute (NAI), Toll-Free in Virginia 1-800-356-3381.

Occupational Objectives: Opportunities for employment and license as a Journeyman or Master's Level Tradesman in the areas of Electrical, HVAC, Plumbing, Carpentry and Masonry fields.

Admission Requirements: Admission to the Building Construction Trades Career Studies Certificate Program is based upon the general requirements for admission to the college. Deficiencies in general education may require enrollment in Developmental Studies. The student is expected to select one of the available program options during admission and registration.

Program Requirements: Students entering any of the options must complete the three general education core courses as listed and all courses included in each option.

		Course Credit
MTH 103	Applied Technical Math	3
BLD 111	Blueprint Reading	3
SAF 120	Safety & Health Standard Regulations and Codes	3

Electrical Option

		Lecture Hours	Lab Hours	Course Credit
ELE 110	Home Electric Power	2	2	3
ELE 133	Practical Electricity	2	2	3
ELE 134	Practical Electricity	2	2	3
ELE 131	National Electrical Code	3	0	3
ELE 216	Industrial Electricity	2	2	3
ELE 156	Electrical Control System	2	2	3
Total Minimum Credits		**13**	**10**	**18**

HVAC Option

		Lecture Hours	Lab Hours	Course Credit
AIR 121	A/C & Refrigeration I	2	2	3
AIR 122	A/C & Refrigeration I	2	2	3
AIR 123	A/C & Refrigeration III	2	2	3
AIR 154	Heating System	2	2	3
AIR 158	Mechanical	2	0	2
AIR 117	Metal Layout	1	6	3
Total Minimum Credits		**11**	**14**	**17**

Plumbing Option

		Lecture Hours	Lab Hours	Course Credit
BLD 20	Introduction to Plumbing	1	2	2
BLD 25	Analysis & Troubleshooting in Plumbing	2	2	3
BLD 195	Plumbing I	3	0	3
BLD 195	Plumbing II	3	0	3
BLD 195	Plumbing III	3	0	3
BLD 195	Plumbing IV	3	0	3
BLD 195	Plumbing V	3	0	3
Total Minimum Credits		**18**	**4**	**20**

Carpentry Option

		Lecture Hours	Lab Hours	Course Credit
BLD 131	Carpentry Framing I	3	4	5
BLD 132	Carpentry Framing II	3	4	5
BLD 133	Carpentry Framing III	3	4	5
BLD 134	Carpentry Framing IV	3	4	5
Total Minimum Credits		**12**	**16**	**20**

Masonry Option

		Lecture Hours	Lab Hours	Course Credit
BLD 126	Basic Carpentry Principles	2	2	3
BLD 146	Form Work & Concrete Theory	2	2	3
BLD 147	Principles of Block and Bricklaying	1	2	3
BLD 181	Intro to Concrete Constr.	2	2	3
BLD 183	Reinforcing Concrete and Patented Forms	3	0	3
Total Minimum Credits		**10**	**8**	**15**

COMMERCIAL ART

Occupational Objectives: The Career Studies Certificate in Commercial Art is designed to prepare individuals for employment as graphic artists and/or designers in advertising agencies, sign shops, or in the printing industry. Procedures and processes will be covered in both theory and hands-on application.

Students who complete the program will develop competencies in the following areas:

1. Basic drawing skills;
2. Application of design techniques for commercial purposes;
3. Use of airbrush in commercial art applications;
4. Paste up skills related to camera-ready printed materials;
5. Silkscreen stencil techniques with emphasis on design;
6. Desktop publishing techniques including Freehand and PageMaker.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
PNT 110	Survey of Repo. Proces.	3	2	3
ART 121	Drawing Techniques I	2	2	3
ART 198	Airbrushing Techniques	1	2	2
PNT 221	Layout & Design I	2	3	3
ART 195	Silkscreen Printing I	1	2	2
PNT 211	Electronic Publishing I	2	2	4
Total Minimum Credits				**17**

COSMETOLOGY

Occupational Objectives: The Career Studies Certificate in Cosmetology is designed to prepare individuals to be competent in the field of Cosmetology, to be successful in passing the State Board of Cosmetology Examination, and to gain employment in the field of cosmetology, barbering, and/or business ownership.

The program is structured within the following courses:

First Term

COS 195	Cosmetology I-III	3	0	3
COS 199	Supervised Study in Cosmetology	6	0	6

Second Term

COS 195	Cosmetology IV-VI	3	0	3
COS 199	Supervised Study in Cosmetology	6	0	6

Third Term

COS 195	Cosmetology VII-IX	3	0	3
COS 199	Supervised Study in Cosmetology	6	0	6
Total Minimum Credits				**27**

EDUCATIONAL INTERPRETER TRAINING

The Educational Interpreter Training Career Studies Certificate program is designed to train individuals with proficiency in American Sign Language to become educational interpreters. The focus is on developing the processing skills necessary to proceed from being "signer" to becoming a transliterator/interpreter. Coursework will focus on processing skills, transliterating skills, and continued sign vocabulary development as well as a specialized focus on interpreting in the educational setting. The objective of this career studies certificate is to prepare individuals to take the Virginia Quality Assurance Screening (VQAS).

Occupational Objectives: Occupational opportunities include working as an interpreter in the public schools as well as working as an interpreter in private practice. A prerequisite to this program is the American Sign Language Career Studies certificate or approval of the coordinator/ program director.

		Course Credit
EIP 181	Pre-Interpreting Skills I	1
EIP 201	Linguistics of American Sign Lang I	1
EIP 202	Linguistics of American Sign Lang II	1
EIP 211	Sign-to-Voice Transliterating I	1
EIP 212	Sign-to-Voice Transliterating II	1
EIP 213	Sign-to-Voice Transliterating III	1
EIP 214	Sign-to-Voice Transliterating IV	1
EIP 231	Expressive Transliterating I	1
EIP 232	Expressive Transliterating II	1
EIP 233	Expressive Transliterating III	1
EIP 234	Expressive Transliterating IV	1
EIP 280	Interactive Transliterating	1
EIP 289	Prep. for Performance Evaluation–Transliteration	1
EIP	Elective	1
EIP	Elective	1
Total Minimum Credits		**15**

These courses do NOT articulate to the ASL/INT/SCM curriculum.

Elective

		Course Credit
EIP 101	Orientation to Deafness I	1
EIP 102	Orientation to Deafness II	1
EIP 111	Intro. to Expr. & Rec. Fingerspelling & Numbers	1
EIP 112	Adv. Expr. & Rec. Fingerspelling & Numbers	1
EIP 150	Expressive Voc. Building & Exp. Text Analysis I	1
EIP 151	Expressive Voc. Building & Exp. Text Analysis II	1
EIP 160	Receptive Voc. Building & Rec. Text Analysis I	1
EIP 161	Receptive Voc. Building & Rec. Text Analysis II	1
EIP 182	Pre-Interpreting Skills II	1
EIP 203	Linguistics of American Sign Language III	1
EIP 215	Adv. Sign-to-Voice Interpreting I	1
EIP 216	Adv. Sign-to-Voice Interpreting II	1
EIP 235	Adv. Expressive Transliterating I	1
EIP 236	Adv. Expressive Transliterating II	1
EIP 240	Interpreting in Educational Setting	1
EIP 242	Interpreting in Special Settings	1
EIP 245	Interpreter Ethics & Responsibilities	1
EIP 261	Intro. to English-to-ASL Interpreting I	1
EIP 262	English-to-ASL Interpreting II	1
EIP 263	English-to-ASL Interpreting III	1
EIP 264	English-to-ASL Interpreting IV	1
EIP 281	Interactive Interpreting	1
EIP 291	Prep. for Performance Evaluation – Interpreting	1

NOTE: This career studies certificate creates a flexible, accessible and unique template that can be offered by any of the 23 community colleges within the VCCS, specifically targeting those areas that have been historically underserved or not served by the current VCCS programs. This career studies certificate also serves to resolve issues related to the lack of qualified instructors/professors by accessing the current pool of qualified instructors/professors.

ELECTRICAL CONCEPTS

Occupational Objectives: The Electrical Concepts Career Studies Program is designed for the investigation of career possibilities, retraining for a career change, upgrading occupational skills and/or to provide entry level skills in the electrical field. Graduates of this program will be eligible for further specialized training in the electrical field or to become more productive in their present occupation. Other opportunities for the graduate are available in sales and installation of electrical components and equipment.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
ELE 199	Supervised Study in Electrical Calculations I	3	0	3
ELE 113	Electricity I	3	0	3
ELE 123	Electrical Applications I	1	2	2
ELE 199	Supervised Study in Electrical Calculations II	3	0	3
ELE 114	Electricity II	3	0	3
ELE 124	Electrical Applications II	1	2	2
ELE	Approved Tech. Elective	-	-	3
Total Minimum Credits				**19**

ELECTRONIC CONCEPTS

Occupational Objectives: The Electronic Concepts Career Studies program is designed for the investigation of career possibilities, retraining for a career change, upgrading occupational skills and/or to provide entry-level skills in the electrical field for those students who are proficient in electrical concepts. Graduates of this program will be eligible for further specialized training in the electrical field or to become more productive in their present occupation. Other opportunities for the graduate are available in sales and installation of electrical/electronic components and equipment.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
ETR 141	Electronics I	3	0	3
ETR 123	Electronic Applications I	1	2	2
ETR 142	Electronics II	3	0	3
ETR 124	Electronic Applications II	1	2	2
ELE/ETR	Approved Tech. Electives	-	-	9
Total Minimum Credits				**19**

Student must be proficient in electrical concepts.

EMERGENCY MEDICAL SERVICES

Occupational Objectives: The Career Studies Certificate in Emergency Medical Services is designed to prepare individuals to work in a variety of job entry-level positions in the broad field of health services. Job opportunities may be available with ambulance services, nursing homes, and home-health care sales and services. This program meets the educational requirements to sit for the Emergency Medical Technician Examination for State (Virginia) certification.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
EMS 112	Emergency Medical Technician — Basic I	2	2	3
EMS 113	Emergency Medical Technician — Basic II	2	2	3
PSY 126	Psychology for Business and Industry	3	0	3
Total Minimum Credits				**9**

GERONTOLOGY

Occupational Objectives: The Career Studies Certificate in Gerontology is designed to provide students with the skills and knowledge needed to work with an aging population in both nursing and community settings. To receive the Certificate in Gerontology, a 12-credit sequence of courses must be completed and the student must have a grade point average of 2.00 or better.

The credits are distributed according to the following outline:

		Course Credit
NUR 114	Geriatric Nursing	3
HLT 270	Health and Well-Being of the Older Adult	3
HMS 231	Gerontology I	3
HMS 232	Gerontology II	3
Total Minimum Credits		**12**

GRAPHIC COMMUNICATIONS

Occupational Objectives: The Career Studies Certificate in Graphic Communications is designed to prepare individuals for various entry-level positions or to upgrade existing skills to meet technology trends in the printing industry. Procedures and processes will be covered in both theory and/or hands-on application.

Students complete the program will develop competencies in the following areas:

- Mathematical concepts for practical application
- Basic understanding of various printing processes
- Desktop publishing techniques including QuarkXPress and PageMaker
- Understanding of the varieties, properties, handling and printing characteristics of paper and inks
- Understanding of safety and health issues and of the OSHA Hazard Communication Standard
- Understanding of the current trends in technology in the field

The program is structured in the following courses:

		Lecture Hours	Lab Hours	Course Credit
PNT 295	Math for Graphic Communications	3	0	3
PNT 110	Survey of Reproduction Processes	3	2	3
PNT 211	Electronic Publishing I	2	2	3
PNT 295	Paper and Ink Concepts	2	0	2
PNT 295	Safety and Health Issues	2	0	2
PNT 295	Industry Trends	2	0	2
Total Minimum Credits				**15**

HORTICULTURE

Purpose: The Horticulture Career Studies Certificate is designed to provide a program of study in horticulture which results in a basic understanding of the horticulture industry and in the acquisition of skills necessary for entry positions in the industry.

Occupational Objectives: Entry-level positions in agriculture and plant management.

Admissions Requirements: Admission to the Horticulture Career Studies Certificate is based upon the general requirements for the college. If a student meets the general admission requirements, a counselor will discuss the student's academic strengths and weaknesses. Any academic deficiencies may be corrected in the College's Developmental Studies program.

Program Requirements: To receive a Horticulture Career Studies Certificate you must complete 12 credits of the listed courses.

		Lecture Hours	Lab Hours	Course Credit
HRT 100	Intro. To Horticulture or			
HRT 110	Principles of Horticulture	2	2	3
HRT 115	Plant Propagation	3	0	3
HRT 121	Greenhouse Crop Prod. I or			
	Horticulture Elective	2	2	3
HRT 122	Greenhouse Crop Prod. II or			
	Horticulture Elective	2	2	3
Total Minimum Credits				**12**

INTERIOR DECORATING

Occupational Objectives: The Career Studies Certificate in Interior Decorating is to give the student the basic knowledge and occupational skills to pursue employment at the job entry level. Positions may include serving as interior decorator trainee/assistant, interior designer assistant, and residential or business interior decorator sales.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
DEC 100	Introduction to Interior Decorating	3	0	3
DEC 198	Seminar and Project	3	0	3
PSY 126	Psychology for Business and Industry	3	0	3
Total Minimum Credits				**9**

LEGAL ASSISTING

Occupational Objectives: The Legal Assisting Career Studies Certificate gives the student the basic knowledge and occupational skills to conduct legal research under the supervision of an attorney and to prepare pleadings and trial notebooks.

		Lecture Hours	Lab Hours	Course Credit
AST 117	Keyboarding for Computer Usage	1	0	1
AST 238	Microsoft Word	2	0	2
AST 239	Microsoft Word Lab	0	2	1
LGL 110	Intro. to Law and the Legal Assistant	3	0	3
LGL 125	Legal Research	3	0	3
LGL 226	Real Estate Abstracting	3	0	3
LGL 216	Trial Preparation and Discovery Practice	3	0	3
Total Minimum Credits				**16**

MANUFACTURING LEADERSHIP

Purpose: The Manufacturing Leadership Career Studies Certificate is designed to provide a program of study in modern manufacturing methods, quality, teamwork and leadership skills.

Occupational Objectives: Engineering Technician and First Line Supervisor

Admissions Requirements: Admission to the Manufacturing Leadership Career Studies Certificate is based upon the general requirements for the college. If a student meets the general admission requirements, a counselor will discuss the student's academic strengths and weaknesses. Any academic deficiencies may be corrected in the College's Developmental Studies program.

Program Requirements: To receive a Manufacturing Leadership Career Studies Certificate you must complete 14 credits of the listed courses.

		Course Credit
IND 181	World Class Manufacturing	3
IND 137	Teamwork and Problem Solving	3
IND 235	Statistical Quality Control	3
PSY 126	Psychology for Business & Industry	3
IND 298	Capstone Project	2
Total Minimum Credits		**14**

MANUFACTURING TECHNICIAN

Occupational Objectives: The Manufacturing Technician Career Studies Certificate is designed to prepare participants to gain employment in various manufacturing jobs requiring advanced technical and operator skills as well as knowledge of advanced manufacturing practices.

Program Requirements: To receive a Manufacturing Technician Career Studies Certificate you must complete 24 credits. The program is structured within the following courses:

		Course Credit
BUS 195	Business Ethics	1
IND 195	Interpreting Engineering Drawings/Math/Metrology (GDT)	2
IND 195	Systematic Problem Solving	1
IND 181	World Class Manufacturing	3
IND 195	KeyTrain Remediation	1
ITE 195	TekXam Computer Literacy & Applications	2
SAF 195	Industrial Safety – OSHA 10	1
SDV 106	Preparation for Employment	1
ETR 115	AC/DC Circuits	3
ELE 195	Applications in Motor Control	3
MEC 195	Applications in Fluid Power	3
MEC 195	Applications in Mechanical Systems I & II	3
Total Minimum Credits		**24**

MEDICAL CODING

Occupational Objectives: The Medical Coding Career Studies Certificate is designed for persons who wish to pursue a career in medical coding. Upon completion of this certificate program, students will be able to pursue employment in hospitals, doctors' offices, nursing facilities, and other health career facilities. Classes will be offered in the evening to accommodate students who are employed during the day. Students must earn a grade of "C" or better in all HIT classes in order to complete the program.

		Course Credit
First Year — First Semester		
BIO 100	Basic Human Biology	3
HLT 143	Medical Terminology I	3
Total		**6**
Second Semester		
HLT 144	Medical Terminology II	3
ITE 115	Intro. to Computer Applications & Concepts	4
Total		**7**
Second Year — First Semester		
AST 234	Records & Database Mgt.	3
HIT 106	ICD-9-CM Coding I	2
HIT 100	Intro. to Health Care Delivery System	1
HIT 226	Legal Aspects of Health Records Documentation	2
Total		**8**
Second Semester		
HIT 195	ICD-9-CM Coding II	3
HIT 105	CPT Coding	2
Total		**5**
Total Minimum Credits		**26**

MEDICAL TERMINOLOGY

Occupational Objectives: The Career Studies Certificate in Medical Terminology is an employment option for clerk-typists and stenographers planning to seek employment as a medical records specialist in a medical facility, such as a hospital, medical clinic, or physician's office. Those entering the program should be proficient in typing and general secretarial skills or in the process of acquiring these skills.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
HLT 143	Medical Terminology I	3	0	3
HLT 144	Medical Terminology II	3	0	3
PSY 126	Psychology for Business and Industry	3	0	3
Total Minimum Credits				**9**

MEDICAL TRANSCRIPTION

Occupational Objectives: The Medical Transcription Career Studies Certificate is designed for persons who wish to pursue a career in medical transcription. Upon completion of this certificate program, students will be able to pursue employment as a medical transcriptionist in hospitals, doctors' offices, nursing facilities, and other health career facilities. Medical transcriptionists may also opt to become self-employed. Classes will be offered in the evening to accommodate those students who are employed during the day. Students must earn a grade of "C" or better in all AST and HLT courses in order to complete the program.

First Year — First Semester

		Course Credit
BIO 100	Basic Human Biology	3
HLT 143	Medical Terminology I	3
AST 101/103	*Keyboarding I	3
Total		**9**

Second Semester

		Course Credit
HLT 144	Medical Terminology II	3
AST 102/104	*Keyboarding II	3
Total		**6**

Students have the option of testing out of Keyboarding I and II.

Second Year — First Semester

		Course Credit
HIT 100	Intro. to Health Care System	1
HIT 226	Legal Aspects of Health Records Documents	2
AST 245	Medical Machine Transcription I	3
AST 113	Speedbuilding	1
Total		**7**

Second Semester

		Course Credit
AST 295	Medical Machine Transcription II	3
Total		**3**

Total Minimum Credits	**25**

METAL PROCESSING

Occupational Objectives: The Metal Processing Career Studies Certificate Program is both broad and detailed enough to permit the graduate to fill a number of jobs in a company's machine shop maintenance department, yet detailed enough to ensure that the student fully understands different types of metal processing. Layout procedures and processes on the lathe, drill press, grinding machines, and milling machines are covered in both theory and practice.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
DRF 160	Mach. Blueprint Reading	3	0	3
MAC 161	Mach. Shop Practices I	2	3	3
MAC 162	Mach. Shop Practices II	2	3	3
MAC 163	Mach. Shop Practices III	2	3	3
MAC 164	Mach. Shop Practices IV	2	3	3
WEL 120	Fundamentals of Welding	1	3	2
Total Minimum Credits				**17**

MICROCOMPUTER SOFTWARE

Occupational Objectives: The Career Studies Certificate in Microcomputer Software is designed to give a basic understanding of various microcomputer software through a variety of applications in word processing, spreadsheets, database, and graphic design. Graduates can use these courses to update their skills or open new areas of microcomputer expertise.

		Course Credit
AST 195	Microsoft Outlook Express	1
AST 238/ 239	Microsoft Word for Windows	3
AST 260	PowerPoint	2
ITE 140	Spreadsheet Software	3
ITE 182	User Support/Helpdesk Principles	3
Select two of the following:		
AST 151	Microsoft Publisher	1
AST 195	Microsoft FrontPage 2000 (Web Editor)	3
ITE 150	Desktop Database Software	4
Total Minimum Credits		**16-20**

MOTORSPORTS MANAGEMENT

Occupational Objectives: The Motorsports Management Career Studies Certificate Program is designed for students who wish to pursue employment with a motorsports related company. Instruction includes both the theoretical concepts and practical applications needed for success. All of the MTS courses are taught as web-based courses. The AUT courses are lecture/lab combinations.

The program is structured within the following courses:

		Course Credit
MTS 100	Intro. to Motorsports Management	3
MTS 110	Motorsports Marketing	3
AUT 127	Lubrication and Cooling Systems 1*	3
AUT 265	Braking Systems *	3
MTS 205	Motorsports Safety,Environmental & Transportation Issues	3
ITE 116	Survey of Computer Software and Applications	2
ECO 100	Elementary Economics	3
PSY 126	Psychology for Business and Industry	3
Total Minimum Credits		**23**

Student may substitute AUT courses approved by advisor.

NETWORK TECHNOLOGY

Occupational Objectives: The Network Technology Career Studies Certificate Program is designed for individuals employed in the field of information systems who wish to upgrade their skills. It is also designed for individuals with previous occupational or academic experience relating to computing systems who may be contemplating a career change.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
ITN 154	Networking Fundamentals CISCO	4	0	4
ITN 155	Introductory Routing - CISCO	4	0	4
ETR 228	Computer Troubleshooting and Repair	2	2	3
ITN 114	Windows XP Prof.	3	0	4
ITN 115	Windows 2003 Server (SER)	3	2	4
ITN 116	Windows 2003 Network Infra. Adm.	3	2	4
Total Minimum Credits				**23**

Advanced standing credit may be awarded to those persons with a demonstrated proficiency in Microsoft Windows 95.

NETWORKING WITH CISCO

Occupational Objectives: The Networking with Cisco Career Studies Certificate Program is designed to give an understanding of the various components of CISCO networking through the four levels of the CICSO courses. Graduates can use these courses to complete the CICSO Network Administrator (CCNA) examination, update their skills or open new areas of expertise with networking through the use of CISCO.

The program is structured within the following courses:

		Course Credit
ITN 154	Networking Fundamentals (CISCO)	4
ITN 155	Introductory Routing (CISCO)	4
ITN 156	Basic Switching & Routing (CISCO)	4
ITN 157	WAN Technologies (CISCO)	4
Total Minimum Credits		**16**

NURSE AIDE

Occupational Objectives: The Nurse Aide is capable of working under the supervision of a licensed nurse in caring for residents of a long-term health care facility or to work under limited supervision in the home. In either situation, the Nurse Aide will use basic skills in observation, communication, reporting, and assisting in maintaining a safe, clean environment for the patient.

The Nurse Aide Career Studies Certificate includes training in the following areas:

1. Orientation
2. Social, emotional, and spiritual needs
3. Communications and interpersonal relationships
4. Anatomy and physiology
5. Personal care
6. Nutrition and patient feeding
7. Activity and exercise
8. Safety and infection control
9. Admission, transfer, and discharge
10. Observation, charting, and reporting
11. Death and dying

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
NUR 25	Nursing Assistant	2	4	3
NUR 27	Nursing Assistant Advanced	2	3	3
NUR 98	Seminar and Project	2	2	3
Total Minimum Credits				**9**

PC UPGRADE AND REPAIR

Description: The PC Upgrade and Repair Career Studies Certificate is designed to present the student with an opportunity to obtain valuable skills in the exciting field of PC repair within a relatively short period of time. A student may complete this program in two semesters or less with all classes being offered in the day or evening.

Occupational Objectives: Employment opportunities may include PC Repair Technician or Wireless Network Technician.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
ETR 149	PC Repair	3	0	3
ETR 115	DC & AC Fundamentals	3	0	3
ETR 195	Topics in Operating Systems & Specialized Software	3	0	3
Total Minimum Credits				**9**

PHARMACY TECHNICIAN

Purpose: The Pharmacy Technician program is designed to prepare students to assist and support licensed pharmacists in providing health care and medications to patients. Students will obtain a broad knowledge of pharmacy practice and be skilled in the techniques required to order, stock, package, prepare, and dispense medications under the supervision of a licensed pharmacist.

Occupational Objectives: Pharmacy technicians work in hospital, retail, home health care, nursing home, clinic, nuclear medicine, and mail order prescription pharmacies. Pharmacy technicians have been employed with medical insurance, medical computer software, drug manufacturing, drug wholesale, and food processing companies, and as instructors in pharmacy technician training programs. Currently, hospital, home health care, and retail pharmacies hire the majority of technicians.

Admission Requirements: In addition to the general admission requirements established for the College, entry into this program requires:

1. A high school diploma or a State approved equivalent education.
2. Acceptable admissions test scores or satisfactory completion of required developmental studies courses.
3. A personal interview with an admissions interview team. See note below.
4. A physician's report of good physical and mental health. (The required health certificate form will be provided by the College and may be completed by a physician of your choice.)

Note: The Pharmacy Technician program is an academically rigorous program and there are more applicants than available seats in the program. Therefore, admission is on a selective basis, not first-come, first-served. The selection process considers the student's academic background as well as the timely and successful completion of Developmental Studies requirements. Approximately one-half of the class will be selected by August of each year from those applicants meeting the second admissions requirement before January 1 and interviewed during February or March. The remaining spots in the class will be filled during June from those applicants meeting the second requirement before May 16.

Re-admission Requirements: Students wishing to be re-admitted to the program will follow the same procedures outlined above. Once a student

is readmitted, there are additional requirements regarding repetition of previous coursework. A copy of these additional requirements may be obtained from the Workforce Services Office following readmission.

Program Requirements: To receive the Pharmacy Technician Career Studies Certificate, you must complete a minimum of 24 credits with a grade point average of 2.00 or better.

The credits are distributed according to the following outline:

First Semester

		Lecture Hours	Lab Hours	Course Credit
MTH 126	Math for Allied Health	3	0	3
HTL 143	Medical Terminology I	3	0	3
HLT 250	General Pharmacology	3	0	3
HLT 261	Basic Pharmacy I	3	0	3
HLT 263	Basic Pharmacy Lab.	0	2	1
Total		**12**	**2**	**13**

Second Semester

		Lecture Hours	Lab Hours	Course Credit
HTL 144	Medical Terminology II	3	0	3
SPD 126	Interpersonal Communication	3	0	3
HLT 290	Pharmacy Technician Lab./Clinical Practice	1	15	4
AST 114	Keyboarding for Info. Processing	1	0	1
AST 115	Keyboarding for Info. Processing Lab.	0	2	1
Total		**8**	**17**	**12**

Total Minimum Credits	**25**

PHLEBOTOMY

Occupational Objectives: The Phlebotomy Career Studies Certificate is designed to prepare students to become certified Phlebotomists. Phlebotomists are employed in all levels of health care facilities to collect blood for laboratory analysis. Upon successful completion of the didactic and clinical course work, students may be eligible to sit for nationally recognized certification or registration exams. The didactic courses are taught on the DCC campus. The clinical work will be done at area health care facilities.

Admission Requirements: Admission to the Phlebotomy Career Studies Certificate Program is based on the general requirements for admission to the college. Deficiencies in general education may require enrollment in Developmental Studies. The student is required to have a GED or standard high school diploma.

Program Description: The art of drawing blood will be taught through intensive supervised hands-on practice using artificial arms and volunteers. Students will collect venous and capillary specimens. The skill level of the student will be assessed using competency standards utilized by the certification agencies such as CLSI and ASCP. The clinical hours (MDL106) will begin ONLY after the student has acquired the appropriate skill level and has satisfactorily passed the didactic portion of the program (MDL 105). To be eligible to sit for national certification exams the student must complete 120-150 hours of clinical time with 100-150 successful collections. Passing a national exam is an additional employment asset; sitting for an exam is not required for completion of the college's program, therefore preparedness for the exam will be stressed. The certificate awarded by the College will note successful completion of the college's program and does not guarantee that the student will pass the national exams.

		Course Credit
*HLT 141	Introduction to Medical Terminology	1
+MDL 105	Phlebotomy	4
+MDL 106	Clinical Phlebotomy	4
**BIO 100	Basic Human Biology	3
Total Minimum Credits		**12**

Students must be non-developmental in English to take this course.
*** Students must have completed ENG 1, ENG 4 and MTH 2 to register for this course.*
+These courses may be offered consecutively as one semester each or compacted. If compacted, each course would be 7 weeks long. The format will depend on faculty availability and demand for the courses.

POLYMER PROCESSING TECHNICIAN

Purpose: The Polymer Processing Technician Career Studies Certificate is designed to provide relevant education and skills for work in a broad range of modern polymer manufacturing organizations.

Occupational Objective: Polymer Technician I

Admission Requirements: Admission to the Polymer Processing Technician Career Studies Certificate program is based upon the general requirements of the college.

Program Requirements: To receive the Polymer Processing Technician Career Studies Certificate, you must successfully complete the following courses of study:

		Course Credit
IND 180	Intro. to Plastics and Plastics Processing	3
IND 195	Extrusion	3
IND 195	Injection Molding	3
IND 295	Polymeric Materials	3
IND 235	Statistical Quality Control	3
Total Minimum Credits		**15**

Classes are usually scheduled one-per-semester on Monday evenings, 4:30 – 8:30 p.m.

PROGRAMMING

Occupational Objectives: The Programming Career Studies Certificate is designed to gain a basic understanding of various programming languages through a variety of 3 and 4 credit courses. Graduates can use these courses to update their skills or open new areas of programming expertise.

The program is structured within the following courses:

		Course Credit
ITP 100	Software Design	3
ITP 134	Visual C++ Programming I	4
ITP 112	Visual Basic .Net I	4
ITP 234	C++ Programming II	
and/or		
ITP 212	Visual Basic NET II	4
ITP 120	Java Programming I	4
ITE 150	Desktop Database Software	4
ITX	Elective	3-4
Total Minimum Credits		**26-27**

REAL ESTATE ABSTRACTING

Occupational Objectives: The Real Estate Abstracting Career Studies Certificate gives the student the basic knowledge and occupational skills to conduct title examinations under the supervision of an attorney*.

		Lecture Hours	Lab Hours	Course Credit
AST 117	Keyboarding for Comp. Usage	1	0	1
LGL 110	Intro. to Law and the Legal Assistant	3	0	3
LGL 115	Real Estate Law for Legal Assistants	3	0	3
LGL 226	Real Estate Abstracting	3	0	3
Total Minimum Credits				**10**

Students are encouraged to complete an internship after the coursework to further their skills in this area prior to seeking employment.

SHEET METAL LAYOUT AND INSTALLATION

Occupational Objectives: The Career Studies Certificate in Sheet Metal Layout and Installation is designed to prepare individuals for employment in the sheet metal layout and/or installation field. Job opportunities may be available with HVAC air conditioning and heating companies, sheet metal layout and/or installation companies.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
AIR 117	Metal Layout I	1	6	3
AIR 118	Metal Layout II	1	6	3
AIR 165	Air Conditioning Systems	2	3	3
AIR 195	System Installation	1	4	3
Total Minimum Credits		**5**	**19**	**12**

SPANISH FLUENCY

Occupational Objectives: The Spanish Fluency Career Studies Certificate is designed for persons who engage in occupations where knowledge of Spanish can be a critical factor, such as law enforcement, court interpreting, or health sciences. This 29-hour program provides the theoretical, procedural, and linguistic backgrounds necessary for fluency in Spanish-language interpretation. Classes will be offered both in the day and in the evening. Students must earn a grade of "C" or better in all courses and pass end-of-course oral and written examinations measuring the student's skills and strategies as an effective and efficient interpreter. The U.S. Census Bureau projects a 33% increase in the Hispanic population by 2015 for Virginia and there is an increasing need for business, government, and educational institutions to communicate effectively with this growing segment of the Virginia population.

		Lecture Hours	Lab Hours	Course Credit
SPA 101	Beginning Spanish I	4	0	4
SPA 102	Beginning Spanish II	4	0	4
SPA 103	Basic Spoken Spanish I	3	0	3
SPA 104	Basic Spoken Spanish II	3	0	3
SPA 203	Intermediate Spanish I	3	0	3
SPA 204	Intermediate Spanish II	3	0	3
SPA 211	Intermediate Span. Conversation I	3	0	3
SPA 212	Intermediate Span. Conversation II	3	0	3

Choose One Class:

SPA 150	Spanish for Law Enforcement	3	0	3
SPA 163	Spanish for Health Professions I	3	0	3
SPA 195	Spanish for Court Interpreting	3	0	3

Total Minimum Credits — **29**

WEB SITE DESIGN

Occupational Objectives: Students completing the Web Site Design Career Studies Certificate Program will have the skills to fully develop a web site, from conceptualizing the overall logic and design of the site to creating the Web pages using graphics and other media. Students will learn how to work with a client to achieve the business, organizational, professional or commercial requirements desired. A professional portfolio will be developed as the student progresses through the program. This program can be completed entirely on line. This means that the student can decide the time and place to complete the courses. This is a perfect option for the working person who has trouble finding the time to come to school or for the individual who lives too far from campus for an easy commute.

The program is structured within the following courses:

		Required/ Elective	Course Credit
ITE 130	Intro. to Internet Services	Required	3
ITD 110	Web Page Design I	Required	3
ENG 123	Writing for the World Wide Web	Required	3
or	Approved English Elective		
ITP 140	Client Side Scripting	Required	3
ITX	Elective	Elective	4
AST 195	Microsoft FrontPage 2000	Required	3
ITD 112	Designing Web Page Graphics	Required	3
MKT 281	Marketing on the Internet	Required	3
	Approved ITX Elective Programming Language, Database, etc.	Required	3-4

Total Minimum Credits — **28-29**

WELDING

Occupational Objectives: The Welding Career Studies Certificate is a response to the short-term training needs of many adults in our service region. It is designed to provide students with the knowledge and skills needed to obtain employment in the welding field. The fundamental objective of the program is to teach students how to weld. Individuals trained in this program must be able to meet welding performance demands of industry; consequently, a minimum amount of time is spent on book and classroom study with most of the time used on supervised welding practice.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
DRF 160	Machine Blueprint Reading	3	0	3
MAC 161	Machine Shop Practices I	2	3	3
WEL 145	Welding Metallurgy	3	0	3
WEL 120	Fundamentals of Welding	1	3	2
WEL 123	Arc Welding I	2	2	3
WEL 124	Arc Welding II	2	2	3
WEL 135	Inert Gas Welding I	1	3	2
WEL 136	Inert Gas Welding II	1	3	2
Total Minimum Credits				**21**

WORKPLACE READINESS

Occupational Objectives: The Career Studies Certificate in Workplace Readiness is designed to prepare individuals to work in a variety of entry-level positions in customer service. Job opportunities may be available in retail sales, food and beverage services, and hotel front office operations. Graduates of this program may pursue additional training in their chosen field and/or in supervision and management.

The program is structured within the following courses:

		Lecture Hours	Lab Hours	Course Credit
BUS 195	Work Ethic & Social Skills	3	0	3
SDV 106	Preparation for Employment	2	0	2
PSY 126	Psychology for Business and Industry	3	0	3
MKT 170	Customer Service	2	0	2
BUS 195	Workplace Preparedness	3	0	3
*MKT 110	Basics of Retail Sales	3	0	3
*HRI 134	Food & Beverage Service Management	3	0	3
*HRI 265	Hotel Front Office Operations	3	0	3
Elective	Elective*	3	0	3
Total Minimum Credits				**16**

Student must choose at least one but may enroll in more than one of these courses, MKT 110, HRI 134, and HRI 265. Other job specific training courses may be substituted with approval.

DEVELOPMENTAL STUDIES

Award: NONE

Length: Variable

Purpose: The Virginia Community College System requires that each campus assess student readiness for college level work. Based on assessment outcomes, a student may be required to take developmental courses in mathematics, reading and writing. These courses do not carry college level credit but are designed to develop essential skills necessary for college level work. By obtaining these skills, students increase the likelihood of successful completion of their chosen program of study.

VCCS campuses currently use both the ASSET and COMPASS tests to assess incoming students who register for transfer or vocational degrees and certificates. Both tests are developed by the American College Testing which ensures the validity and accuracy of their assessment tools. Students seeking additional information on these tests are invited to view ACT's website at www.act.org. This site contains valuable information about the test, sample questions and tips for taking both the ASSET and COMPASS.

Program Requirements: All students are assigned to an academic advisor. College-level course enrollment requires advisor approval, and students must complete all developmental pre-requisites before taking college-level courses. Students requiring remediation are encouraged to complete Developmental Studies course requirements as early as possible in their college enrollment. When a student completes the required objectives for the Developmental Studies courses, a grade of "S" (satisfactory completion of objectives) is awarded. When a student makes satisfactory progress during the term, the student receives a grade of "R" (re-enroll) and should re-enroll in that Developmental Studies course during the subsequent term. When a Developmental Studies student receives the "U" (unsatisfactory) grade, that student is to be re-counseled by a Developmental Studies academic advisor with the assistance of the Counseling Office. Students may select Developmental Studies courses offered in a traditional format or in a modular format that breaks content into smaller units. Math courses are comprised of five modules each, and reading and writing courses contain three modules each.

Students who want to strengthen their skills before taking MTH 3 – Algebra I can take BSK 6. This module will prepare students for a traditional MTH 3 course. Students can complete their Algebra I requirements by completing BSK 7-10 if they have taken BSK 6. BSK 6 is the equivalent of the former
MTH 9 course. Students who want to strengthen their skills in geometry (areas, volumes, and other basic geometric measurements and applications) prior to enrolling in MTH 3 should enroll in BSK 5. This is the equivalent of the former MTH 6 course.

For assessment and precise placement into math modules, contact Kathleen Morrison at 434.797.6423.

Developmental Studies Prerequisites

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Curricular students should not enroll in the following courses until they have demonstrated proficiency on the placement examination or completed the appropriate developmental course. Note: "C" attached to course number indicates it may be taken concurrently as a co-requisite. Students may meet developmental requirements by registering for Basic Skill Classes at the appropriate level. BSK 1-5 is equivalent to MTH 2; BSK 6-10 is equivalent to MTH 3; and BSK 11-14 is equivalent to MTH 4. Students may meet reading or writing requirements by enrolling in BSK Language Arts Modules (41-46). Completion of BSK 41-43 satisfies both ENG 1 and ENG 4. Completion of BSK 44-46 satisfies both ENG 3 and ENG 5 requirements.

Course #	Course Name
ACC 105	Office Accounting (MTH2, ENG 2, ENG 3, ENG 4, ENG 5)
ACC 111	Accounting I (MTH 2C, ENG 1C, ENG 4C)
ACC 211	Principles of Accounting I (MTH2, MTH 3, ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 100	Survey of Criminal Justice (ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 116	Special Enforcement Topics (ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 130	Introduction to Criminal Law (MTH2, ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 131	Legal Evidence (MTH2, ENG 1, ENG 3, ENG 4, ENG 5)
ADJ 140	Introduction to Corrections (ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 145	Corrections and the Community (ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 150	Introduction to Security Administration (ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 171	Forensic Science I (MTH2, ENG 1, ENG 3C, ENG 4, ENG 5C)
ADJ 215	Report Writing (ENG 1, ENG 3, ENG 4, ENG 5)
ADJ 227	Constitutional Law for Justice Personnel (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
ADJ 236	Principles of Criminal Investigation (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
ADJ 257	Loss Prevention (ENG 1, ENG 3, ENG 4, ENG 5)
AIR 111	Air Conditioning and Refrigeration Controls I (ENG 4)
AIR 117	Metal Layout I (ENG 4C)
AIR 121	Air Conditioning and Refrigeration I (ENG 4C)
AIR 154	Heating Systems I (ENG 4C)
AIR 155	Heating Systems II (ENG 4C)
AIR 156	Heating Systems III (ENG 4C)
AIR 161	Heating, Air and Refrigeration Calculations I (ENG 4C)
AIR 165	Air Conditioning Systems I (ENG 4C)
ASL 100	American Sign Language I (ENG 3C, ENG 5C)
ASL 101	American Sign Language II (ENG 3, ENG 5)
AST 101	Keyboarding I (MTH 2C, ENG 4C)
AST 113	Keyboarding for Speed and Accuracy (ENG 4C)
AST 117	Keyboarding for Computer Usage (ENG 4C)
AST 201	Keyboarding III (ENG 1, ENG 3, ENG 4, ENG 5)
AST 234	Records and Database Management (MTH 2C, ENG 1, ENG 3C, ENG 4, ENG 5C)
AST 238	Word Processing Advanced Operations (MTH 2C, ENG 4, ENG 5)
AST 243	Office Administration I (ENG 1, ENG 4)
AST 244	Office Administration II (ENG 1, ENG 4)
AST 253	Advanced Desktop Publishing I (ENG 4)
AST 265	Legal Office Procedures I (ENG 1, ENG 3, ENG 4, ENG 5)
BIO 20	Introduction to Human Services (MTH 2, ENG 1, ENG 4)
BIO 100	Basic Human Biology (MTH 2, ENG 1, ENG 4)

Course #	Course Name
BIO 101	General Biology I (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5, MTH 3C)
BIO 102	General Biology II (MTH 2, MTH 3, MTH 4C, MTH 9, ENG 1, ENG 3C, ENG 4, ENG 5)
BIO 141	Human Biology and Physiology I (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
BUS 100	Introduction to Business (MTH 2C, ENG 1, ENG 3C, ENG 4, ENG 5C)
BUS 111	Principles of Supervision (ENG 1, ENG 3C, ENG 4, ENG 5C)
BUS 121	Business Mathematics I (MTH 2, ENG 1, ENG 4, ENG 5C)
BUS 122	Business Mathematics II (MTH 2)
BUS 125	Applied Business Mathematics (MTH 2, ENG 1, ENG 4, ENG 5C)
BUS 147	Introduction to Business Information Systems (MTH 2, MTH 3, ENG 1, ENG 3C, ENG 4, ENG 5)
BUS 165	Small Business Management (MTH 2, ENG 1, ENG 3C, ENG 4, ENG 5C)
BUS 209	Continuous Quality Improvement (MTH 2, ENG 1, ENG 3C, ENG 4, ENG 5C)
BUS 220	Introduction to Basic Statistics (MTH 2, ENG 1, ENG 4, ENG 5C)
BUS 241	Business Law I (ENG 1, ENG 5)
CHD 118	Language Arts for Young Children (ENG 1, ENG 3C, ENG 4, ENG 5C)
CHD 120	Introduction to Early Childhood Education (ENG 1, ENG 3C, ENG 4, ENG 5C)
CHD 125	Creative Activities for Children (ENG 1, ENG 3C, ENG 4, ENG 5C)
CHD 126	Science and Math Concepts for Children (MTH2, ENG 1, ENG 3, ENG 4, ENG 5)
CHD 145	Teaching Art, Music, and Movement to Children (ENG 1, ENG 3, ENG 4, ENG 5)
CHD 166	Infant and Toddler Programs (ENG 1, ENG 3, ENG 4, ENG 5)
CHD 167	CDA Theories and Applications: Portfolio (ENG 1, ENG 3, ENG 4, ENG 5)
CHD 205	Guiding the Behavior of Children (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
CHD 210	Introduction to Exceptional Children (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
CHD 215	Models of Early Childhood Education Programs (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
CHM 101	General Chemistry I (MTH 2, MTH 3, ENG 1, ENG 3, ENG 4, ENG 5)
CHM 102	General Chemistry II (MTH 2, MTH 3, ENG 1, ENG 3, ENG 4, ENG 5)
CHM 111	College Chemistry I (MTH 2, MTH 3, ENG 1, ENG 3, ENG 4, ENG 5)

Course #	Course Name
CHM 112	College Chemistry II (MTH 2, MTH 3, ENG 1, ENG 3, ENG 4, ENG 5)
CIV 170	Principles of Surveying (MTH 2, MTH 3, ENG 1, ENG 4)
DRF 120	Introduction to Graphic Representation (MTH 2C, MTH 4C, ENG 4)
DRF 114	Drafting I (MTH 2C)
DRF 115	Drafting II (MTH 2C)
DRF 116	Drafting III (MTH 2, MTH 3C)
DRF 130	Introduction to Electrical/Electronics Drafting (MTH 2C, MTH 4C, ENG 4)
DRF 160	Machine Blueprint Reading (MTH 2C, ENG 4)
DRF 201	Computer Aided Drafting and Design (MTH 2, MTH 3, ENG 4)
ECO 100	Elementary Economics (MTH 2C, ENG 1C, ENG 4C)
ECO 120	Survey of Economics (MTH 2, ENG 1, ENG 3C, ENG 4, ENG 5C)
ECO 201	Principles of Macroeconomics (MTH 2, MTH 3, MTH 4, ENG 1, ENG 3C, ENG 4, ENG 5)
ECO 202	Principles of Microeconomics (MTH 2, MTH 3, MTH 4, ENG 1, ENG 3C, ENG 4, ENG 5)
EGR 115	Engineering Graphics (MTH 2, MTH 3)
ELE 156	Electrical Control Systems (MTH 2C, ENG 4C)
ENG 100	Basic Occupational Communication or Higher (ENG 1, ENG 3, ENG 4, ENG 5)
ETR 136	General Industrial Electronic Systems (MTH 2C, ENG 4C)
ETR 151	Electronic Circuits and Troubleshooting I (MTH 2C, ENG 4C)
ETR 152	Electronic Circuits and Troubleshooting II (MTH 2C, ENG 4C)
GEO 220	World Regional Geography (ENG 1, ENG 3, ENG 4, ENG 5)
HIS 101	History of Western Civilization I (ENG 1, ENG 3, ENG 4, ENG 5)
HIS 102	History of Western Civilization (ENG 1, ENG 3, ENG 4, ENG 5)
HIS 121	United States History I (ENG 1, ENG 3, ENG 4, ENG 5)
HIS 122	United States History II (ENG 1, ENG 3, ENG 4, ENG 5)
HIS 266	Military History of the Civil War (ENG 1, ENG 3, ENG 4, ENG 5)
HIS 268	The American Constitution (ENG 1, ENG 3, ENG 4, ENG 5)
HIT 105	Current Procedural Terminology (ENG 1, ENG 4)
HLT 100	First Aid and Cardiopulmonary Resuscitation (ENG 1, ENG 3C, ENG 4, ENG 5C)
HLT 116	Introduction to Personal Wellness Concepts (ENG 1, ENG 4, ENG 5C)
HLT 130	Nutrition and Diet Therapy (ENG 1, ENG 3C, ENG 4, ENG 5)
HLT 135	Child Health and Nutrition (ENG 1, ENG 3C, ENG 4, ENG 5)
HLT 141	Introduction to Medical Terminology (ENG 1, ENG 3C, ENG 4, ENG 5)
HLT 143	Medical Terminology I (ENG 1, ENG 4, ENG 5C)
HLT 160	Personal Health and Fitness (ENG1, ENG 3, ENG 4, ENG 5, MTH2)
HLT 200	Human Sexuality (ENG 1, ENG 3, ENG 4, ENG 5)
HLT 215	Personal Stress and Stress Management (ENG 1, ENG 3, ENG 4, ENG 5)
HLT 230	Principles of Nutrition and Human Development (ENG 1, ENG 3, ENG 4, ENG 5)
HUM 165	Controversial Issues in Contemporary American Culture (ENG 1, ENG 3C, ENG 4, ENG 5C)
ITE 115	Introduction to Computer Applications and Concepts (MTH 2, ENG 4, ENG 5)
ITE 215	Introduction to Microcomputer Software (MTH 2, ENG 4, ENG 5)

Course #	Course Name
ITE 140	Spreadsheet Software (MTH 2, ENG 4, ENG 5)
ITE 150	Database Management Software (MTH 2, ENG 4, ENG 5)
LGL 110	Introduction to Law and the Legal Assistant (ENG 1, ENG 3C, ENG 4, ENG 5C)
LGL 115	Real Estate Law for Legal Assistants (ENG 1, ENG 3C, ENG 4, ENG 5C)
LGL 116	Domestic Relations and Consumer Law (ENG 1, ENG 3C, ENG 4, ENG 5C)
LGL 215	Torts (ENG 1, ENG 3, ENG 4, ENG 5C)
LGL 225	Estate Planning and Probate (ENG 1, ENG 3C, ENG 4, ENG 5C)
LGL 230	Legal Transactions (ENG 1, ENG 3, ENG 4, ENG 5C)
MAC 101	Machine Shop I (MTH 2C)
MAC 102	Machine Shop II (MTH 2)
MAC 110	Introductory Machining Techniques (MTH 2C, ENG 4C)
MAC 121	Computer Numerical Control I (MTH 2, ENG 4)
MAC 162	Machine Shop Practices II (MTH 2, ENG 4)
MAC 163	Machine Shop Practices III (MTH 2, ENG 4)
MAC 164	Machine Shop Practices IV (MTH 2, ENG 4)
MEC 100	Introduction to Engineering Technologies (MTH 2C, ENG 4C)
MEC 111	Materials for Industry (MTH 2C, ENG 3, ENG 4C)
MEC 126	Computer Programming for Technologists (MTH 2, MTH 3)
MEC 131	Mechanics I – Statics for Engineering Technology (MTH 2, MTH 3)
MEC 211	Machine Design I (MTH 2, MTH 3)
MEC 226	Practical Metallurgy (MTH 2, ENG 4)
MEC 265	Fluid Mechanics (MTH 2, MTH 3)
MKT 100	Principles of Marketing (MTH 2, ENG 3C, ENG 4, ENG 5C)
MKT 110	Principles of Selling (ENG 3C, ENG 4, ENG 5C)
MKT 281	Principles of Internet Marketing (MTH 2, ENG 3, ENG 4, ENG 5)
MTH 2	Arithmetic (ENG 4C)
MTH 3	Algebra I (MTH 2, ENG 5C)
MTH 4	Algebra II (MTH 2, MTH 3, ENG 5)
MTH 6	Developmental Geometry (MTH 2, MTH 3, MTH 4)
MTH 103	Applied Technical Mathematics I (MTH 2)
MTH 113	Engineering Technical Mathematics I (MTH 2, MTH 3, ENG 5C)
MTH 114	Engineering Technical Mathematics II (MTH 2, MTH 3, ENG 5)
MTH 121	Fundamentals of Mathematics I (MTH 2, MTH 3, ENG 5)
MTH 126	Mathematics for Allied Health (MTH 2, ENG 5)
MTH 151	Mathematics for Liberal Arts I (MTH 2, MTH 3, MTH 4, ENG 1, ENG 3C, ENG 4, ENG 5C)
MTH 163	Precalculus I (MTH 2, MTH 3, MTH 4, MTH 06, ENG 1C, ENG 4, ENG 5)
MTH 173	Calculus with Analytic Geometry I (MTH 2, MTH 3, MTH 4, MTH 06, MTH 07, ENG 1, ENG 3, ENG 4, ENG 5)
MUS 121	Music Appreciation I (ENG 1, ENG 3, ENG 4, ENG 5)
MUS 131	Class Voice I (ENG 1, ENG 3C, ENG 4, ENG 5C)
NAS 105	Natural Science Topics for Modern Society (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5C)
NAS 110	Elementary Physical Science (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
PBS 120	Introduction to Community and Social Service (MTH 2C, ENG 1, ENG 3C, ENG 4)
PBS 265	Interviewing (MTH 2C, ENG 1, ENG 3, ENG 4, ENG 5C)
PHI 100	Introduction to Philosophy (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
PHI 115	Practical Reasoning (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
PHI 220	Ethics (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
PHI 226	Social Ethics (MTH 2, ENG 1, ENG 3, ENG 4, ENG 5)
PHY 130	Survey of Applied Physics (MTH 2, ENG 1, ENG 4, MTH 3)

Course #	Course Name
PHY 201	General College Physics I (MTH 2, MTH 3, MTH 4, MTH 6, ENG 1, ENG 3, ENG 4, ENG 5)
PLS 211	U. S. Government I (MTH 2C, ENG 1, ENG 3, ENG 4, ENG 5)
PLS 212	U. S. Government II (MTH 2C, ENG 1, ENG 3, ENG 4, ENG 5)
PNT 110	Survey of Reproduction Processes (ENG 4C)
PNT 131	Principles of Lithography I (ENG 4C)
PNT 132	Principles of Lithography II (ENG 4, ENG 5C)
PNT 135	Print Imaging (ENG 4C)
PNT 221	Layout and Design I (MTH 2C, ENG 4, ENG 5C)
PNT 245	Production Planning and Estimating (MTH 2, ENG 5)
PSY 126	Psychology for Business and Industry (ENG 1, ENG 3C, ENG 4, ENG 5C)
PSY 200	Principles of Psychology (MTH 2, MTH 3C, ENG 1, ENG 3, ENG 4, ENG 5)
PSY 201	Introduction to Psychology I (MTH 2, MTH 3C, ENG 1, ENG 3, ENG 4, ENG 5)
PSY 202	Introduction to Psychology II (MTH 2, MTH 3, ENG 1, ENG 3, ENG 4, ENG 5)
PSY 230	Developmental Psychology (MTH 2, MTH 3C, ENG 1, ENG 3, ENG 4, ENG 5)
PSY 231	Life Span Human Development I (MTH 2, MTH 3C, ENG 1, ENG 3, ENG 4, ENG 5)
PSY 235	Child Psychology (MTH 2, MTH 3C, ENG 1, ENG 3C, ENG 4, ENG 5C)
PSY 236	Adolescent Psychology (MTH 2, MTH 3C, ENG 1, ENG 3C, ENG 4, ENG 5C)
REA 100	Principles of Real Estate (MTH 2, MTH 3, ENG 1, ENG 3, ENG 4, ENG 5)
REL 200	Survey of the Old Testament (ENG 1, ENG 3, ENG 4, ENG 5)
REL 210	Survey of the New Testament (ENG 1, ENG 3, ENG 4, ENG 5)
REL 230	Religions of the World (ENG 1, ENG 3, ENG 4, ENG 5)
REL 235	Major Religious Thinkers (ENG 1, ENG 3, ENG 4, ENG 5)
REL 255	Selected Problems and Issues in Religion (ENG 1, ENG 3, ENG 4, ENG 5)
SOC 200	Principles of Sociology (ENG 1, ENG 3C, ENG 4, ENG 5C)
SOC 201	Introduction to Sociology I (ENG 1, ENG 3C, ENG 4, ENG 5C)
SOC 202	Introduction to Sociology II (ENG 1, ENG 3C, ENG 4, ENG 5C)
SOC 215	Sociology of the Family (ENG 1, ENG 3, ENG 4, ENG 5)
SOC 235	Juvenile Delinquency (ENG 1, ENG 3C, ENG 4, ENG 5C)
SOC 236	Criminology (ENG 1, ENG 3C, ENG 4, ENG 5C)
SOC 268	Social Problems (ENG 1, ENG 3, ENG 4, ENG 5)
SPA 101	Beginning Spanish I (ENG 1, ENG 3C, ENG 4, ENG 5C)
SPA 103	Basic Spoken Spanish I (ENG 1, ENG 3, ENG 4, ENG 5)
SPA 150	Spanish for Law Enforcement (ENG 1, ENG 3, ENG 4, ENG 5)
SPA 203	Intermediate Spanish I (ENG 1, ENG 3, ENG 4, ENG 5)
SPD 100	Principles of Public Speaking (ENG 1, ENG 3C, ENG 4, ENG 5C)
SPD 110	Introduction to Speech Communication (ENG 1, ENG 3C, ENG 4, ENG 5C)
SPD 131	Acting I (ENG 1, ENG 3, ENG 4, ENG 5)
WEL 116	Welding I (ENG 4C)
WEL 120	Introduction to Welding (ENG 4C)

COURSE DESCRIPTIONS

(ACC) Accounting

ACC 110 Introduction to Computerized Accounting (1- 2 cr.)
Introduces the computer in solving accounting problems. Focuses on the operation of computers. Presents the accounting cycle and financial statement preparation in a computerized system and other applications for financial and managerial accounting. Co-requisite(s): ACC 111, ACC 211 or equivalent.

ACC 111 Accounting I (3 cr.)
Introduces the computer in solving accounting problems. Focuses on the operation of computers. Presents the accounting cycle and financial statement preparation in a computerized system and other applications for financial and managerial accounting. Co-requisite(s): ACC 111, ACC 211 or equivalent.

ACC 111 Accounting I (3 cr.)
Presents fundamental accounting concepts and principles governing the accounting cycle, journals, ledgers, working papers, and preparation of financial statements for sole proprietorships. Covers services and merchandising businesses. Lecture 3 hours. Total 3 hours per week.

ACC 112 Accounting II (3 cr.)
Continues ACC 111 with emphasis on application to partnerships, and corporations. Also includes an introduction to cost and managerial accounting. Lecture 3 hours. Total 3 hours per week. Prerequisite: ACC 111.

ACC 211 Principles of Accounting I (3 cr.)
Presents accounting principles and their application to various businesses. Covers the accounting cycle, income determination, and financial reporting. Studies services, merchandising, and includes internal controls. Lecture 3 hours per week. Total 3 hours per week.

ACC 212 Principles of Accounting II (3 cr.)
Continues ACC 211 with emphasis on application to partnerships and corporations, and the study of financial analysis. Includes an introduction to cost and managerial accounting. Prerequisite: ACC 211. Total 3 hours per week.

ACC 221 Intermediate Accounting I (4 cr.)
Covers accounting principles and theory, including a review of the accounting cycle and accounting for current assets, current liabilities, and investments. Introduces various accounting approaches, and demonstrates the effect of these approaches on the financial statement users. Prerequisite: ACC 212 or 112 or equivalent. Lecture 4 hours per week.

ACC 222 Intermediate Accounting II (4 cr.)
Continues accounting principles and theory with emphasis on accounting for fixed assets, intangibles, corporate capital structure, long-term liabilities, and investments. Prerequisite: ACC 221 or equivalent. Lecture 4 hours per week.

ACC 231 Cost Accounting I (3 cr.)
Studies cost accounting methods and reporting as applied to job order, process, and standard cost accounting systems. Includes cost control, and other topics. Prerequisite: ACC 212 or 112 or equivalent. Lecture 3 hours per week.

ACC 241 Auditing I (3 cr.)
Presents techniques of investigating, interpreting, and appraising accounting records and assertions. Studies internal control design and evaluation, evidence-gathering techniques and other topics. Prerequisite: ACC 221 or co-requisite ACC 222 or equivalent. Lecture 3 hours per week.

ACC 261 Principles of Federal Taxation I (3 cr.)
Presents the study of federal taxation as it relates to individuals, and related entities. Includes tax planning, compliance and reporting. Lecture 3 hours per week.

ACC 262 Principles of Federal Taxation II (3 cr.)
Presents the study of federal taxation as it relates to partnerships, corporations, and other tax entities. Includes tax planning, compliance, and reporting. Lecture 3 hours per week. Prerequisite: ACC 261

(ADJ) Administration of Justice

ADJ 100 Survey of Criminal Justice (3 cr.)
Presents an overview of the United States criminal justice system; introduces the major system components law enforcement, judiciary, and corrections. Lecture 3 hours per week.

ADJ 116 Special Enforcement Topics (3 cr.)
Considers contemporary issues, problems, and controversies in modern law enforcement. Lecture 3 hours per week.

ADJ 130 Introduction to Criminal Law (3 cr.)
Surveys the general principles of American criminal law, the elements of major crimes, and the basic steps of prosecution procedure. Lecture 3 hours per week.

ADJ 131 Legal Evidence (3 cr.)
Surveys the identification, degrees, and admissibility of evidence for criminal prosecution; examines pre-trial procedures as they pertain to the rules of evidence. Pre-requisite: ADJ 130. Lecture 3 hours per week.

ADJ 140 Introduction to Corrections (3 cr.)
Focuses on societal responses to the offender. Traces the evolution of practices based on philosophies of retribution, deference, and rehabilitation. Reviews contemporary correctional activities and their relationships to other aspects of the criminal justice system. Lecture 3 hours per week.

ADJ 145 Corrections and the Community (3 cr.)
Studies and evaluates the relationships and interactions between correctional organizations and free society. Focuses on the shared responsibility of the community and corrections agencies to develop effective programs for management and treatment of criminal offenders. Lecture 3 hours per week.

ADJ 150 Introduction to Security Administration (3 cr.)
Introduces the student to the field of private security – its histories, structures, functions, and personnel; surveys the principles and practices of security administration. Lecture 3 hours per week.

ADJ 171 Forensic Science I (4 cr.)
Introduces the student to crime scene technology, procedures for sketching, diagramming and using casting materials. Surveys the concepts of forensic chemistry, fingerprint classification/ identification and latent techniques, drug identification, hair and fiber evidence, death investigation techniques, thin-layer chromatographic methods, and arson materials examination. Prerequisites: ADJ 100 and ADJ 236. Lecture 3 hours. Laboratory 3 hours. Total: 6 hours per week.

ADJ 215 Report Writing (3 cr.)
Introduces the basic mechanics and procedures of report writing; emphasizes clear, concise and accurate writing of communications as they relate to law enforcement records, investigations, and research. Prerequisite: ENG 111. Lecture 3 hours per week.

ADJ 227 Constitutional Law for Justice Personnel (3 cr.)
Surveys the basic guarantees of liberty described in the U.S. Constitution and the historical development of these restrictions on government power, primarily through U.S. Supreme Court decisions. Reviews rights of free speech, press, assembly, as well as criminal procedure guarantees (to counsel, jury trial, habeas corpus, etc.) as they apply to the activities of those in the criminal justice system. Prerequisite: ADJ 130. Lecture 3 hours per week.

ADJ 234 Terrorism and Counter-Terrorism (3 cr.)
Surveys the historical and current practices of terrorism that are national, transnational, or domestic in origin. Includes biological, chemical, nuclear, and cyber-terrorism. Teaches the identification and classification of terrorist organizations, violent political groups and issue-oriented militant movements. Examines investigative methods and procedures utilized in counter terrorist efforts domestically and internationally. Prerequisite: ADJ 100. Lecture 3 hours per week.

ADJ 236 Principles of Criminal Investigation (3 cr.)
Surveys the fundamentals of criminal investigation procedures and techniques. Examines crime scene search, collecting, handling and preserving of evidence. Lecture 3 hours per week.

ADJ 257 Loss Prevention (3 cr.)

Studies internal and external theft that affects all private and public operations, with focus on retail businesses. Examines and evaluates major loss prevention programs used by security operations, again with focus on retail security. Lecture 3 hours per week.

ADJ 296 Internship (3 cr.)

In order to apply criminal justice theory to practice, this course will allow the student to participate in an on-site criminal justice learning experience in a variety of criminal justice agencies. Appropriate placements will be with police departments, sheriff 's departments, juvenile and adult probation departments, correctional institutions, and departments of social services. Other placements will be evaluated on a case by case basis. Prerequisites: ADJ 100 and ADJ 130. Variable hours per week.

(AIR) Air Conditioning and Refrigeration

AIR 111-112 Air Conditioning and Refrigeration Controls I-II (3 cr. each)

Presents electron theory, magnetism, Ohm's Law, resistance, current flow, instruments for electrical measurement, A.C. motors, power distribution controls and their application. Pre-requisite AIR 161 or approval. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 117 Metal Layout I (3 cr.)

Presents measuring and gauging of sheet metal, types of metal, handling sheet metal, cutting and bending, layout. Teaches fundamentals of drafting, basic drawing instruments, lettering practices. Lecture 1 hour. Laboratory 6 hours. Total 7 hours per week.

AIR 118 Metal Layout II (3 cr.)

Presents practice in the laying out of various sheet metal pieces on paper and transposing to metal. Prerequisite: AIR 117 or approval. Lecture 1 hour. Laboratory 6 hours. Total 7 hours per week.

AIR 121 Air Conditioning and Refrigeration I (3 cr.)

Studies refrigeration theory, tools and equipment, soldering, brazing, refrigeration systems, system components, compressors, evaporators, metering devices. Provides laboratory application of refrigerators and freezers. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 122 Air Conditioning and Refrigeration II (3 cr.)

Presents operations of commercial refrigeration systems, ice machines, design, installation and service, air conditioning and heat pumps. Prerequisite: AIR 121 or approval. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 123-124 Air Conditioning and Refrigeration III-IV (3 cr. each)

Psychrometric properties of air, heat load and gain calculation, heated and chilled water systems, duct design, air distribution and air comfort requirements. Prerequisite: AIR 122 or approval. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 134 Circuits and Controls I (3 cr.)

Presents circuit diagrams for heating units, reading and drawing of circuit diagrams, types of electrical controls, and house wiring circuits. Includes analysis of heating circuits, components, analysis and characteristics of circuits and controls, testing and servicing. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 135 Circuits and Controls II (3 cr.)

Introduces electricity for air conditioning which includes circuit elements, direct current circuits and motors, single and three-phase circuits and motors, power distribution systems, and protective devices. Studies the electron and its behavior in passive and active circuits and components. Demonstrates electronic components and circuits as applied to air conditioning systems. Prerequisite: AIR 134 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 136 Circuits and Controls III (3 cr.)

Introduces types of circuits and controls used in home, commercial and industrial air conditioning systems. Includes servicing and installation procedures for electrical unloading of compressors, single- and two-stage thermostats, and electrical regulation of fan speed for air volume control. Explains operational and safety control and how schematic and pictorial diagrams are used in these systems. Prerequisite: AIR 134 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 137 Air Conditioning Electronics Survey (2 cr.)

Studies electronics and its applications in the HVAC field. Covers computers, programmable controllers, and microprocessors in the HVAC industry. Prerequisite: AIR 134 or approval. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

AIR 154 Heating Systems I (3 cr.)

Introduces types of fuels and their characteristics of combustion; types, components and characteristics of burners, and burner efficiency analyzers. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 155 Heating Systems II (3 cr.)

Studies commercial gas and oil boilers to include troubleshooting, preventive maintenance and servicing. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 156 Heating Systems III (3 cr.)

Introduces types of boilers, sizing boilers, sizing radiators and convectors, designing piping systems for steam, hot water and vacuum systems. Includes testing and servicing wet heat systems. Prerequisite: 154 - 155 or approval. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 158 Mechanical Codes (2 cr.)

Presents mechanical code requirements for installation, service, and inspection procedures. Uses the BOCA code in preparation for the master's card. Lecture 2 hours per week.

AIR 161 Heating, Air Conditioning and Refrigeration Calculations I (3 cr.)

Introduces fractions, decimals, sign of operations, equations, Ohm's Law, subtraction, multiplication and division of signed numbers. Teaches fundamentals of algebra, expression of stated problems in mathematical form, and solutions of equations. Lecture 3 hours. Total 3 hours per week.

AIR 162 Heating, Air Conditioning & Refrigeration Calculations II (3 cr.)

Introduces the functions of angles, trigonometric functions, angles of elevation and depression, and powers and roots. Prerequisite: AIR 161 or approval. Lecture 3 hours. Total 3 hours per week.

AIR 165 Air Conditioning Systems I (3 cr.)

Introduces comfort survey, house construction, load calculations, types of distribution systems, and equipment selection. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 166 Air Conditioning Systems II (3 cr.)

Introduces designing, layout, installation, and adjusting of duct systems, job costs, and bidding of job. Prerequisite: AIR 165 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 167 Air Conditioning Systems III (4 cr.)

Introduces building survey, commercial load calculations, design conditions, solar heat gain, ventilation, internal heat gains, cooling, heating and humidification with water psychrometrics distribution systems, ice and water for air conditioning. Prerequisite: AIR 166 or approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AIR 181 Planning & Estimating I (2 cr.)

Presents fundamentals of blueprint reading as applied to the building trades. Emphasizes air conditioning and distribution, designing and drawing residential systems take-off of materials and estimating the cost of the systems. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

AIR 182 Planning & Estimating II (2 cr.)

Presents designing and estimating cost of commercial air conditioning systems applying student's previous studies. Prerequisite: AIR 187 or approval. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

AIR 213-214 Air Conditioning and Refrigeration Controls III-IV (3 cr. each)

Introduces electrical, pneumatic and electronic control circuits as applied to year-round air conditioning systems. Includes reading wiring and schematic diagrams, troubleshooting, and designing high and low voltage control systems. Prerequisite: AIR 111 or approval. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

AIR 231 Circuits and Controls IV (5 cr.)

Applies controls and control circuits to air conditioning and refrigeration, including components, pilot devices and controls and circuit diagrams. Prerequisite: AIR 136 or approval. Lecture 4 hours. Laboratory 3 hours. Total 7 hours per week.

AIR 232 Circuits and Controls V (3 cr.)
Presents application and design of wiring and schematic diagrams of commercial refrigeration systems. Teaches fundamentals of operation and applications of pneumatic controls including basic pneumatic control circuits. Prerequisite: Air 231 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 233 Circuits and Controls VI (3 cr.)
Studies planning and design of electric, pneumatic, and combination control systems used in the air conditioning industry. Prerequisite: AIR 232 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 254 Air Conditioning Systems IV (3 cr.)
Presents air balancing including taking duct pressure readings, finding register and grille CFM's, fans, laws and their applications. Explores instruments used for air balancing and proper procedures. Lecture 2 hours. Prerequisite: AIR 167 or approval. Laboratory 3 hours. Total 5 hours per week.

AIR 255 Air Conditioning Systems V (3 cr.)
Studies water-cooled and air-cooled condensers, refrigerant piping design, capacity control, air washers, water and steam piping arrangements. Prerequisite: AIR 254 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AIR 271 Refrigeration I (6 cr.)
Studies refrigeration, care and use of refrigeration tools and equipment, soldering, brazing, refrigeration systems, cycles, and compressors, domestic refrigeration, charging and testing systems. Lecture 4 hours. Laboratory 6 hours. Total 10 hours per week.

AIR 272 Refrigeration II (5 cr.)
Studies commercial refrigeration systems, components, sizing, and testing. Includes low temperature refrigeration systems equipment selection, load calculations, absorption systems, air conditioning systems, window units, air-cooled and water-cooled condensers. Lecture 3 hours. Prerequisite: AIR 271 or approval. Laboratory 6 hours. Total 9 hours per week.

AIR 273 Refrigeration III (3 cr.)
Studies heat pumps, sizing, installation, and servicing, reciprocating chillers and centrifugal air conditioners. Prerequisite: AIR 272 or approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

(ARC) Architecture

ARC 115 Architectural Graphics (2 cr.)
Covers various types of presentation techniques associated with architecture, including rendered plans and elevations, pictorial drawings and perspectives, and the use of drawing media. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

(ART) Arts

ART 101-102 History and Appreciation of Art I-II (3 cr. each)
Presents the history and interpretation of architecture, sculpture, and painting. Begins with prehistoric art and follows the development of western civilization to the present. Lecture 3 hours per week.

ART 121-122 Drawing I-II (3 cr. each)
Develops basic drawing skills and understanding of visual language through studio instruction/lecture. Introduces concepts such as proportion, space, perspective, tone and composition as applied to still life, landscape and the figure. Uses drawing media such as pencil, charcoal, ink wash and color media. Includes field trips and gallery assignments as appropriate. Variable hours per week.

ART 131-132 Fundamentals of Design I-II (3-4 cr. each)
Explores the concepts of two- and three-dimensional design and color. May include field trips as required. Lecture 1-2 hours. Studio instruction 4 hours. Total 5-6 hours per week.

ART 195-295 Silkscreen Printing I-II (2 cr. each)
Develops skills in silkscreen stencil techniques with emphasis on design. Includes field trips when applicable. Lecture 1 hours. Studio instruction 2 hours. Total 3 hours per week.

ART 198-298 Airbrush I-II (2 cr. each)
Teaches concepts and use of the airbrush in a variety of applications. Prerequisites: ART 121, ART 131, ART 140, or divisional approval. Lecture 2 hours. Studio instruction 2 hours. Total 4 hours per week.

(ASL) American Sign Language

ASL 101-102 American Sign Language I-II (3-4 cr. each)
Introduces the fundamentals of American Sign Language (ASL) used by the Deaf Community, including basic vocabulary, syntax, fingerspelling, and grammatical non-manual signals. Focuses on communicative competence. Develops gestural skills as a foundation for ASL enhancement. Introduces cultural knowledge and increases understanding of the Deaf Community. ASL 101 is a prerequisite for ASL 102.

ASL 115 Fingerspelling and Number Use in ASL (2 cr.)
Provides intensive practice in comprehension and production of fingerspelled words and numbers with emphasis on clarity and accuracy. Focuses on lexicalized fingerspelling and numeral incorporation as used by native users of American Sign Language. Prerequisite: ASL 101 or permission of instructor.

ASL 125 History & Culture of the Deaf Community I (3 cr.)
Presents an overview of various aspects of Deaf Culture, including educational and legal issues. Examines the history of the Deaf Community. Lecture 3 hours per week.

ASL 201-202 American Sign Language III-IV (3-4 cr. each)
Develops vocabulary, conversational competence, and grammatical knowledge with a total immersion approach. Introduces increasingly complex grammatical aspects including those unique to ASL. Discusses culture and literature. Contact with the Deaf Community is encouraged to enhance linguistic and cultural knowledge. Prerequisite: ASL 102 or permission of instructor.

(AST) Administrative Support Technology

AST 101 Keyboarding I (2 cr.)
Teaches the alpha/numeric keyboard with emphasis on correct techniques, speed, and accuracy. Teaches formatting of basic personal and business correspondence, reports, and tabulation. A laboratory co-requisite (AST 103) is required. Lecture 2 hours per week.

AST 102 Keyboarding II (2 cr.)
Develops keyboarding and document production skills with emphasis on developing proofreading skills in the preparation of specialized business documents. Continues skill building for speed and accuracy. Prerequisite: AST 101. A laboratory co-requisite (AST 104) is required. Lecture 2 hours per week.

AST 103 Keyboarding I Laboratory (1 cr.)
Provides supplemental instruction in AST 101. Should be taken concurrently with AST 101. Laboratory 2 hours per week.

AST 104 Keyboarding II Laboratory (1 cr.)
Provides supplemental instruction in AST 102. Should be taken concurrently with AST 102. Laboratory 2 hours per week.

AST 113 Keyboarding for Speed and Accuracy (1 cr.)
Focuses on improving keyboarding speed and accuracy through assigned exercises that diagnose problem areas. Emphasizes increased productivity through improved speed and accuracy. Prerequisite: AST 101 or equivalent. Laboratory 2 hours per week.

AST 117 Keyboarding for Computer Usage (1 cr.)
Teaches the alphabetic keyboard and 10-key pad. Develops correct keying techniques. Lecture 1 hour per week.

AST 195 Topics In: (1 - 5 cr.)
Provides an opportunity to explore topical areas of interest or needed by students. May be repeated for credit. Variable credits.

AST 201 Keyboarding III (Internship) (2 cr.)
Develops decision-making skills, speed, and accuracy in production keying. Applies word processing skills in creating specialized business documents. An internship in an office during the latter part of the course provides on-the-job training. Prerequisite: AST 102. A laboratory co-requisite (AST 202) is required. Lecture 3 hours per week.

AST 202 Keyboarding III Laboratory (1 cr.)
Provides supplemental instruction in AST 201. Should be taken concurrently with AST 201. Laboratory 2 hours per week.

AST 205 Business Communications (3 cr.)

Teaches techniques of oral and written communications. Emphasizes writing and presenting business-related materials including instruction in PowerPoint. Includes brief instruction in voice recognition software use (DRAGON) Prerequisite: AST 102, ENG 135, and BUS 235, or departmental approval. Lecture 3 hours per week.

AST 234 Records and Database Management (3 cr.)

Teaches filing and records management procedures. Incorporates both manual and electronic methods using Access database software for managing information. Lecture 3 hours per week.

AST 238 Microsoft Word For Windows (2 cr.)

Teaches advanced word processing features including working with merge files, macros, and graphics; develops competence in the production of complex documents. Prerequisite: Touch Keyboarding Skills (ability to type 20 wpm). A laboratory co-requisite (AST 239) is required. Lecture 2 hours per week.

AST 239 Microsoft Word for Windows Laboratory (1 cr.)

Provides supplemental instruction in AST 238. Should be taken concurrently with AST 238. Laboratory 2 hours per week.

AST 243 Office Administration I (3 cr.)

Develops an understanding of the administrative support role and the skills necessary to provide organizational and technical support in a contemporary office setting. Emphasizes the development of critical-thinking, problem-solving, and job performance skills in a business office environment. Co-requisite or Prerequisite: AST 101 or instructor approval. Lecture 3 hours per week.

AST 244 Office Administration II (3 cr.)

Enhances skills necessary to provide organizational and technical support in a contemporary office setting. Emphasizes administrative and supervisory roles of the office professional, Includes travel and meeting planning, office budgeting, and financial procedures, international issues, and career development. Prerequisite: AST 101 or instructor approval. Lecture 3 hours per week.

AST 245 Medical Machine Transcription I (2 cr.)

Develops machine transcription skills, integrating operation of transcribing equipment with understanding of medical terminology. Emphasizes dictation techniques and accurate transcription of medical documents in prescribed formats. Prerequisite: AST 101/103 and HLT 143. Co-requisites: AST 102/104 and HLT 144. Instructor permission is needed to exempt prerequisites or co-requisites. Lecture 2 hours per week.

AST 253 Desktop Publishing I (Adobe In Design/ Publisher) (2 cr.)

Introduces specific desktop publishing software. Teaches document layout and design, fonts, type styles, style sheets, and graphics. Develops abilities in creating letterheads, business cards, brochures, newsletters, forms and many other publications. Prerequisite: AST 101 or equivalent, experience in using a word processing package, and ITE 115 or instructor approval. A laboratory co-requisite AST 255 is required. Lecture 2 hours per week.

AST 255 Desktop Publishing I Lab (1 cr.)

Provides supplemental instruction in AST 253. Should be taken concurrently with AST 253. Laboratory 2 hours per week.

AST 265 Legal Office Procedures (Internship) (3 cr.)

Concentrates on office procedures used in law offices and develops skills necessary to provide organizational and technical support in a legal setting. An internship in a legal environment provides on-the-job training in the course, providing the student has a curricular Grade Point Average (GPA) of 3.0 or higher. Prerequisite: AST 102.

AST 295 Medical Machine Transcription II (2 cr.)

Continues the development of machine transcription skills and reinforcement of medical terminology. Prerequisite: AST 245 or instructor permission. Lecture 2 hours per week.

(AUB) Auto Body

AUB 111-112 Automobile Body Theory and Shop Practices I-II (8 cr. each)

Teaches and applies the fundamentals and use of body tools and materials. Emphasizes shop safety, metal working, welding, and cooling systems. Teaches the recommended methods of identifying, analyzing and repairing collision damage to the

front, top, side and rear of the vehicle. Lecture 5 hours. Laboratory 9 hours. Total 14 hours per week.

AUB 113 Automobile Body Theory and Shop Practices III (6 cr.)

Presents the fundamentals of refinishing and painting automobiles including the techniques of masking, blending and spraying. Covers paint shop layout, management, equipment, and damage estimating. Lecture 3 hours. Laboratory 9 hours. Total 12 hours per week.

AUB 115 Damage Repair Estimating (2 cr.)

Teaches inspection and estimation of cost to repair collision damage. Emphasizes writing acceptable estimates for insurance companies. Studies practices used by repair shops and insurance adjusters. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

AUB 116 Automotive Body Repair (4 cr.)

Teaches collision straightening procedures and use of equipment, planning repair procedures, disassembly techniques, body fastening systems, glass removal and replacement and panel repair and alignment. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUB 190-290 Coordinated Internship In Auto Body Repair (1-5 cr.)

Supervised on-the-job training in selected business, industrial or service firms coordinated by the College. Credit/ practice ratio maximum 1:5 hours. May be repeated for credit. Variable hours.

AUB 198-298 Seminar and Project (2 cr.)

Teaches and applies the fundamentals and use of body and frame equipment. Teaches body and frame design and frame construction. Teaches frame and body measuring equipment use. Teaches the recommended methods of identifying and repairing the different types of frame damage. Variable hours.

AUB 206 Automotive Body Component Service (2 cr.)

Teaches operating principles, adjustments and service of selected automotive body components. Emphasizes bumper overhaul and adjustments, hood alignment, door overhaul and adjustments, deck lid alignment, door glass adjustments. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

(AUT) Automotive

AUT 111-112 Automotive Engines I-II (4 cr. each)

Presents analysis of power, cylinder condition, valves and bearings in the automotive engine to establish the present condition, repairs or adjustments. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 113 Cylinder Block Service I (3 cr.)

Studies basic cylinder block reconditioning, including boring, resleeving, line-boring and deck resurfacing. Includes repair techniques for damaged block and cylinder head castings to include cold welding, brazing, welding and epoxy. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AUT 114 Cylinder Head Service II (3 cr.)

Studies cylinder head reconditioning, including valve seat grinding, refacing valves, servicing valve guides, valve seat inserts, cutting for valve seals and spring thread repair and resurfacing mating surfaces. Prerequisite: AUT 113. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AUT 121-122 Automotive Fuel Systems I-II (4 cr. each)

Analyzes major domestic and foreign automotive fuel systems to include carburetors and fuel injection systems. Includes detailed inspection and discussion of fuel tanks, connecting lines, instruments, filters, fuel pumps, supercharges, and turbo charger. Also includes complete diagnosis, troubleshooting, overhaul and factory adjustment procedures of all major carbureted and fuel injection systems. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week. AUT 122 Prerequisite: AUT 121.

AUT 127 Automotive Lubrication and Cooling Systems (3 cr.)

Analyzes lubrication systems to include lubricants, pumps, lines, filters, and vents. Also analyzes cooling systems, coolants, pumps, fans, lines and connections. Teaches estimating repairs, adjustments needed and their costs. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

AUT 136 Automotive Vehicle Inspection (2 cr.)

Presents information on methods for performing automotive vehicle safety inspection. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

AUT 178 Automotive Final Drive and Manual Transmission Systems (4 cr.)

Presents the operation, design, construction and repair of manual transmissions and final drive systems, for both front and rear drive vehicles, including clutches, synchronizers, torque multiplication/gear reduction, along with differentials, transmission/transaxles, drive axles, U-joints, CV joints, 4-wheel drive and all-wheel drive systems. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 211-212 Automotive Systems III-IV (4 cr. each)

Presents advanced theory and detailed study of automobile systems. Provides laboratory periods for actual field practice in troubleshooting. Prerequisite: AUT 122 or in conjunction with AUT 211. AUT 212 Prerequisite: AUT 211 or with instructor approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 215 Emissions Systems Diagnosis and Repair (2 cr.)

Presents logical diagnostic paths to identify vehicle HC-CO failure areas. Teaches a progression of failure detection from most likely to more complex causes. emphasizes use of infrared analyzer and manufacturer's specified adjustment. Lecture 2 hours per week.

AUT 236 Automotive Climate Control (4 cr.)

Introduces principles of refrigeration, air conditioning controls, and adjustment and general servicing of automotive air conditioning systems. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 237 Automotive Accessories (3 cr.)

Introduces the principles, design, construction, adjustment, and maintenance of all automotive equipment classed as an accessory which is not studied in other automotive courses. Lecture 3 hours per week.

AUT 241-242 Automotive Electricity I-II (4 cr. each)

Introduces electricity and magnetism, symbols and circuitry as applied to the alternators, regulators, starters, lighting systems, instruments and gauges. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 245 Automotive Electronics (4 cr.)

Introduces field of electronics as it applies to the modern automobile. Emphasizes basic circuit operation, diagnosis and repair of digital indicator and warning systems. Lecture 3 hours. Prerequisite: AUT 241. Laboratory 3 hours. Total 6 hours per week.

AUT 251-252 Automatic Transmissions I-II (4 cr.)

Studies several types of automatic transmissions, torque converters, and their principles of operation. Includes adjustment, maintenance, and rebuilding. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

AUT 265 Automotive Braking Systems (3 cr.)

Presents operation, design, construction, repair, and servicing of braking systems. Explains uses of tools and test equipment, evaluation of test results, estimation of repair cost for power, standard and disc brakes. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AUT 266 Auto Alignment, Suspension and Steering (4 cr.)

Introduces use of alignment equipment in diagnosing, adjusting, and repairing front and rear suspensions. Deals with repair and servicing of power and standard steering systems. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

(BIO) Biology

BIO 100 Basic Human Biology (3 cr.)

Presents basic principles of human anatomy and physiology. Discusses cells, tissues, and selected human systems. Lecture 3 hours per week.

BIO 101-102 General Biology I-II (4 cr. each)

Explores fundamental characteristics of living matter from the molecular level to the ecological community with emphasis on general biological principles. Introduces the diversity of living organisms, their structure, function and evolution. Lecture 3 hours. Recitation and Laboratory 3 hours. Total 6 hours per week. Prerequisite: MTH 9 or equivalent.

BIO 107 Biology of the Environment (4 cr.)

Presents the basic concepts of environmental science through a topical approach. Includes the scientific method, population growth and migration, use of natural resources and waste management, ecosystem simplification recovery, evolution, biogeochemical cycles, photosynthesis and global warming, geological formations, atmosphere and climate, and ozone depletion and acid deposition.

Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

BIO 141-142 Human Anatomy and Physiology I-II (4 cr. each)
Integrates anatomy and physiology of cells, tissues, organs, and systems of the human body. Integrates concepts of chemistry, physics, and pathology. Lecture 3 hours. Laboratory 2-3 hours. Total 5-6 hours per week.

BIO 205 General Microbiology (4 cr.)
Examines morphology, genetics, physiology, ecology, and control of microorganisms. Emphasizes application of microbiological techniques to selected fields. Prerequisites: BIO 101, one year of college biology and one year of college chemistry or divisional approval. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 231-232 Human Anatomy and Physiology I-II (4 cr. each)
Integrates the study of gross and microscopic anatomy with physiology, emphasizing the analysis and interpretation of physiological data. Prerequisites: BIO 101, one year of college biology and one year of college chemistry or divisional approval. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 256 General Genetics (4 cr.)
Explores the principles of genetics ranging from classical Mendelian inheritance to the most recent advances in the biochemical nature and function of the gene. Includes experimental design and statistical analysis. Prerequisite: BIO 101-102 or equivalent. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

BIO 270 General Ecology (2-6 cr.)
Studies interrelationships between organisms and their natural and cultural environments with emphasis on populations, communities, and ecosystems. Prerequisite BIO 101-102 or divisional approval. Lecture 1-4 hours. Recitation and laboratory 3-6 hours. Total 4-10 hours per week.

(BLD) Building

BLD 131-132 Carpentry Framing I-II (5 cr. each)
Presents an introduction to carpentry with emphasis on residential construction. Covers safety on the job, appropriate use of power tools, basic construction techniques, and introduction to working drawings, and the team approach to residential buildings. Presents an introduction to selection and use of ladders and scaffolds, basic form removal and demolition, and use of basic first aid. Includes the concepts of carpentry framing for floors, walls, ceilings, porches and decks. Includes theoretical and practical application as well as the concepts of carpentry framing for roof, truss installation and door and window installation. Lecture 3 hours. Laboratory 4 hours. Total 7 hours.

BLD 133-134 Carpentry Framing III-IV (5 cr. each)
Continues the study of carpentry with emphasis on residential construction. Covers safety on the job, appropriate use of power tools, basic construction techniques, and introduction to working drawings, and the team approach to residential buildings. Continues the study of selection and use of ladders and scaffolds, basic form removal and demolition, and use of basic first aid. Includes the concepts of carpentry framing for floors, walls, ceilings, porches and decks. Includes theoretical and practical application as well as the concepts of carpentry framing for roof, truss installation and door and window installation. Lecture 3 hours. Laboratory 4 hours. Total 7 hours per week.

BLD 195 Plumbing I (3 cr.)
Course will include topics in understanding blueprints and their symbols; the Cabo/Ansi A117.1-1992 Standard for Accessible Facilities; water heaters; water supply and distribution systems; and sizing water lines.

BLD 195 Plumbing II (3 cr.)
Topics include the design of sanitary systems, learning drainage fixture units, materials, joints and connections. Health care plumbing, plumbing math, and plumbing in one and two family dwelling units will also be covered.

BLD 195 Plumbing III (3 cr.)
Covers the study of indirect/special waste, vents, vent stack and stack vents, wet venting, waste stack venting, island fixture venting, relief vents, combination drain and vent system, and sizing vents.

BLD 195 Plumbing IV (3 cr.)
Understanding traps, interceptors, separators, storm water drainage, sizing conductors, leaders and storm drains; root drains, cabo one and two-family dwelling plumbing.

BLD 195 Plumbing V (3 cr.)
Topics include the study of the current uniform Statewide Building Code and how it relates to plumbing, Department of Building Inspections, Application for Permits, Conditions of Permits, Inspections, Violations, Plumbing Definitions, General Regulations, and Plumbing Fixtures.

(BUS) Business Management and Administration

BUS 100 Introduction To Business (3 cr.)
Presents a broad introduction to the functioning of business enterprises within the U.S. economic framework. Introduces economic systems, essential elements of business organizations, production, human resource management, marketing, finance, and risk management. Develops business vocabulary. Lecture 3 hours per week.

BUS 111 Principles of Supervision (3 cr.)
Teaches the fundamentals of supervision, including the primary responsibilities of the supervisor. Introduces factors relating to the work of supervisor and subordinates. Covers aspects of leadership, job management, work improvement, training, and orientation, performance evaluation, and effective employee/supervisor relationships. Prerequisite: BUS 100 or Department/Instructor approval. Lecture 3 hours per week.

BUS 116 Entrepreneurship (3 cr.)
Presents the various steps considered necessary when going into business. Includes areas such as product-service analysis, market research evaluation, setting up books, ways to finance start-up, operations of the business, development of business plans, buyouts verses starting from scratch, and franchising. Uses problems and cases to demonstrate implementation of these techniques. Lecture 3 hours per week.

BUS 121 Business Mathematics I (3 cr.)
Applies mathematical operations to business processes and problems. Reviews operations, equations, percents, sales and property taxes, insurance, checkbook and cash records, wage and payroll computations, discounts, markup, mark-down and simple interest. Lecture 3 hours per week.

BUS 122 Business Mathematics II (3 cr.)
Applies mathematical operations to business problems. Reviews basic statistics, distribution of profit and loss in partnerships, distribution of corporate dividends, mortgage amortization, insurance, simple interest, present value, bank discount notes, multiple payment plans, compound interest, annuities, sinking funds, and amortization. Lecture 3 hours per week.

BUS 125 Applied Business Mathematics (3 cr.)
Applies mathematics and Excel to business process and problems such as wages and payroll, sales and property taxes, checkbook records and bank reconciliation, commercial discounts, markup, markdown, simple interest, present values, bank discount notes, compound interest, annuities, sinking funds, and amortization. Lecture 3 hours per week.

BUS 147 Introduction To Business Information Systems (3 cr.)
Presents an overview of business information systems. Introduces computer hardware, software, procedures, systems, and human resources, and explores their integration and application in business. Discusses fundamentals and applications of computer problem solving and programming. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

BUS 165 Small Business Management (3 cr.)
Identifies management concerns unique to small businesses. Introduces the requirements necessary to initiate a small business, and identifies the elements comprising a business plan. Presents information establishing financial and administrative controls, developing a marketing strategy, managing business operations, and the legal and government relationships specific to small businesses. Lecture 3 hours per week.

BUS 195 Work Ethic & Social Skills (3 cr.)
The first phase of the class develops social, personal and job-readiness skills. The second phase helps develop job-finding and job entry skills. The third phase helps students to maintain and improve work ethic and job performance.

BUS 195 Business Ethics (1 cr.)

Course content includes a broad overview of ethics in the modern day business world. The internet of this course is to provide a basic understanding and awareness of ethical dilemmas and possible methods of resolution. This course does not cover legal issues or managerial issues in depth.

BUS 195 Workplace Preparedness (3 cr.)

The class provides workforce skill building through workplace assessments and group discussions. Students will be introduced to workforce topics such as teambuilding, communication, problem solving, business ethics, customer service and personal finances.

BUS 205 Human Resource Management (3 cr.)

Introduces employment, selection, and placement of personnel, usage levels and methods, job descriptions, training methods and programs, employee evaluation systems, compensation and labor relations. Includes procedures for management of human resources and uses case studies and problems to demonstrate implementation of these techniques. Lecture 3 hours per week.

BUS 209 Continuous Quality Improvement (3 cr.)

Presents the different philosophies in Continuous Quality Improvement. Introduces students to Process Improvement, Team Development, Consensus Building, and Problem Solving strategies. Identifies methods for Process Improvement in manufacturing and service organizations, which includes Statistical Process Control when used in the quality assurance function of business and industry. Lecture 3 hours per week.

BUS 220 Introduction To Business Statistics (3 cr.)

Introduces statistics as a tool in decision-making. Emphasizes ability to collect, present, and analyze data. Employs measures of central tendency and dispersion, statistical inference, index number, and time series analysis. Lecture 3 hours per week.

BUS 221 Business Statistics I (3 cr.)

Focuses on statistical methodology in the collection, organization, presentation, and analysis of data; concentrates on measures of central tendency, dispersion, probability concepts and distribution, sampling, statistical estimation, normal and T distribution, and hypothesis testing for means and proportions. Prerequisite: MTH 163, or departmental approval. Lecture 3 hours per week.

BUS 223 Distribution and Transportation (3 cr.)

Examines the background and history of transportation, emphasizing the fundamental role and importance the industry plays in companies, society, and the environment in which transportation service is provided. Provides an overview of carrier operations, management, technology, and strategies including transportation regulations and public policy. Lecture 3 hours per week.

BUS 227 Quantitative Methods (3 cr.)

Includes an overview of quantitative methods in business decision-making, simple and multiple regression and correlation analysis, time series analysis and business forecasting, decision analysis, linear programming, transportation and assignment methods, and network models. Includes computer applications. Prerequisite: MTH 163, or departmental approval. Lecture 3 hours per week.

BUS 235 Business Letter Writing (3 cr.)

Applies composition principles to business correspondence, employment documents, and reports (including presentation of data in various chart formats). Focuses on preparing effective communications with customers, suppliers, employees, the public, and other business contacts. Prerequisite: AST 102/104, ENG 134. Co-requisite: ENG 135. Lecture 3 hours per week.

BUS 236 Communication In Management (3 cr.)

Introduces the functions of communication in management with emphasis on gathering, organizing, and transmitting facts and ideas. Teaches the basic techniques of effective oral and written communication. Pre-requisite: ENG 111 and ITE 115 or departmental approval. Lecture 3 hours per week.

BUS 240 Introduction to Business Law (3 cr.)

Presents an introduction to the American legal system, including an overview of the courts, civil and criminal law. Develops an in-depth understanding of contracts, agency law, and business organizations. Also includes an overview of property, UCC Sales, and Commercial Paper. Lecture 3 hours per week.

BUS 255 Inventory and Warehouse Management (3 cr.)

Emphasizes the relationships of inventory and warehouse management to customer service and profitability of the wholesale distributor. Focuses on the role of computerized systems and resulting information for effective management of inventory and the warehouse under various conditions. Lecture 3 hours per week.

BUS 295 Topics in: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. May be also used for special honors courses. May be repeated for credit. Variable hours.

BUS 297 Cooperative Education in Business (1-5 cr.)

Provides on-the-job training in approved business, industrial and service firms. Credit/work ratio not to exceed 1:5 hours. Variable hours per week.

BUS 298 Seminar and Project in Business (3 cr.)

Requires completion of a project or research report related to the student's occupational objectives and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Prerequisite: Sophomore standing in business management plus ACC 111 (or departmental approval). Lecture 3 hours per week.

(CHD) Childhood Development

CHD 117 Introduction to Reading Methods (3 cr.)

Focuses on promoting language and literacy skills as the foundation for emergent reading. Emphasizes phonetic awareness and alphabetic knowledge, print awareness and concepts, comprehension and early writing. Addresses strategies for intervention and support for exceptional children and English Language Learners. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

CHD 118 Language Arts for Young Children (3 cr.)

Presents techniques and methods for encouraging the development of language and perceptual skills in young children. Stresses improvement of vocabulary, speech and methods to stimulate discussion. Surveys children's literature, examines elements of quality story telling and story reading, and stresses the use of audio-visual materials. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

CHD 120 Introduction to Early Childhood Education (3 cr.)

Introduces early childhood development through activities and experiences in nursery, pre-kindergarten, and primary programs. Investigates classroom organization and procedures, and use of classroom time and materials, approaches to education for young children, professionalism, and curricular procedures. Lecture 3 hours per week.

CHD 126 Science & Math Concepts for Children (3 cr.)

Covers the selection of appropriate developmental learning materials for developing activities to stimulate the logical thinking skills in children. Lecture 3 hours.

CHD 145 Methods for Teaching Art, Music, and Movement to Children (3 cr.)

Provides experiences in developing the content, methods, and materials for directing children in art, music, and movement activities. Lecture 3 hours.

CHD 165 Observation and Participation in Early Childhood/Primary Settings (3 cr.)

Observes and participates in early childhood settings such as child care centers, pre-schools, Montessori schools or public schools in Kindergarten through 3rd grade levels. Students spend one hour each week in a seminar session in addition to 60 clock hours in the field. May be taken again for credit. Lecture 1 hour. Laboratory 6 hours. Total 7 hours per week.

CHD 166 Infant and Toddler Programs (3 cr.)

Examines the fundamentals of infant and toddler development, including planning and implementing programs in group care. Emphasizes meeting physical, social, emotional, and cognitive needs: scheduling, preparing age-appropriate activities, health and safety policies, record keeping, and reporting to parents. Lecture 3 hours per week.

CHD 205 Guiding the Behavior of Children (3 cr.)

Explores positive ways to build self-esteem in children and help them develop self-control. Presents practical ideas for encouraging pro-social behavior in children and emphasizes basic skills and techniques in classroom management. Lecture 3 hours per week.

CHD 210 Introduction to Exceptional Children (3 cr.)

Reviews the history of education for exceptional children. Studies the characteristics associated with exceptional children. explores positive techniques for managing behavior and adapting materials for classroom use. Lecture 3 hours per week.

CHD 215 Models of Early Childhood Education Programs (3 cr.)

Studies and discusses the various models and theories of early childhood education programs, including current trends and issues. Presents state licensing and staff requirements. Lecture 3 hours per week.

CHD 216 Early Childhood Programs, School, and Social Change (3 cr.)

Explores methods of developing positive, effective relations with families to enhance their developmental goals for children. Considers diverse needs, perspectives and abilities of both families and teaching staff. Reviews current trends and issues in early care and education. Lecture 3 hours per week.

CHD 265 Advanced Observation and Participation in Early Childhood/Primary Settings (3 cr.)

Observes and participates in early childhood settings such as child care centers, pre-school, Montessori schools or public school settings (Kindergarten through third grade). Emphasizes planning and implementation of appropriate activities and materials for children. Students will spend one hour each week in a seminar session in addition to 60 clock hours in the field. May be taken again for credit. Lecture 1 hour. Laboratory 6 hours. Total 7 hours per week.

CHD 270 Administration of Child Care Programs (3 cr.)

Examines the skills needed for establishing and managing early childhood programs. Emphasizes professionalism and interpersonal skills, program planning, staff selection and development, creating policies, budgeting and developing forms for recordkeeping. Lecture 3 hours per week.

CHD 290 Coordinated Internship in Child Development (2 cr.)

Laboratory 10 hours per week.

CHD 298 Portfolio Development (1 cr.)

In conjunction with CHD 265, serves as the capstone course for the Early Childhood Associate in Applied Science Degree. Focuses on the development of a portfolio to demonstrate professional competence in the field of early care and education. The resulting portfolio will be reviewed by early childhood faculty and other designated early childhood professionals. Lecture 1 hour per week.

(CHM) Chemistry

CHM 101-102 General Chemistry I-II (4 cr. each)

Emphasizes experimental and theoretical aspects of inorganic, organic, and biological chemistry. Discusses general chemistry concepts as they apply to issues within our society and environment. Designed for the non-science major. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

CHM 111-112 College Chemistry I-II (4 cr. each)

Explores the fundamental laws, theories, and mathematical concepts of chemistry. Designed primarily for science and engineering majors. Requires a strong background in mathematics. Prerequisite: MTH 03 or equivalent. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

CHM 241-242 Organic Chemistry I-II (3 cr. each)

Introduces fundamental chemistry of carbon compounds, including structures, physical properties, syntheses, and typical reactions. Emphasizes reaction mechanisms. Prerequisite: CHM 112, co-requisite CHM 243-244 or CHM 245-246. Lecture 3 hours per week.

CHM 243-244 Organic Chemistry Lab. I-II (1 cr. each)

Taken concurrently with CHM 241 and CHM 242. Laboratory 3 hours per week.

CHM 245-246 Organic Chemistry Lab. I-II (2 cr. each)

Taken concurrently with CHM 241 and CHM 242 by chemistry and chemical engineering majors. Includes qualitative organic analysis. Laboratory 6 hours per week.

(CIV) Civil Engineering Technology

CIV 170 Principles of Surveying (3 cr.)
Introduces the elements of surveying to include use and care of modern surveying equipment and the application of surveying in construction. Prerequisite: MTH 07. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

(COS) Cosmetology

COS 195 Cosmetology Theory 1-3 (3 cr. each)
Covers bacteriology, finger waving, sterilization, wet hair styling, draping, shampooing and rinsing, permanent waving, haircutting and properties of the scalp and hair.

COS 195 Cosmetology Theory 4-6 (3 cr. each)
Covers hair coloring, theory of massage, the salon business, chemical hair relaxing and soft curl permanent, facial and facial make-up, hair pressing, skin and its disorders.

COS 195 Cosmetology Theory 7-9 (3 cr. each)
Artistry and artificial nails, cells, anatomy and physiology, manicuring and pedicure, electricity and light therapy, nail and its disorders, chemistry and the State Board Review.

COS 199 Supervised Study (18 cr.)
Students are required to complete 18 credits of Supervised Study in which they will be given hands-on instruction related to the subjects covered in Cosmetology Theory.

(DEC) Decorating

DEC 100 Introduction to Interior Decorating (3 cr.)
Presents the elements and principles of residential design with emphasis on space planning, color, lighting, materials, furnishings and costing. Lecture 3 hours per week.

DEC 198 Seminar and Project (3 cr.)
Completion of a project or research report related to the student's occupational objectives, and a study of approaches to the selection and pursuit of career opportunities in the field.

(DNA) Dental Assisting

DNA 100 Introduction to Oral Health Professions (1 cr.)
Provides an introduction to the oral health profession and covers basic terminology, historical perspective, the credentialing process, accreditation, professional organizations, and legal and ethical considerations. Lecture 1 hour per week.

DNA 103 Introduction to Oral Health (1 cr.)
Teaches anatomy of the head and neck, the oral cavity hard and soft tissues, as well as tooth morphology. Includes dental terminology, deciduous and permanent dentition as well as pathology. Lecture 1 hour per week.

DNA 110 Dental Materials (3 cr.)
Studies the materials utilized in the laboratory aspect of dentistry as support in treatment. Emphasis is placed on the characteristics, manipulation, economical control, storage, and delivery of materials. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

DNA 113 Chairside Assisting I (3 cr.)
Provides instruction on the principles of clinical chair side dental assisting, dental equipment use and maintenance, safety, instrument identification, tray set-ups by procedures, and patient data collection. Emphasis on patient management during restorative procedures. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

DNA 134 Dental Radiology and Practicum (3 cr.)
Teaches the physics of dental radiation and safety, equipment operation, cone placement for the parallel and bisection techniques, panoramic exposures, mounting and film processing. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

(DRF) Drafting

DRF 114-115 Drafting I-II (4 cr. each)
Focuses on instruments, geometric construction, orthographic projection, sections and conventions, pictorial drawings, isometric principles, oblique drawing, and dimensioning. Prerequisite: for DRF 115: DRF 114. Lecture 1 hour. Laboratory 9 hours. Total 10 hours per week.

DRF 116 Drafting III (3 cr.)
Focuses on auxiliaries, basic concepts, terms of reference, choice of views, axis, proportioning distances and perspective drawings. Prerequisite: DRF 114. Lecture 1 hour. Laboratory 6 hours. Total 7 hours per week.

DRF 120 Introduction to Graphic Representation (3 cr.)
Teaches use of instruments, lettering, sketching, and drawing conventions. Emphasizes legible drawings and the value of presentation. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

DRF 130 Introduction to Electrical/Electronics Drafting (2 cr.)
Teaches applications of drafting procedures with emphasis on working and functional drawings and direct applications to electrical and electronic components and circuits. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

DRF 160 Machine Blueprint Reading (3 cr.)
Introduces interpreting of various blueprints and working drawings. Applies basic principles and techniques such as visualization of an object, orthographic projection, technical sketching and drafting terminology. Requires outside preparation. Lecture 3 hours per week.

DRF 201 Computer Aided Drafting and Design I (4 cr.)
Teaches computer-aided drafting concepts and equipment designed to develop a general understanding of components of a typical CAD system and its operation. Prerequisite: DRF 114 or department approval. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

DRF 202 Computer Aided Drafting and Design II (4 cr.)
Teaches working drawings and advanced operations in computer aided drafting. Prerequisite: DRF 201. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

DRF 210 Advanced Technical Drafting (4 cr.)
Intersections of plane surfaces, lines and planes, skew lines and surfaces; intersections of prisms, pyramids and other shapes, developments, sheet metal-drafting, screw threads and fasteners, keys and springs. Prerequisite: DRF 114. Lecture 1 hour. Laboratory 9 hours. Total 10 hours per week.

DRF 232 Computer Aided Drafting II (2 cr.)
Teaches advanced operation in computer aided drafting. Lecture 1 hour per week. Laboratory 3 hours per week. Total 4 hours per week.

DRF 233 Computer Aided Drafting III (3 cr.)
Exposes student to 3-D and modeling. Focuses on proficiency in Production drawing using a CAD system. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

(ECO) Economics

ECO 100 Elementary Economics (3 cr.)
Introduces students to the most basic elements of economics without detailed study of theory. Presents and interprets current issues and concerns publicized in the media. Allows students to understand and grasp the importance of current local, state, and national issues with economic themes and overtones. Lecture 3 hours per week.

ECO 110 Consumer Economics (3 cr.)
Fosters understanding of the American economic system and the individual's role as a consumer. Emphasizes application of economic principles to practical problems encountered. Alerts students to opportunities, dangers, and alternatives of consumers. Lecture 3 hours per week.

ECO 120 Survey of Economics (3 cr.)
Presents a broad overview of economic theory, history, development, and application. Introduces terms, definitions, policies, and philosophies of market economies. Provides some comparison with other economic systems. Includes some degree of exposure to microeconomic and macroeconomic concepts. Lecture 3 hours per week.

ECO 201 Principles of Economics I (3 cr.)
Introduces macroeconomic principles and their relationship to current economic conditions. Presents the concept of a free enterprise economy and how it compares to other economic systems. Introduces the concepts of supply and demand and discusses how markets allocate resources. Presents measures of economic activity and discusses the problems of economic instability - inflation and unemployment. Discusses the various approaches to achieving economic stability including classical, Keynesian, monetarist and supply side positions. The structure of the banking system and the role of

the Federal Reserve are discussed. Lecture 3 hours per week.

ECO 202 Principles of Economics II (3 cr.)
Introduces microeconomic principles and their relationship to current economic conditions. Further analysis of the theories of supply and demand is presented. The costs of production for private business firms are analyzed. The concept of profit maximization by business firms under various market conditions is presented. Describes the four basic market models and their implications for business decision making. Analyzes resource markets and the determination of resource prices. Discusses the U.S. role in the global economy and the importance of competitiveness. Lecture 3 hours per week.

(EDU) Education

EDU 114 Driver Task Analysis (3 cr.)
Introduces the "driver task" as related to the highway transportation system and factors that influences performance ability. Prepares students so they may be eligible to take certification exams for driving school instructors in both public and private schools. Prerequisite: Must be eligible for ENG 03 and 05 or ESL 13. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EDU 200 Introduction to Teaching as a Profession (3 cr.)
Provides an orientation to the teaching profession in Virginia, including historical perspectives, current issues, and future trends in education on the national and state levels. Emphasizes information about teacher licensure examinations, steps to certification, teacher preparation and induction programs, and attention to critical shortage areas in Virginia. Includes supervised field placement (recommended: 40 clock hours) in a K-12 school. Prerequisite: Successful completion of 24 credits of transfer courses. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EDU 235 - Health, Safety, and Nutrition Education (3 cr.)
Focuses on the physical needs of children and explores strategies to meet these needs. Emphasizes positive health routines, hygiene, nutrition, feeding and clothing habits, childhood diseases, and safety. Places emphasis on the development of food habits and concerns in food

and nutrition. Describes symptoms and reporting procedures for child abuse. Lecture 3 hours per week.

(EIP) Educational Interpreter Program
(Note: These courses may not transfer to any other VCCS institutions in ASL or INT programs.)

EIP 101 Orientation to Deafness I (1 cr.)
Provides an overview of the Deaf community and its inherent Culture. Includes Deaf Culture, Deaf community dynamics, causes of hearing loss/deafness, and education of the Deaf. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 102 Orientation to Deafness II (1 cr.)
Further investigates the dynamics of the Deaf Community and its inherent Culture, including the differences between the Deaf Community/Culture and the Hearing Community/ Culture in areas such as sociolinguistics, political aspects and the development and role of organizations of and by the Deaf. Prerequisite: EIP 101 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 111 Introduction to Expressive and Receptive Fingerspelling and Number Systems (1 cr.)
Provides intensive practice in expressive and receptive fingerspelling and numbers with emphasis on clarity, accuracy and speed. Focuses on increasing skills in vocabulary, spelling, letter production, number incorporation and improving fluency. Prerequisite: EIP 11 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 112 Advanced Expressive and Receptive Fingerspelling and Number Systems (1 cr.)
Provides more intensive practice in expressive and receptive fingerspelling and numbers with an emphasis on clarity, accuracy, speed and fluency. Addresses appropriate incorporation of fingerspelling and numbers into expressive skills and appropriate comprehension of receptive fingerspelling and numbers and within texts. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 150 Expressive Vocabulary Building and Expressive Text Analysis for Interpreters I (1 cr.)

Expands and improves expressive sign language skills necessary for effective communication and interpreting. Includes vocabulary building within context (spoken and written), refinement of sign production and auditory memory training. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 151 Expressive Vocabulary Building and Expressive Text Analysis for Interpreters II (1 cr.)

Further develops expressive sign language skills, with a continuing emphasis on vocabulary building within context (spoken and signed) and appropriate sign production. Prerequisite: EIP 150 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 160 Receptive Vocabulary Building and Receptive Text Analysis for Interpreters I (1 cr.)

Expands and improves receptive sign language skills necessary for effective communication and interpreting. Includes vocabulary building within context (signed), receptive sign analysis and visual memory training. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 161 Receptive Vocabulary Building and Receptive Text Analysis for Interpreters II (1 cr.)

Further develops receptive sign language skills, with a continuing emphasis on vocabulary building within context (signed) and receptive sign analysis. Prerequisite: EIP 160 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 181 Pre-Interpreting Skills I (1 cr.)

Develops fundamental skills towards the task of interpreting, specifically building memory and processing skills (both auditory and visual). This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 182 Pre-Interpreting Skills II (1 cr.)

Further develops fundamental skills towards the task of interpreting, including review of the Models

of Interpreting, English skills and text analysis of spoken English and signed source messages. Prerequisite: EIP 181 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 201 Linguistics of American Sign Language for Interpreters I (1 cr.)

Emphasizes linguistical aspects of ASL, including ASL phonology, time references and time sequencing, pronominalization, directional placement, and an introduction to classifiers and locatives. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 202 Linguistics of American Sign Language for Interpreters II (1cr.)

Review and expands linguistical aspects taught in EIP 201, including more intensive practice with classifiers and locatives, and emphasizes additional linguistical features of ASL (e.g., pluralization, numbers in ASL, and unique morphological characteristics, such as loan signs and noun-verb pairs). Prerequisite: EIP 201 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 203 Linguistics of American Sign Language for Interpreters III (1 cr.)

Emphasizes ASL syntax, including ASL sentence types and grammatical features as well as additional morphological characteristics (e.g., temporal aspect and distributional aspect). Prerequisite: EIP 201 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 211 Sign-to-Voice Transliterating I (1cr.)

Introduces skill development techniques for consecutive sign-to- voice transliterating. Incorporates use of visual memory and visual processing skills in reading sign language (e.g., contact signing/Pidgin Signed English). Develops fluency, accuracy and speed through extensive practice with a variety of consecutive sign-to-voice materials. Emphasizes incorporation of appropriate English grammar and vocal intonation. Prerequisites: EIP 181, EIP 202 or consent of instructor. This course may not transfer to any other

VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 212 Sign-to-Voice Transliterating II (1 cr.)

Further develops consecutive sign-to-voice transliterating skills through extensive practice. Continues to develop and refine fluency, accuracy and speed. Additional enhancement of appropriate English grammar skills and appropriate vocal intonation. Prerequisite: EIP 211 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 213 Sign-to-Voice Transliterating III (1 cr.)

Introduces skill development techniques for simultaneous sign-to-voice transliterating skills. Develops fluency, accuracy and speed through extensive practice with a variety of simultaneous sign-to-voice materials. Emphasizes use of appropriate English grammar and vocal intonation. Prerequisite: EIP 212 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 214 Sign-to-Voice Transliterating IV (1 cr.)

Further develops simultaneous sign-to-voice transliterating skills through extensive practice. Continues to develop and refine fluency, accuracy and speed with a variety of simultaneous sign-to-voice materials. Accentuates use of appropriate English grammar and vocal intonation. Prerequisite: EIP 213 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 215 Advanced Sign-to-Voice Interpreting I (1 cr.)

Provides instruction on refining and enhancing sign-to-voice skills, specifically sign-to-voice transliterating and interpreting. Students will self-identify strengths (in voicing) and areas of weakness as the springboard for individual improvement through group work and feedback. Group work will entail student self-analysis and giving and receiving feedback. Prerequisites: EIP 214 and EIP 203, or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 216 Advanced Sign-to-Voice Interpreting II (1 cr.)

Further refines and enhances simultaneous sign-to-voice skills. Continued emphasis on student self-analysis and group feedback. Prerequisites: EIP 215 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 231 Expressive Transliterating I (1 cr.)

Introduces the skills required to transmit spoken English into a manual code of English consecutively. While a variety of manual codes and their relationships to ASL will be identified, concentration will be on the use of contact signing/ Pidgin Signed English (PSE) and the incorporation of conceptually accurate signs. Incorporates use of auditory memory and auditory processing skills in listening to spoken English. Develops fluency and accuracy through extensive practice with a variety of consecutive voice-to-sign materials. Prerequisites: EIP 181, EIP 202 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 232 Expressive Transliterating II (1 cr.)

Further develops consecutive voice-to-sign transliterating skills through extensive practice. Continued emphasis on contact signing/Pidgin Signed English (PSE) and conceptually accurate sign choices. Prerequisite: EIP 231 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 233 Expressive Transliterating III (1 cr.)

Introduces skill development techniques for simultaneous voice-to-sign transliterating. Emphasis is on use of contact signing/Pidgin Signed English (PSE) and the incorporation of conceptually accurate signs. Develops fluency and accuracy through extensive practice with a variety of simultaneous voice-to-sign materials. Prerequisite: EIP 232 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 234 Expressive Transliterating IV (1 cr.)

Further develops simultaneous voice-to-sign transliterating skills through extensive practice. Continued emphasis on contact signing/Pidgin Signed English (PSE) and conceptually accurate

sign choices. Prerequisite: EIP 233 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 235 Advanced Expressive Transliterating I (1 cr.)

Provides instruction on refining and enhancing simultaneous voice-to-sign transliterating skills. Students will self identify strengths (in signing) and areas of weakness as the springboard for individual improvement through group work and feedback. Group work will entail student self-analysis and giving and receiving feedback. Prerequisite: EIP 234 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 236 Advanced Expressive Transliterating II (1 cr.)

Further refines and enhances simultaneous voice-to-sign transliterating skills. Continued emphasis on student self-analysis and group feedback. Prerequisite: EIP 235 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 240 Interpreting in the Educational Setting (1 cr.)

Examines roles, responsibilities and communication techniques of the Educational Interpreter. Provides information on the needs of the Deaf student and methods used in teaching students who are Deaf and Hard-of-Hearing. Emphasizes skill development using conceptually accurate signs. Prerequisites: EIP 214 and EIP 234 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 242 Interpreting in Special Situations (1 cr.)

Presents techniques and vocabulary involved in interpreting in specific contexts (e.g., medical, legal, platform, artistic, etc). Prerequisites: EIP 214 and EIP 234 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 245 Interpreter Ethics and Responsibilities (1 cr.)

Reviews the basic principles and practices of interpreting, including the logistics of interpreting situations, regulatory and legislative issues, resources, review of the Code of Ethics, professional appearance, and interpreter responsibilities. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 261 Introduction to English-to-ASL Interpreting I (1 cr.)

Develops consecutive interpreting skills from English to ASL. Review of ASL structure and linguistical features and text analysis of English sources into ASL. Incorporates use of auditory memory and auditory processing skills. Emphasis on appropriate incorporation of "restructuring" between English and ASL. Prerequisites: EIP 181 and EIP 203 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 262 English-to-ASL Interpreting II (1 cr.)

Builds on consecutive voice-to-sign interpreting skills. Continued review of ASL structure and linguistical features, text analysis of English sources into ASL and appropriate "restructuring". Prerequisite: EIP 261 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 263 English-to-ASL Interpreting III (1 cr.)

Introduces skills needed for simultaneous voice-to-sign interpreting. Emphasis on appropriate processing time needed for simultaneous "restructuring" into ASL. Prerequisite: EIP 262 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 264 English-to-ASL Interpreting IV (1 cr.)

Further refines and enhances simultaneous voice-to-sign interpreting skills. Continued emphasis on appropriate processing time needed for simultaneous "restructuring" into ASL. Prerequisite: EIP 263 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 280 Interactive Transliterating (1 cr.)

Provides instruction on transliterating in interactive situations. Prerequisites: EIP 214 and EIP 234 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 281 Interactive Interpreting (1 cr.)
Provides instruction on interpreting in interactive situations. Prerequisites: EIP 216 and EIP 264 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 289 Preparation for Performance Evaluations: Transliterating (1 cr.)
Provides a "mock" performance evaluation with a focus on transliterating. Students will receive feedback as well perform self-analyses in order to better prepare them to take the Transliterating component of the Virginia Quality Assurance Screening (VQAS). Prerequisites: EIP 214, EIP 280 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

EIP 291 Preparation for Performance Evaluations: Interpreting (1 cr.)
Provides a "mock" performance evaluation with a focus on interpreting. Students will receive feedback as well perform self-analyses in order to better prepare them to take the Interpreting component of the Virginia Quality Assurance Screening (VQAS). Prerequisites: EIP 216, EIP 264, EIP 281 or consent of instructor. This course may not transfer to any other VCCS institutions in ASL or INT programs. Lecture 1 hour per week.

(EGR) Engineering

EGR 115 Engineering Graphics (2 cr.)
Applies principles of orthographic projection and multi-view drawings. Teaches descriptive geometry, including relationships of points, lines, planes, and solids. Introduces sectioning, dimensioning, and computer graphic techniques. Includes instruction in Computer Aided Drafting. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

EGR 120 Introduction to Engineering (1-2 cr.)
Introduces the engineering profession, professional concepts, ethics, and responsibility. Reviews hand calculators, number systems, and unit conversions. Introduces the personal computer and operating systems. Includes engineering problem solving techniques using computer software. Lecture 0-2 hours. Laboratory 0-3 hours. Total 1-4 hours per week.

EGR 126 Computer Programming for Engineers (3 cr.)
Introduces computers, their architecture and software. Teaches program development using flowcharts. Solves engineering problems involving programming in languages such as FORTRAN, PASCAL, or C++. Lecture 2-3 hours. Laboratory 0-2 hours. Total 3-4 hours per week.

EGR 140 Engineering Mechanics - Statics (3 cr.)
Introduces mechanics of vector forces and space, scalar mass and time, including S.I. and U.S. customary units. Teaches equilibrium, free-body diagrams, moments, couples, distributed forces, centroids, moments of inertia analysis of two- force and multi-force members and friction and internal forces. Lecture 3 hours per week.

EGR 245 Engineering Mechanics - Dynamics (3 cr.)
Presents approach to kinematics of particles in linear and curvilinear motion. Includes kinematics of rigid bodies in plane motion. Teaches Newton's second law, work-energy and power, impulse and momentum, and problem solving using computers. Lecture 3 hours per week.

EGR 246 Mechanics of Materials (3 cr.)
Teaches concepts of stress, strain, deformation, internal equilibrium, and basic properties of engineering materials. Analyzes axial loads, torsion, bending, shear and combined loading. Studies stress transformation and principle stresses, column analysis and energy principles. Lecture 3 hours per week.

EGR 248 Thermodynamics for Engineering (3 cr.)
Studies formulation of the first and second law of thermodynamics. Presents energy conversion, concepts of energy, temperature, entropy, and enthalpy, equations of state of fluids. Covers reversibility and irreversibility in processes, closed and open systems, cyclical processes and problem solving using computers. Lecture 3 hours per week.

(ELE) Electrical Technology

ELE 90-190-290 Coordinated Internship (1-5 cr.)
Supervised on-the-job training in selected business, industrial or service firms coordinated by the College. Credit/ practice ratio maximum 1:5 hours. May be repeated for credit. Variable hours.

ELE 95-195-295 Topics in: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. May be used also for special honors courses. May be repeated for credit. Variable hours.

ELE 98-198-298 Seminar and Project in: (1-5 cr.)

Requires completion of a project or research report related to the student's occupational objective and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Variable hours.

ELE 99-199-299 Supervised Study in: (1-5 cr.)

Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Variable hours.

ELE 110 Home Electric Power (3 cr.)

Covers the fundamentals of residential power distribution, circuits, panels, fuse boxes, breakers, transformers. Includes study of the national electrical code, purpose and interpretation. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 113-114 Electricity I-II (3 cr. each)

Teaches principles of electricity covering fundamentals, devices and components in both DC and AC circuits. Lecture 3 hours per week.

ELE 123-124 Electrical Applications I-II (2 cr. each)

Provides laboratory and shop assignments/jobs as applied to fundamental principles of electricity with emphasis on measurements and evaluation of electrical components, devices and circuits. May require preparation of a report as an out-of-class activity. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

ELE 131-132 National Electrical Code I-II (3 cr. each)

Provides comprehensive study of the purpose and interpretations of the National Electric Code as well as familiarization and implementation of various charts, code rulings and wiring methods including state and local regulations. Lecture 3 hours per week.

ELE 133-134 Practical Electricity I-II (3 cr. each)

Teaches the fundamentals of electricity, terminology, symbols, and diagrams. Includes the principles essential to the understanding of general practices, safety and the practical aspects of residential and non-residential wiring and electrical installation, including fundamentals of motors and controls. Pre/Co requisite MTH 02 or equivalent. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 143 Programmable Controllers I (4 Cr.)

Studies operating characteristics, programming techniques, interfacing, and networking capabilities of programmable logic controllers. Studies controllers with analog and/or digital interfacing, hand-held and/or software programming. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ELE 152 Electrical-Electronic Calculations I (4 cr.)

Includes general math, scale readings, conversions between units of measure and algebra with exponents and radicals as it applies to DC circuits. (First of a three-course sequence). Lecture 4 hours. Total 4 hours per week.

ELE 153 Electrical-Electronic Calculations II (4 cr.)

Includes a review of DC applications, angular measurements, right triangle ratios, vector and vector algebra as it applies to AC circuits. (Second of a three-course sequence). Prerequisite: ELE 152. Lecture 4 hours per week.

ELE 154 Electrical-Electronic Calculations III (2 cr.)

Includes a review of DC and AC applications and includes exponential equations and logarithms as it applies to electrical-electronic circuits. (Third of a three-course sequence). Prerequisite: ELE 153. Lecture 2 hours per week.

ELE 156 Electrical Control Systems (3 cr.)

Includes troubleshooting and servicing electrical controls, electric motors, motor controls, motor starters, relays, overload, instruments and control circuits. May include preparation of a report as an out-of-class activity. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ELE 195 - Mechatronics (Control Panel Navigation/System Integration) (3 cr.)

Studies current flow in direct and alternating current circuits with emphasis upon practical problems. Reviews mathematics used in circuit calculations. Introduces concepts of resistance, capacitance,

inductance and magnetism. Focuses on basic electrical / electronics / circuits application.

ELE 195 Applications in Motor Control (3 cr.)
Studies electrical safety, three phase power & motors, manual motor control and protection, control ladder logic, troubleshooting, input devices, timers and other areas.

ELE 201 Applications and Instruments I (1 cr.)
Presents assignments and individual projects to supplement the course of study. Requires the selection, operation, and interpretation of laboratory instruments. May require formal reports to demonstrate state-of-the-art techniques. Laboratory 3 hours.

ELE 216 Industrial Electricity (3 cr.)
Studies rotating devices, single phase and polyphase distribution, magnetic devices, circuits and systems for industrial applications. Lecture 2-3 hours. Laboratory 2 hours. Total 5 hours per week.

ELE 235 Industrial Communications (3 cr.)
Teaches applications of basic and special devices and circuits in combination to form modern communications and control systems. Includes progression from low frequency to high frequency applications beginning with carrier circuit systems and basic transceivers to microwave systems. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ELE 239 Programmable Controllers (3 cr.)
Deals with installation, programming, interfacing, and concepts of troubleshooting programmable controllers. Lecture 2 hours. Laboratory 3 hours. Total 4 hours per week.

ELE 240 Advanced Programmable Logic Controllers (3 cr.)
Advances further study of Programmable Logic Controllers that was initiated in ELE 239. Students will learn to use more advanced program instructions, including data manipulation, sequences and program control, and advanced PLC features, including timers, counters. Covers connectivity and use of a variety of real world I/O devices. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

(EMS) Emergency Medical Services

EMS 111 Emergency Medical Technician - Basic I (3 cr.)
Provides instruction in basic life support, physical assessment. Introduces role and responsibilities of the emergency medical technician/ambulance. Includes emergency operations, anatomy and physiology, bleeding, shock, MAST rousers, cardio-pulmonary resuscitation, soft tissue injuries, fractures and dislocations, abdominal and chest injuries. Required for certification as a Virginia EMT/A. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EMS 112 Emergency Medical Technician - Basic II (3 cr.)
Continues material begun in EMT 111. Includes major trauma and medical emergencies, emergency childbirth procedures, lifting and moving patients, vehicle extrication, pediatric and environmental emergencies, and mass casualty situations. Required for certification as a Virginia EMT/A. Prerequisite: EMT 111. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EMS 113 Emergency Medical Technician-Basic II (3 cr.)
Continues preparation of student for certification as a Virginia and/or National Registry EMT-Basic. Includes all aspects of pre-hospital basic life support as defined by the Virginia Office of Emergency Medical Services curriculum for Emergency Medicine Technician Basic. Lecture 2 hours per week. Laboratory 2 hours per week. Total 4 hours per week.

(ENG) English

ENG 1 Preparing for College Writing I (1-6 cr.)
Helps students discover and develop writing processes needed to bring their proficiency to the level necessary for entrance into their respective curricula. Guides students through the process of starting, composing, revising, and editing. Variable hours per week.

ENG 3 Preparing for College Writing II (1-6 cr.)
Emphasizes strategies within the writing process to help students with specific writing situations. Develops techniques to improve clarity of writing and raise proficiency to the level necessary for

entrance into particular curricula. Variable hours per week.

ENG 4 Reading Improvement I (1-6 cr.)
Helps students improve their reading processes to increase their understanding of reading materials. Includes word forms and meanings, comprehension techniques, and ways to control reading pace. Variable hours per week.

ENG 5 Reading Improvement II (1-6 cr.)
Helps students read critically and increase appreciation of reading. Guides students in making inferences, drawing conclusions, detecting relationships between generalizations and supporting details. Includes interpreting graphic aids and basic library skills. Variable hours per week.

Note: Students who place into developmental English 1,3,4 and 5 (writing and/or reading) may consider meeting these requirements by taking BSK modules. Please refer to Developmental Studies in this Catalog.

ENG 7 Writing and Reading Improvement I (3-12 cr.)
Provides an integrated approach to developing students' writing and reading processes. Prepares students to complete assignments successfully by providing them with reading and writing strategies. Variable hours per week.

ENG 8 Writing and Reading Improvement II (6-12 cr.)
Emphasizes strategies within the writing and critical reading processes to help students with specific writing and reading assignments. Encourages an appreciation for clear writing and practical reading assignments. Variable hours per week.

ENG 111-112 College Composition I-II (3 cr. each)
Develops writing ability for study, work, and other areas of writing based on experience, observation, research, and reading of selected literature. Guides students in learning writing as a process: understanding audience and purpose, exploring ideas and information, composing, revision, and editing. Supports writing by integrating, composing, revising, and editing. Supports writing by integrating experiences in thinking, reading, listening, and speaking. Lecture 3 hours per week.

ENG 115 Technical Writing (3 cr.)
Develops ability in technical writing through extensive practice in composing technical reports and other documents. Guides students in achieving voice, tone, style, and content in formatting, editing, and graphics. Introduces students to technical discourse through selected reading. Prerequisite: ENG 131 or ENG 111. Lecture 3 hours per week.

ENG 121-122 Introduction to Journalism I-II (3 cr. each)
Introduces students to all news media, especially news gathering and preparation for print. Prerequisite: ENG 111 or ENG 112, or divisional approval. Lecture 3 hours per week.

ENG 123 Writing for the World Wide Web (3 cr.)
Teaches students how to outline, compose, organize, and edit written materials for publication on the World Wide Web. Teaches students how to design basic web pages, compose website content, design web site layout and develop website navigation for a variety of possible audiences. Prerequisite: ENG 111 or approval. Lecture 3 hours per week.

ENG 131 Technical Report Writing I (3 cr.)
Offers a review of organizational skills including paragraph writing and basic forms of technical communications, various forms of business correspondence, and basic procedures for research writing. Includes instruction and practice in oral communication skills. Lecture 3 hours per week.

ENG 134 Grammar for Writing and Speaking (3 cr.)
Studies the various parts of speech with application to both writing and speaking. Includes significant assignments to demonstrate skills in a variety of written and verbal communication, and emphasizes the skills necessary for correct everyday usage of the English language. Lecture 3 hours per week.

ENG 135 Applied Grammar (3 cr.)
Develops ability to edit and proofread correspondence and other documents typically produced in business and industry. Instructs the student in applying conventions of grammar, usage, punctuation, spelling, and mechanics. Prerequisite: ENG 134 or divisional approval. Lecture 3 hours per week.

ENG 150 Children's Literature (3 cr.)

Surveys the history of children's literature, considers learning theory and developmental factors influencing reading interests, and uses bibliographic tools in selecting books and materials for recreational interests and educational needs of children. Lecture 3 hours per week.

ENG 210 Advanced Composition (3 cr.)

Helps students refine skills in writing non-fiction prose. Guides development of individual voice and style. Introduces procedures for publication. Prerequisite: ENG 112 or divisional approval. Lecture 3 hours per week.

ENG 211-212 Creative Writing I-II (3 cr. each)

Introduces the student to the fundamentals of writing imaginatively. Students write in forms to be selected from poetry, fiction, drama, and essays. Prerequisite: ENG 112 or divisional approval. Lecture 3 hours per week.

ENG 241-242 Survey of American Literature I-II (3 cr. each)

Examines American literary works from colonial times to the present, emphasizing the ideas and characteristics of our national literature. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture 3 hours per week.

ENG 243-244 Survey of English Literature I-II (3 cr. each)

Studies major English works from the Anglo-Saxon period to the present, emphasizing ideas and characteristics of the British literary tradition. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture 3 hours per week.

ENG 255 Major Writers in World Literature (3 cr.)

Examines major writers selected from a variety of literary traditions. Involves critical reading and writing. Prerequisite: ENG 112 or divisional approval. Lecture 3 hours per week.

(ESL) English as a Second Language

ESL 05 English as a Second Language: Reading I (3-6 cr.)

Helps students improve their reading comprehension and vocabulary. Improves students' reading proficiency to a level which would allow the students to function adequately in ESL 06 and other college classes. Variable hours per week.

ESL 06 English as a Second Language: Reading II (3-6 cr.)

Helps students improve their reading comprehension and vocabulary. Improves students' reading proficiency to a level which would allow the students to function adequately in ESL 06 and other college classes. Variable hours per week.

ESL 06 English as a Second Language: Reading II (3-6 cr.)

Helps students improve their reading comprehension and vocabulary. Improves students' reading proficiency to a level which would allow the students to function adequately in college classes. Variable hours per week.

ESL 07 Oral Communication I (3-6 cr.)

Helps students practice and improve listening and speaking skills as needed for functioning successfully in academic, professional, and personal settings. Assesses students' oral skills and includes, as needed, practice with pronunciation, rhythm, stress, and intonation. Provides exercises, practices, small and large group activities, and oral presentations to help students overcome problems in oral communication. Variable hours per week.

ESL 08 Oral Communication II (3-6 cr.)

Provides further instruction and practice in helping students to improve listening and speaking skills. Assesses students' oral skills and includes, as needed, practice with pronunciation, rhythm, stress, and intonation. Emphasizes the development of fluency through exercises, practices, small and large group activities, and formal and informal presentations. Variable hours per week.

(ETR) Electronics Technology

ETR 90-190-290 Coordinated Internship (1-5 cr.)

Supervised on-the-job training in selected business, industrial or service firms coordinated by the College. Credit/ practice ratio maximum 1:5 hours. May be repeated for credit. Variable hours.

ETR 95-195-295 Topics in: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. May be used also for special honors courses. May be repeated for credit. Variable hours.

ETR 98-198-298 Seminar and Project in: (1-5 cr.)

Requires completion of a project or research report related to the student's occupational objective and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Variable hours.

ETR 99-199-299 Supervised Study in: (1-5 cr.)

Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Variable hours.

ETR 112 Math for Electrical/Electronic Analysis (2 cr.)

Presents a specialized mathematics course for the electronics student who selects the option electronic analyst technology. Includes mathematical concepts and problems in algebra and trigonometry, and direct application to the specialty option. Includes a survey of advanced mathematics to develop and reinforce electronic concepts. May require preparation of a report as an out-of-class activity. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

ETR 115 D.C. and A.C. Fundamentals (3 cr.)

Studies current flow in direct and alternating current circuits with emphasis upon practical problems. Reviews the mathematics used in circuit calculations. Introduces concepts of resistance, capacitance, inductance and magnetism. Lecture 3 hours per week.

ETR 123-124 Electronic Applications I-II (2 cr. each)

Provides laboratory and shop experience as applied to basic electronic devices, circuits and systems with emphasis on practical measurements. Lecture 1 hour. Laboratory 2 hours. Total 3 hours.

ETR 136 General Industrial Electronic Systems (3 cr.)

Studies devices, circuits, power modules, analog and digital, open and closed loop control and servo systems. May include laboratory projects and modular troubleshooting. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ETR 141-142 Electronics I-II (3 cr. each)

Introduces electronic devices as applied to basic electronic circuits and systems. Lecture 3 hours per week.

ETR 148 Amplifiers and Integrated Circuits (4 cr.)

Studies devices and amplifiers with emphasis on analysis and design. May include summing and integrating amplifiers, choppers, modulators and other circuits. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 149 PC Repair (3 cr.)

Teaches the maintenance, troubleshooting and repair of personal computer systems. Uses IBM or compatible computer systems to provide fault isolation drill and practice. Lecture 3 hours. Total 3 hours per week.

ETR 151-152 Electronic Circuits and Troubleshooting I-II (2 cr. each)

Studies analog and digital circuits and systems with standard circuit test and troubleshooting procedure. Lecture 2 hours per week.

ETR 206 Logic Circuits and Systems I (2 cr.)

Includes the basic numbering systems, Boolean algebra, logic circuits and systems as applied to electrical and electronic technology. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

ETR 207 Logic Circuits and Systems II (2 cr.)

Deals with math logic systems, pulse logic circuits and pulse logic systems as applied to computer and microprocessor technology. May require preparation of a report as an out-of- class activity. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

ETR 211 Electronic Diagnostics I (3-4 cr. each)

Teaches analyzing, testing and repair of fundamental assemblies, subassemblies, circuits and systems as applied to electronic maintenance and manufacturing. Lecture 2 hours. Laboratory 3-6 hours. Total 5-8 hours per week.

ETR 218 Industrial Electronics Circuits (4 cr.)

Introduces the principles of industrial measurements and control: electrical, electronic, mechanical, thermal, and optical measuring and records, and actuators, electronic instrumentation control devices and circuits. Provides demonstrations and laboratory experiments. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 225 Data Communications (4 cr.)

Studies computer communication devices including configurations and protocols. May include modems multiplexing, teletex and interfacing with telecommunication systems such as local and area networks, microwave and satellite and delivery systems, fiber optic systems and packet systems.

Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 241-242 Electronic Communications I-II (4 cr. each)

Studies noise, information and bandwidth, modulation and demodulation, transmitters and receivers, wave propagation, antennas and transmission lines. May include broad, band communication systems, microwave, both terrestrial and satellite, fiber optics, multiplexing and associated hardware. Prerequisite: Knowledge of DC/AC Theory and devices. Lecture 2-3 hours. Laboratory 3 hours. Total 5-6hours per week.

ETR 243 Digital, Analog and Data Communication Systems I (4 cr.)

Teaches theory and implementation of digital and analog circuits in communication systems. Includes PCM, multiplexing, analog modulation, analysis and performance of transmitters and receivers. Includes optical satellite and other communications systems. Prerequisite: Knowledge of DC/AC theory and devices. Lecture 3 hours. Laboratory 3 hours. Total 6 hours.

ETR 245 Two-Way Communications (4 cr.)

Teaches mobile and base station communications, transmitters and receivers and their test equipment. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

ETR 246 Broadcast Systems (3 cr.)

Teaches practical operating fundamentals and systems for students interested in the field of commercial broadcast electronics. Includes AM, FM and TV broadcast systems. May require field trips to various types of operations. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ETR 247 Display Systems (3 cr.)

Teaches principles, circuits and devices for producing, transmitting, receiving, storing, reproducing, processing and displaying video and other visual information. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ETR 248 Test Instruments and Measurements (2 cr.)

Studies circuits used in electronics measurement and application of these circuits to test instruments such as oscilloscopes, electronic meters, and bridges. Stresses the accuracy of measurements, how instruments work, proper use of instruments,

and calibration techniques. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

ETR 255 Active Devices and Circuits (3 cr.)

Teaches theory of active devices and circuits, devices and circuit parameters, semi-conductor characteristics and the application of circuits to active systems. Includes testing and analysis of active devices and circuits. Prerequisite: Knowledge of DC/AC Theory. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ETR 282-283 Digital Systems I-II (3 cr. each)

Includes fundamental definition, programming, circuitry, logic, operation/interfacing of computer and microprocessor systems. May include pulse circuits and pulse logic systems as applied to computer and microprocessor technology. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

(FIN) Financial Services

FIN 215 Financial Management (3 cr.)

Introduces basic financial management topics, including statement analysis, working capital, capital budgeting, and long-term financing. Focuses on Net Present Value and Internal Rate of Return Techniques, lease verses buy analysis, and Cost of Capital computations. Uses problems and cases to enhance skills in financial planning and decision making. Prerequisite: ACC 111 or ACC 211. Lecture 3 hours per week.

(FST) Fire Science Technology

FST 100 Principles of Emergency Services (3 cr.)

Provides an overview to fire protection; career opportunities in fire protection and related fields; philosophy and history of fire protection/service; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics. Lecture 3 hours per week.

FST 110 Fire Behavior and Combustion (3 cr.)

Explores the theories and fundamentals of how and why fires start, spread, and how they are controlled. Lecture 3 hours per week.

FST 112 Hazardous Materials Chemistry (3 cr.)
Provides basic fire chemistry relating to the categories of hazardous materials including problems or recognition, reactivity, and health encountered by firefighters.

FST 115 Fire Prevention (3 cr.)
Provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education. Lecture 3 hours per week.

FST 205 Fire Protection Hydraulics and Water Supply (3 cr.)
Provides a foundation of theoretical knowledge in order to understand the principles of the use of water in fire protection and to apply hydraulic principles to analyze and to solve water supply problems. Lecture 3 hours per week.

FST 210 Legal Aspects of Fire Service (3 cr.)
Introduces the Federal, State, and local laws that regulate emergency services, national standards influencing emergency services, standard of care, tort, liability, and a review of relevant court cases. Lecture 3 hours per week.

FST 215 Fire Protection Systems (3 cr.)
Provides information relating to the features of design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection and portable fire extinguishers.

FST 220 Building Construction for Fire Protection (3 cr.)
Provides the components of building construction that relate to fire and life safety. Focuses on firefighter safety. Covers the elements of construction and design of structures and how they are key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Lecture 3 hours per week.

FST 235 Strategy and Tactics (3 cr.)
Provides an in-dept analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground.

FST 240 Fire Administration (3 cr.)
This course introduces the student to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis on fire service leadership from the perspective of the company officer. Lecture 3 hours per week.

FST 245 Fire and Risk Analysis (3 cr.)
Presents a study of current urban fire problems with emphasis on solutions based upon current available technology. Includes master planning, as well as methods of identifying, analyzing and measuring accompanying risk and loss possibilities. Prerequisite: FST 240. Lecture 3 hours per week.

(FRE) French

FRE 203-204 Intermediate French I-II (3 cr. each)
Continues to develop understanding, speaking, reading, and writing skills. Prerequisite French 102 or equivalent. Lecture 3 hours per week.

(GEO) Geography

GEO 210 People and the Land: An Introduction to Cultural Geography (3 cr.)
Focuses on the relationship between culture and geography. Presents a survey of modern demographics, landscape modification, material and non-material culture, language, race and ethnicity, religion, politics, and economic activities. Introduces the student to types and uses of maps. Lecture 3 hours per week.

GEO 220 World Regional Geography (3 cr.)
Studies physical and cultural characteristics of selected geographical regions of the world. Focuses upon significant problems within each of the regions, and examines the geographical background of those problems. Introduces the student to types and uses of maps. Lecture 3 hours per week.

(GOL) Geology

GOL 105 Physical Geology (4 cr.)
Introduces the composition and structure of the earth and modifying agents and processes. Investigates the formation of minerals and rocks, weathering, erosion, earthquakes, and crustal

deformation. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

GOL 106 Historical Geology (4 cr.)
Traces the evolution of the earth and life through time. Presents scientific theories of the origin of the earth and life and interprets rock and fossil record. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

(HIS) History

HIS 101-102 History of Western Civilization I-II (3 cr. each)
Examines the development of western civilization from ancient times to the present. The first semester ends with the seventeenth century; the second semester continues through modern times. Lecture 3 hours per week.

HIS 111-112 History of World Civilizations (3 cr. each)
Surveys Asian, African, Latin American, and European Civilizations from the ancient period to the present.

HIS 121-122 United States History I-II (3 cr. each)
Surveys United States history from its beginning to the present. Lecture 3 hours per week.

HIS 266 Military History of the Civil War (3 cr.)
Analyzes military campaigns of the Civil War, including factors contributing to the defeat of the Confederacy and problems created by the war. May include field trips to Civil War sites in the region. Lecture 3 hours per week.

HIS 268 The American Constitution (3 cr.)
Analyzes the origin and development of the United States Constitution. Includes the evolution of civil liberties, property rights, contracts, due process, judicial review, federal, state relationships, and corporate-government relations. Lecture 3 hours per week.

(HIT) Health Information Technology

HIT 100 Introduction to the Health Care Delivery System (1 cr.)
Introduces the organization of health care delivery system with emphasis on types of providers and the role that accrediting and licensing bodies play in the delivery of health care. Lecture 1 hour per week.

HIT 105 CPT Coding (2 cr.)
Develops skills in coding a diagnosis and/or procedure according to the principles of CPT Coding. Not intended for HIT majors. HIT 105 should not be taken concurrently with HIT 106/107. Prerequisite: HLT 143.

HIT 106 ICD-9-CM Coding I (2 cr.)
Introduces ICD-9-CM coding classification system and provides actual coding exercises. Not intended for HIT majors. HIT 106 should not be taken concurrently with HIT 105. Prerequisite: HLT 143.

HIT 107 ICD-9-CM Coding II (3 cr.)
Stresses advanced ICD-9-CM coding skills through practical exercises. Not intended for HIT majors. HIT 107 should not be taken concurrently with HIT 105. Prerequisite: HIT 106.

HIT 143 Managing Electronic Billing in a Medical Practice (3 cr.)
Presents practical knowledge on use of computer technology in medical practice management. Develops basic skills in preparation of universal billing claim including manual preparation. Explores insurance claim processing issues. HLT 143 is a prerequisite for this class. Lecture 2 hours per week.

HIT 226 Legal Aspects of Health Record Documentation (2 cr.)
Presents the legal requirements associated with health record documentation. Emphasizes the policies and procedures concerning the protection of the confidentiality of patient's health record. Lecture 2 hours per week.

(HLT) Health

HLT 100 First Aid and Cardiopulmonary Resuscitation (2 - 3 cr.)
Focuses on the principles and techniques of safety, first aid and cardiopulmonary resuscitation. Lecture 2-3 hours per week.

HLT 105 Cardiopulmonary Resuscitation (1 cr.)
Provides training in coordinated mouth-to-mouth artificial ventilation and chest compression, choking, life-threatening emergencies, and sudden illness. Lecture 1 hour per week.

HLT 106 First Aid and Safety (2 cr.)
Focuses on the principles and techniques of safety and first aid. Lecture 2 hours per week.

HLT 116 Personal Wellness (2-3 cr.)

Explores the relationship between personal health and physical fitness as they apply to individuals in today's society. Includes nutrition, weight control, stress, conditioning, and drugs. Lecture 3 hours per week.

HLT 130 Nutrition and Diet Therapy (1 cr.)

Studies nutrients, sources, functions, and requirements with an introduction to diet therapy. Lecture 1 hour per week.

HLT 135 Child Health and Nutrition (3 cr.)

Focuses on the physical needs of the preschool child and the methods by which these are met. Emphasizes health routines, hygiene, nutrition, feeding and clothing habits, childhood diseases, and safety as related to health growth and development. Lecture 3 hours per week.

HLT 141 Intro to Medical Terminology (1-2 crs.)

Focuses on medical terminology for students preparing for careers in the health professions. Lecture 1-2 hours per week.

HLT 143-144 Medical Terminology I-II (3 cr. each)

Provides an understanding of medical abbreviations and terms. Includes the study of prefixes, suffixes, word stems, and technical terms with emphasis on proper spelling, pronunciation, and usage. Emphasizes more complex skills and techniques in understanding medical terminology. Lecture 3 hours per week.

HLT 160 Personal Health and Fitness (3 cr.)

Studies the relationships between health and fitness. Topics include nutrition, disease prevention, weight control, smoking and health, medical care, aerobic and anaerobic conditioning, and the relationship between physical and mental health. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HLT 195 Topics in: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. May be repeated for credit. Variable hours.

HLT 200 Human Sexuality (3 cr.)

Provides a basic understanding of human sexuality. Includes anatomy, physiology, pregnancy, family planning, venereal diseases, and sexual variations. Lecture 3 hours per week.

HLT 215 Personal Stress and Stress Management (3 cr.)

Provides a basic understanding of stress and its physical, psychological, and social effects. Includes the relationships between stress and change, self-evaluation, sources of stress, and current coping skills for handling stress. Lecture 3 hours per week.

HLT 230 Principles of Nutrition and Human Development (3 cr.)

Teaches the relationship between nutrition and human development. Emphasizes nutrients, balanced diet, weight control, and the nutritional needs of an individual. Lecture 3 hours per week.

HLT 270 Health and Well-Being of the Older Adult (3 cr.)

Focuses on the health of the older adult; teaches health promotion; preventative health techniques; and accident prevention. Prerequisite: Admission to the Program. Lecture 3 hours per week.

(HMS) Human Services

HMS 141 Group Dynamics I (3 cr.)

Examines the stages of group development, group dynamics, the role of the leader in a group, and recognition of the various types of group processes. Discusses models of group dynamics that occur as a result of group membership dynamics. Lecture 3 hours per week.

HMS 142 Group Dynamics II (3 cr.)

Examines group dynamics, group leadership, group cohesion, transference and group helping through experiential involvement in group facilitating and leadership. Increases group skills through active classroom participation in group experiences. Lecture 3 hours per week.

HMS 231-232 Gerontology I-II (3 cr. each)

Examines characteristics of the aging process and problems for the elderly. Considers both theoretical and applied perspectives on the following issues: biological, psychological, sociological, economic and political. Lecture 3 hours per week.

HMS 231-232 Gerontology I-II (3 cr. each)

Examines characteristics of the aging process and problems for the elderly. Considers both theoretical

and applied perspectives on the following issues: biological, psychological, sociological, economic and political. Lecture 3 hours per week.

(HRI) Hotel-Restaurant-Institutional Management

HRI 134 Food & Beverage Service Management (3 cr.)
This class prepares a conceptual and technical framework for managing the service of meals in a variety of commercial settings. Studied will be the integration of production and service delivery, guest contact dynamics, reservation management, and point of sale systems.

HRI 265 Hotel Front Office Operations (3 cr.)
This class analyzes hotel front office positions and the procedures involved in reservation registration, accounting for and checking out guests and principles and practices of night auditing. The class also covers the complete guest operation in both traditional and computerized operations.

(HRT) Horticulture

HRT 100 Introduction to Horticulture (3 cr.)
Introduces commercial horticulture industry with emphasis on career opportunities. Examines equipment, facilities, and physical arrangements of production, wholesale and retail establishments. Surveys individual areas within horticulture industry. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 110 Principles of Horticulture (3 cr.)
Introduces concepts of plant growth and development. Covers horticultural practices, crops and environmental factors affecting plant growth. Lecture 3 hours per week.

HRT 115 Plant Propagation (3 cr.)
Teaches principles and practices of plant propagation. Examines commercial and home practices. Provides experience in techniques using seed-spores, cuttings, grafting, budding, layering and division. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 121 Greenhouse Crop Production I (3 cr.)
Covers commercial practices related to production of floriculture crops. Considers production requirements, environmental control and management, and cultural techniques. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 122 Greenhouse Crop Production II (3 cr.)
Continues commercial practices related to production of floriculture crops. Considers production requirements, environmental control and management, and cultural techniques. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

(HUM) Humanities

HUM 165 Controversial Issues in Contemporary American Culture (3 cr.)
Introduces students to selected issues in contemporary American culture. Includes topic areas ranging from welfare reform, economic development, privacy, environmental protection and conservation, evolution vs. creation, to family values, and special interest lobbying in our state and national governments. Focuses on the development of the student's critical thinking skills by analyzing, evaluating, and reflecting on opposing sides of the same issue as expressed by public leaders, special interest groups and academicians. Lecture 3 hours per week.

HUM 195 Topics in: (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students, including honors program seminars. May be repeated for credit. Variable hours.

(IND) Industrial Engineering Technology

IND 103 Industrial Methods (2 cr.)
Covers theoretical knowledge necessary for familiarization with common hand tools, common power tools, measuring tools and techniques, fastening components and procedures, grinding operations, metal cutting operations, and other miscellaneous tasks.

IND 116 Applied Technology (3 cr.)
Introduces basic information and problem solving techniques in liquids, gases, solids, metrics, mechanics, forces, simple machines, heat, light, sound and nuclear energy as applied in industrial engineering technologies. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 125 Installation and Preventive Maintenance (3 cr.)

Studies practices in the installation of machinery, including mounting, grouting, leveling, and alignment. Examines methods of preventive maintenance, including inspection, scheduled maintenance, controls, record keeping, repair parts stocking, and safety considerations. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 137 Teamwork and Problem Solving (3 cr.)

Studies team concepts and problem solving techniques to assist project teams in improving quality and productivity. Provides knowledge of how to work as a team, plan and conduct good meetings, manage logistics and details, gather useful data, communicate the results and implement changes. Lecture 3 hours per week.

IND 145 Introduction to Metrology (3 cr.)

Studies principles of measurement and calibration control, application of statistics to measurement processes, and standards of measurements in calibration. May include the use of gauges and instruments in modern production and dimensional control concepts. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 181 World Class Manufacturing (3 cr.)

Studies the principles and applications of the globalization of industry. Emphasizes the fundamentals of interpersonal/ team process, organization skills, total quality tools for continuous improvement, statistical process control, manufacturing resource planning and just- in-time. Lecture 3 hours per week.

IND 190 - 290 Coordinated Internship (3 crs. each)

Supervised on-the-job training in selected business, industrial or service firms coordinated by the College.

IND 195 Interpreting Engineering Drawings/Math/Metrology (GDT) (2 cr.)

Teaches how to interpret engineering drawings, reads machine schematics and prints. This course will also cover the use of measurements, technical math and the metric system in a manufacturing environment.

IND 195 - Systematic Problem Solving (1 cr.)

Provides experience in applying a systematic approach to solving problems for individuals or small groups working in problem solving teams. Teaches either 6 or 8 step methods, 5-Whys or other techniques.

IND 195 KeyTrain Remediation (1 cr.)

Provides on-line remediation for the Reading for Understanding, Locating Information, Applied Math, & Applied Technology. These are the components of the CRC + Manufacturing certification.

IND 216 Plant Layout and Materials Handling (3 cr.)

Examines arrangement and layout of physical facilities. Explains material handling and modern techniques for efficient utilization of space. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 230 Applied Quality Control (3 cr.)

Studies principles of inspection and quality assurance with emphasis on statistical process control. May include the setting up, maintaining, and interpreting of control charts, and review of basic metrology. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 235 Statistical Quality Control (3 cr.)

Gives overview of the quality control function within industry. May include the organization, cost, and techniques of quality control. Emphasizes essentials and applications of statistics in the quality control function. Lecture 3 hours per week.

IND 298 Capstone Project (1-3 cr.)

A hands-on application of Lean Manufacturing, Quality and Problem Solving methods in the workplace. Laboratory 2-6 hours per week.

(INS) Instrumentation

INS 210 Principles of Instrumentation (3 cr.)

Introduces the basic concepts and terminology of process control systems. Presents types of control systems, applicable component elements, basic control analysis, and documentation requirements for measuring instruments and signal conditioning. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

INS 230 Instrumentation I (3 cr.)
Presents the fundamental scientific principles of process control including temperature, pressure, level, and flow measurements. Topics include transducers, thermometers, and gauges are introduced along with calibration. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

(ITD) Information Technology Database

ITD 110 Web Page Design I (3 cr.)
Stresses a working knowledge of web site designs, construction, and management using HTML or XHTML. Course content includes headings, lists, links, images, image maps, tables, forms, and frames. Recommended prerequisite is ITE 115. Lecture 3 hours. Total 3 hours per week.

ITD 112 Designing Web Page Graphics (3 cr.)
Explores the creation of digital graphics for web design. Basic design elements such as color and layout will be explored utilizing a computer graphics program(s). Recommended prerequisite is ITD 110. Lecture 3 hours. Total 3 hours per week.

ITD 210 Web Page Design II (3-4 cr.)
Incorporates advanced techniques in web site planning, design, usability, accessibility, advanced site management, and maintenance utilizing web editor software(s). Recommended prerequisite is ITD 110. Lecture 3 hours. Total 3 hours per week.

ITD 212 Interactive Web Design (3-4 cr.)
Provides techniques in interactive design concepts to create cross-platform, low-bandwidth animations utilizing a vector-based application. This course emphasizes the importance of usability, accessibility, optimization and performance. Recommended prerequisite is ITD 110. Lecture 3 hours. Total 3 hours per week.

(ITE) Information Technology Essentials

ITE 100 Introduction to Information Systems (3-4 cr.)
Covers the fundamentals of computers and computing and topics which include impact of computers on society, ethical issues, and terminology. Provides discussion about available hardware and software as well as their application. Lecture 3-4 hours. Laboratory 0-2 hours. Total 2-5 hours per week.

ITE 101 Introduction to Microcomputers (1-2 cr.)
Examines concepts and terminology related to microcomputers and introduces specific uses of microcomputers.

ITE 102 Computers and Information Systems (1-2 cr.)
Introduces terminology, concepts, and methods of using computers in information systems. This course teaches computer literacy, not intended for Information Technology majors.

ITE 115 Introduction to Computer Applications and Concepts (3-4 cr.)
Covers computer concepts and Internet skills and uses a software suite which includes word processing, spreadsheet, database, and presentation software to demonstrate skills required for computer literacy. Recommended prerequisite keyboarding skills. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITE 116 Survey of Computer Software Applications (1-2 cr.)
Reviews current business software applications for microcomputers emphasizing comparison of a variety of software packages. This course provides experience with multiple operating system commands, database, spreadsheet, and word processing programs. Lecture: 2 hours per week.

ITE 130 Introduction to Internet Services (3 cr.)
Provides instruction to provide students with a working knowledge of Internet terminology and services including e-mail, WWW browsing, search engines, ftp, file compression, and other services using a variety of software packages. This course provides instruction for basic web page construction. Lecture 3 hours. Total 3 hours per week.

ITE 140 Spreadsheet Software (3 cr.)
Covers the use spreadsheet software to create spreadsheets with formatted cells and cell ranges, control pages, multiple sheets, charts, and macros. Topics will include type and edit text in a cell, enter data on multiple worksheets, work with formulas and functions, create charts, pivot tables, and styles, insert headers and footers, and filter data. This

course covers MOS Excel objectives. Prerequisite: ITE 115. Lecture 3 hours. Total 3 hours per week.

ITE 150 Desktop Database Software (4 cr.)

Incorporates instruction in planning, defining, and using a database; performing queries; producing reports; working with multiple files; and concepts of database programming. Course topics include database concepts, principles of table design and table relationships, entering data, creating and using forms, using data from different sources, filtering, creating mailing labels. This course covers MOS Access certification objectives. Prerequisite: ITE 115. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITE 182 User Support/Help Desk Principles (3 cr.)

Introduces a variety of tools and techniques that are used to provide user support in help desk operations. This course includes help desk concepts, customer service skills, troubleshooting problems, writing for end users, help desk operations, and software, needs analysis, facilities management, and other topics related to end user support. Prerequisite: ITE 115. Lecture 3 hours. Total 3 hours per week.

ITE 195 - TekXam Certification & Applications (2 cr.)

Provides basic technology literacy certification for individuals not majoring in information technology programs. This certification provides a way for individuals to demonstrate their technology competencies to employers. Topics included in the certification are general computing concepts, word processing, internet concepts, and spreadsheets. Additional time will be spent on actual document preparation.

ITE 215 Advanced Computer Applications and Integration (4 cr.)

Incorporates advanced computer concepts including the integration of a software suite. Prerequisite: ITE 115 Introduction to Computer Applications and Concepts. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITE 221 PC Hardware and OS Architecture (4 cr.)

Covers instruction about processors, internal functions, peripheral devices, computer organization, memory management, architecture, instruction format, and basic OS architecture.

Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week. Prerequisite: ITE 115 Introduction to Computer Applications and Concepts

(ITN) Information Technology Networking

ITN 114 Windows XP Professional (4 cr.)

Provides instruction in installation, configuration, administration, and troubleshooting of Windows XP Professional as a desktop operating system in a networked data communications environment. Prerequisite: ITE 115. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 115 Windows 2003 Server (SER) (4 cr.)

Consists of instruction that teaches students how to manage and maintain a Microsoft Windows Server 2003 environment. Prerequisite: ITN 114 or instructor approval. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 116 Windows 2003 Network Infrastructure Implementation, Management, & Maintenance (NI-IMM) (4 cr.)

Provides instruction on how to implement, manage, and maintain a Microsoft Windows Server 2003 network infrastructure. Prerequisite: ITN 115 or instructor approval. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 154 Networking Fundamentals-Cisco (4 cr.)

Provides introduction to networking using the OSI reference model. Course content includes data encapsulation, TCP/IP suite, routing, IP addressing, and structured cabling design and implementation. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 155 Introductory Routing-Cisco (4 cr.)

Features an introduction to basic router configuration using Cisco IOS software. Course content includes system components, interface configuration, IP network design, troubleshooting techniques, configuration and verification of IP addresses, and router protocols. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 156 Basic Switching and Routing-Cisco (4 cr.)

Centers instruction in LAN segmentation using bridges, routers, and switches. Course content

includes fast Ethernet, access lists, routing protocols, spanning tree protocol, virtual LANs, and network management. Prerequisite: ITN 155 or instructor approval. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 157 WAN Technologies-Cisco (4 cr.)
Concentrates on an introduction to Wide Area Networking (WANs). Course content includes WAN design, LAPB, Frame Relay, ISDN, HDLC, and PPP. Prerequisite: ITN 156 or instructor approval. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 250 Advanced Routing-Cisco (4 cr.)
Includes instruction focusing on the characteristics of various Routing Protocols used in the TCP/IP networking environment, static routing, OSPF, IGRP, EIGRP, BGP, advanced IP addressing, and security. Course content also examines various strategies for optimizing network routing performance. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 251 Remote Access Networking-Cisco (4 cr.)
Focuses on in-depth instruction to a variety of wide area networking technologies and their implementation. Course content includes POTS and analog network connectivity, ISDN (both BRI and PRI), PPP, Cisco, AAA Security System, and Frame Relay. Prerequisite: ITN 250. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 252 Advanced Switching-Cisco (4 cr.)
Provides in-depth instruction in switching as a core technology in today's networking environment. Course content includes VLANs, trunking protocols, spanning-tree protocol, HSRP, and multi-layer switching. Prerequisite: ITN 251. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITN 253 Network Troubleshooting-Cisco (4 cr.)
Centers on instruction in troubleshooting tools and techniques appropriate to the network communications environment. Course content includes workstation troubleshooting software, communication equipment troubleshooting options, and typical problems related to Switching, WAN, and routing technologies. Prerequisite: ITN 252. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

(ITP) Information Technology Programming

ITP 100 Software Design (3 cr.)
Introduces principles and practices of software development. Course content includes instruction in critical thinking, problem solving skills, and essential programming logic in structured and object-oriented design using contemporary tools. Recommended prerequisites or co requisites: high school algebra or ITE 115. Lecture 3 hours. Total 3 hours per week.

ITP 112 Visual Basic.NET I (4 cr.)
Concentrates instruction in fundamentals of object-oriented programming using Visual Basic.NET and the .NET framework. Course content emphasizes program construction, algorithm development, coding, debugging, and documentation of graphical user interface applications. Recommended prerequisite: ITP 100. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITP 120 Java Programming I (4 cr.)
Entails instruction in fundamentals of object-oriented programming using Java. This course emphasizes program construction, algorithm development, coding, debugging, and documentation of console and graphical user interface applications. Recommended prerequisite: ITP 100. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITP 134 Visual C++ Programming I (4 cr.)
Provides instruction in fundamentals of object-oriented programming and design using C++ for GUI applications. Course content emphasizes software design and construction using the concepts of foundation classes. Recommended prerequisite: ITP 100. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITP 136 C# Programming I (4 cr.)
Presents instruction in fundamentals of object-oriented programming and design using C#. Course content emphasizes program construction, algorithm development, coding, debugging, and documentation of applications within the .NET Framework. Recommended prerequisite: ITP 100. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITP 140 Client Side Scripting (3 cr.)

Provides instruction in fundamentals of Internet application design, development, and deployment using client side scripting language(s). Recommended prerequisites: ITP 100, and a programming language or equivalent experience. Lecture 3 hours. Total 3 hours per week.

ITP 212 Visual Basic.NET II (4 cr.)

Includes instruction in application of advanced object-oriented techniques to application development. Course content emphasizes database connectivity, advanced controls, web forms, and web services using Visual Basic.NET. Prerequisite: ITP 112. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

ITP 234 Visual C++ Programming II (4 cr.)

Encompasses instruction in advanced concepts of foundation classes for graphical user interfaces. Recommended prerequisite: ITP 134. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

(LGL) Legal Administration

LGL 110 Introduction to Law and the Legal Assistant (3 cr.)

Introduces various areas of law in which a legal assistant may be employed. Includes study of the court system (Virginia and federal) as well as a brief overview of criminal law, torts, domestic relations, evidence, ethics, the role of the legal assistant, and other areas of interest. Corequisite: ENG 134. Lecture 3 hours per week.

LGL 115 Real Estate Law for Legal Assistants (3 cr.)

Studies law of real property . Focuses on practical knowledge and skills necessary for practicing legal assistants to review or draft deeds, contracts, leases, and deeds of trust. Introduces recording documents and searching public records. Corequisite: ENG 134. Lecture 3 hours per week.

LGL 116 Domestic Relations and Consumer Law (3 cr.)

Studies elements of a valid marriage, grounds for divorce and annulment, separation, defenses, custody, support, adoptions, and applicable tax consequences. Focuses on separation and pre-nuptial agreements, pleading and rules of procedure. May include specific federal and Virginia consumer laws. Lecture 3 hours per week.

LGL 125 Legal Research (3 cr.)

Provides an understanding of various components of a law library and emphasizes research skills through the use of digests, encyclopedias, reporter systems, codes, Shepards, citations, ALR and other research tools. Lecture 3 hours per week. (Prerequisite: LGL 110 or instructor approval).

LGL 195 Topics in: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. May also be used for special honors courses. May be repeated for credit. Variable hours.

LGL 215 Torts (3 cr.)

Studies fundamental principles of the law of torts, including preparation and use of pleadings and other documents involved in the trial of a civil action. Emphasizes personal injury and medical malpractice cases. Lecture 3 hours per week.

LGL 216 Trial Preparation and Discovery Practice (3 cr.)

Studies the preparation of a trial notebook, pretrial orders, use of interrogatories, depositions and other discovery tools used in assembling evidence in preparation for trial or an administrative hearing. Lecture 3 hours per week.

LGL 217 Trial Practice and the Law of Evidence (3 cr.)

Introduces civil and criminal evidence; kinds, degrees and admissibility of evidence; and methods and techniques of its acquisition. Emphasizes Virginia and federal rules of evidence. Focuses on elements of a trial and various problems associated with the trial of a civil or criminal case. Lecture 3 hours per week.

LGL 225 Estate Planning and Probate (3 cr.)

Introduces various devices used to plan an estate, including wills, trusts, joint ownership and insurance. Considers various plans in light of family situations and estate objectives. Focuses on practices involving administration of an estate including tax and threading. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

LGL 226 Real Estate Abstracting (3 cr.)

Reviews aspects of abstracting title to real estate, recordation of land transactions, liens, grantor-grantee indices, warranties, covenants, restrictions, and easements. Pre-requisite: LGL 115 Real Estate Law for Legal Assistants. Lecture 3 hours per week.

LGL 227 Administration of Decedent's Estates (3 cr.)

Teaches students how to administer an estate efficiently. Includes instruction on substantive areas of law and preparation of forms and provides samples for the efficient administration of decedent's estates. Lecture 3 hours per week.

LGL 295 Topics In: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. May also be used for special honors courses. May be repeated for credit. Variable hours.

(MAC) Machine Technology

MAC 101-102 Machine Shop I-II (8 cr. each)

Introduces the machinist to identification, care and use of precision tools and instruments. Emphasizes the operation of the drill press, lathe, power saw, grinder and milling machine. Covers the sharpening of lathe curring tools, safety and good housekeeping. Provides for operation and setup on the various types of precision grinders, milling machines, and drill presses. Lecture 5 hours. Laboratory 9 hours. Total 14 hours per week.

MAC 121-122-123 Numerical Control I-II-III (2 cr. each)

Focuses on numerical control techniques in metal forming and machine processes. Includes theory and practice in lathe and milling machine computer numerical control program writing, setup and operation. Lecture 1 hours. Laboratory 2 hours. Total 3 hours per week.

MAC 126 Introductory CNC Programming (3 cr.)

Introduces programming of computerized numerical control machines with hands-on programming and operation of CNC machines. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

MAC 127 Advanced CNC Programming (3 cr.)

Provides in-depth study of programming computerized numerical control machines. Prerequisite: MAC 121. Lecture 3 hours per week.

MAC 131 Machine Lab I (2 cr.)

Teaches fundamental machine shop operations, bench work, layout, measuring tools, and safety. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

MAC 150 Introduction to Computer-Aided Manufacturing (3 cr.)

Introduces computer aided manufacturing (CAM) with emphasis on programming of numerical control machinery. Teaches program writing procedures using proper language and logic and Smart Cam programming software to produce numerical control code for machines. Teaches basic computer usage, 2-D and 3-D CAD-CAM integration, and code-to machine transfer. Pre-requisite: MAC 122) Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

MAC 156 Mechanisms I (3 cr.)

Teaches techniques for disassembly, inspection, alignment and reassembly of industrial machinery. Includes hands on activities involving alignment of motor and pump shaft; tension of multi-belt sheaves; and the setting of end play and backlash in a gear box. Includes instruction on bearings involving the proper assembly and disassembly.

MAC 161-162 Machine Shop Practices I-II (3 cr. each)

Introduces safety procedures, bench work, hand tools, precision measuring instruments, drill presses, cut-off saws, engine lathes, manual surface grinders, and milling machines. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

MAC 163-164 Machine Shop Practices III-IV (3 cr. each)

Offers practice in the operation of the drill press, engine lathe, vertical milling machine, horizontal milling machine, and the surface grinder. Introduces practical heat treatment of directly hardenable steels commonly used in machine shops. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

MAC 221-222-223 Advanced Machine Tool Operations I-II-III (7 cr. each)

Focuses on advanced lathe and millwork with concentration on fits, finishes, inspection, quality control, and basic heat-treating. Includes design and construction of specific projects to determine the student's operational knowledge of all equipment. Lecture 4 hours. Laboratory 9 hours. Total 13 hours per week.

(MDL) Medical Laboratory

MDL 105 Phlebotomy (3- 4 cr.)
Introduces basic medical terminology, anatomy, physiology, components of health care delivery and clinical laboratory structure. Teaches techniques of specimen collection, specimen handling, and patient interactions. Lecture 2 hours. Laboratory 3-6 hours. Total 5-8 hours per week.

MDL 106 Clinical Phlebotomy (4 cr.)
Focuses on obtaining blood specimens, processing specimens, managing assignments, assisting with and/or performing specified tests, performing clerical duties and maintaining professional communication. Provides supervised learning in college laboratory/ and or cooperating agencies. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

MDL 195 Topics in Clinical Training (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May be repeated for credit. Variable hours.

(MEC) Mechanical Engineering Technology

MEC 100 Introduction to Engineering Technology (2 cr.)
Introduces professional fields of engineering technology. Covers the work of the engineering technologist, professional ethics, division of industrial practice, and engineering problem solving with hand calculator and computer applications. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

MEC 111 Materials for Industry (3 cr.)
Studies the nature, structure, properties, and typical applications of metallic, polymeric, ceramic, and composite materials. Promotes job entry understanding of basic material concepts. Focuses on applications of materials as well as the behavior of materials subjected to external stresses. Addresses as required the earth's limited material resources, energy efficient materials, dependence on foreign sources of materials, material systems, thermal processing, and electronic-related materials. Lecture 3 hours per week.

MEC 126 Computer Programming for Technologists (3 cr.)
Introduces computer software and programming. Covers programming for the microcomputer using high level languages. Teaches computer solutions of mathematical problems in applications such as circuit analysis and static equilibrium. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

MEC 131 Mechanics I-Statics for Engineering Technology (3 cr.)
Teaches Newton's laws, resultants and equilibrium of force systems, trusses and frames, determination of centroids, and distributed loads and moments of inertia. Introduces dry friction and force systems in space. Prerequisite: MTH 114. Lecture 3 hours per week.

MEC 132 Mechanics II-Strengths of Materials for Engineering Technology (3 cr.)
Teaches the concepts of stress and strain. Provides an analysis of stresses and deformations in loaded members, connectors, shafts, beams, columns, and combined stress. Prerequisite: MEC 131. Lecture 3 hours per week.

MEC 133 Mechanics III-Dynamics for Engineering Technology (2 cr.)
Focuses on rigid body mechanics including kinetics, kinematics, and applications to machine elements. Prerequisite: MEC 132. Lecture 2 hours per week.

MEC 195 Applications in Fluid Power (3 cr.)
Studies hydraulic power systems and basic circuits, pressure and flow, speed control, DCV's, cylinders, relief valves, check valves, pumps and motors, accumulators and fluid conditioning.

MEC 195 – Applications in Mechanical Systems I & II (3 cr.)
Teaches techniques for disassembly, inspection, lubrication, alignment and reassembly of industrial machinery. Includes hands on activities involving alignment of motor and pump shaft; tension of belt sheaves. Includes instruction on bearings, gears and pulley's involving the proper assembly and disassembly.

MEC 210 Machine Design (3 cr.)
Studies the design of machine elements for producing and transmitting power. Includes additional material in statics, strength of materials, dynamics, engineering materials and industrial

processes, including lubrication and friction. Emphasizes graphical kinematics of mechanisms, and discusses analytical design of machine components. Requires preparation of weekly laboratory reports.   Lecture 3 hours. Total 3 hours per week.

MEC 211-212 Machine Design I-II (4 cr. each)
Introduces analytical design of bearings, clutches, coupling, brakes, springs, gearing systems, and power shafting. Emphasizes methods of construction, machine parts and specifications of materials, and manufacturing processes. Prerequisite: MEC 133 or department approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

MEC 226 Practical Metallurgy (3 cr.)
Studies metals and their structure. Focuses on effects of hardening, tempering, and annealing upon the structure and physical properties of ferrous and non-ferrous metals. Covers the equipment and processes in heat-treating. Lecture 3 hours. Total 3 hours per week.

MEC 265 Fluid Mechanics (3 cr.)
Studies properties of fluids and fluid flow, Bernoulli's theorem, measuring devices, viscosity and dimensional

(MKT) Marketing

MKT 100 Principles of Marketing (3 cr.)
Presents principles, methods and problems involved in the distribution and marketing of goods, services, and ideas to consumers and organizational buyers. Discusses present-day problems and policies connected with distribution and sale of products, pricing, promotion, and buyer motivation. Examines variations of the marketing mix and market research, plus legal, social and ethical considerations in marketing. Lecture 3 hours per week.

MKT 110 Principles of Selling (3 cr.)
Presents fundamental aspects of personal selling, sales, and selling methods. Emphasizes professional sales techniques and ethics. Examines organization necessary for a well-coordinated sales effort, including the training of sales personnel for maximum efficiency in selling and organization of the sales division within the business enterprise. Introduces sales management in planning,

organizing, directing, and controlling the total sales effort. Lecture 3 hours per week.

MKT 170 Customer Service (1 cr.)
Introduces students to the concepts of marketing as they related to customer service. Teaches development of customer service training and implementation of strategies to improve customer relations and service. Includes lecture, role-playing and case studies. Lecture 1-2 hours per week.

MKT 195 Topics In: (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May also be used for special honors courses. May be repeated for credit. Variable hours.

MKT 216 Retail Organization and Management (3 cr.)
Examines the organization of the retail establishment to accomplish its goals in an effective and efficient manner. Includes study of site location, internal layout, store operations, and security. Examines the retailing mix, the buying or procurement process, pricing, and selling. Studies retail advertising, promotion and publicity as a coordinated effort to increase store traffic. Lecture 3 hours per week.

MKT 227 Merchandise Buying and Control (3 cr.)
Studies the merchandising cycle. Explores techniques used in the development of buying resources, merchandising plans, model stock, unit control, and inventory systems. Highlights merchandise selection, pricing strategies, and inventory control methods. Prerequisite: BUS 121, and MKT 100 or 216 or departmental approval. Lecture 3 hours per week.

MKT 228 Promotion (3 cr.)
Presents an overview of integrated marketing communications through advertising, public relations, personal selling and sales promotion. Focuses on coordinating these activities into an effective campaign to promote sales for a particular product, business, institution or industry. Lecture 3 hours per week.

MKT 281 Principles of Internet Marketing (3 cr.)
Introduces students to Internet marketing. Discusses how to implement marketing programs strategically and tactically using online

communications tools. Teaches e-marketing strategies. Lecture 3 hours per week.

MKT 282 Principles of E-Commerce (3 cr.)
Studies on-line business strategies, and the hardware and software tools necessary for Internet commerce. Includes the identification of appropriate target segments, the development of product opportunities, pricing structures, distribution channels and execution of marketing strategies. Lecture 3 hours per week.

MKT 295 Topics In: (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May also be used for special honors courses. May be repeated for credit. Variable hours.

MKT 297 Cooperative Education in Marketing (1-5 cr.)
Provides on-the-job training in approved business, industrial and service firms. Credit/work ratio not to exceed 1:5 hours. Variable hours per week.

MKT 298 Seminar & Project in Marketing (3 cr.)
Requires completion of a project or research report related to the student's occupational objectives and a study of approaches to the selection and pursuit of career opportunities in the field. May be repeated for credit. Prerequisite: Sophomore standing in the marketing curriculum, plus ACC 111 (or departmental approval). Lecture 3 hours per week.

(MTH) Mathematics

MTH 1 Developmental Mathematics (1-5 cr.)
Designed to bridge the gap between a weak mathematical foundation and the knowledge necessary for the study of mathematics courses in technical, professional, and transfer program. Topics may include arithmetic, algebra, geometry, and trigonometry. Credits not applicable toward graduation. Variable hours per week.

MTH 2 Basic Arithmetic (1-5 cr.)
Covers arithmetical principles and computations including whole numbers, fractions, decimals, percents, measurement, graph interpretation, geometric forms, and applications. Credits not applicable toward graduation. BSK 1-5 modular instruction also covers the material in MTH 2. Variable hours per week.

MTH 3 Basic Algebra I (1-5 cr.)
Covers the topics of Algebra I including real numbers, equations and inequalities, exponents, polynomials, Cartesian coordinate system, rational expressions, and applications. Credits not applicable toward graduation. Prerequisites: a placement recommendation for MTH 3 and Arithmetic or equivalent. BSK 6-10 modular instruction also covers the material in MTH 3.Variable hours per week.

MTH 4 Basic Algebra II (1-5 cr.)
Expands upon the topics of Algebra I including rational expressions, radicals and exponents, quadratic equations, systems of equations, and applications. Credits not applicable toward graduation. Prerequisites: a placement recommendation for MTH 4 and Algebra I or equivalent. Variable hours per week.

MTH 6 Developmental Geometry (1-5 cr.)
MTH 6 content is now only available through modular instruction, BSK 5. Please refer to Developmental Studies in this *Catalog*.

MTH 9 Pre-Algebra (1-5 cr.)
MTH 9 content is now only available through modular instruction, BSK 6. Please refer to Developmental Studies in this *Catalog*.

MTH 103-104 Applied Technical Mathematics I-II (3 cr. each)
Presents a review of arithmetic, elements of algebra, geometry, and trigonometry. Directs applications to specialty areas. Prerequisites: a placement recommendation for MTH 103 and one unit of high school mathematics or equivalent. Lecture 3 hours per week.

MTH 113-114 Engineering Technical Mathematics I-II (5 cr. each)
Presents algebra, geometry, trigonometry, and an introduction to calculus. Includes solution of linear and quadratic equations, trigonometric curve sketching, logarithms, ratio, proportion, variation, vectors, and the binomial theorem. Prerequisites: a placement recommendation for MTH 113 and Algebra I and Geometry, or Algebra I and Algebra II, or equivalent. Lecture 5 hours per week.

MTH 120 Introduction to Mathematics (3 cr.)

Introduces number systems, logic, basic algebra, and descriptive statistics. Prerequisites: a placement recommendation for MTH 120 and one unit of high school mathematics or equivalent. (Intended for occupational/technical programs.) Lecture 3 hours per week.

MTH 121-122 Fundamentals of Mathematics I-II (3 cr. each)

Covers concepts of numbers, fundamental operations with numbers, formulas and equations, graphical analysis, binary numbers, Boolean and matrix algebra, linear programming, and elementary concepts of statistics. Prerequisites: placement recommendation for MTH 121 and one unit of high school mathematics or equivalent. (Intended for occupational/technical programs.) Lecture 3 hours per week.

MTH 126 Mathematics for Allied Health (2-3 cr.)

Presents scientific notation, precision and accuracy, decimals and percents, ratio and proportion, variation, simple equations, techniques of graphing, use of charts and tables, logarithms, and the metric system. Prerequisites: a placement recommendation for MTH 126 and one unit of high school mathematics or equivalent. Lecture 2-3 hours per week.

MTH 151 Mathematics for the Liberal Arts I (3 cr.)

Presents topics in sets, logic, numeration systems, geometric systems, and elementary computer concepts. Prerequisites: a placement recommendation for MTH 151 and Algebra I, Algebra II and Geometry or equivalent. Lecture 3 hours per week.

MTH 157 Elementary Statistics (3 cr.)

Presents elementary statistical methods and concepts including descriptive statistics, estimation, hypothesis testing, linear regression, and categorical data analysis. (Credit will not be awarded for both MTH 157 and MTH 240 or MTH 157). Prerequisites: Algebra I, Algebra II and Geometry and a placement recommendation for MTH 157. Lecture 3 hours per week.

MTH 163 Precalculus I (3 cr.)

Presents college algebra, matrices, and algebraic, exponential, and logarithmic functions. Prerequisites: a placement recommendation for MTH 163 and Algebra I, Algebra II, and Geometry or

equivalent. (Credit will not be awarded for both MTH 163 and MTH 166.) Lecture 3 hours per week.

MTH 164 Precalculus II (3 cr.)

Presents trigonometry, analytic geometry, and sequences and series. Prerequisite: MTH 163 or equivalent. (Credit will not be awarded for both MTH 164 and MTH 168.) Lecture 3 hours per week.

MTH 166 Precalculus with Trigonometry (4-5 cr.)

Presents college algebra, analytic geometry, trigonometry, and algebraic exponential and logarithmic functions. Prerequisite: a placement recommendation for MTH 166 and Algebra 1, Algebra II, and Geometry or equivalent. (Credit will not be awarded for both MTH 163 and MTH 166). Lecture 4-5 hours per week.

MTH 173 Calculus with Analytic Geometry I (5 cr.)

Presents analytic geometry and the calculus of algebraic transcendental functions including the study of limits, derivatives, differentials, and introduction to integration along with their applications. Designed for mathematical, physical, and engineering science programs. Prerequisites: a placement recommendation for MTH 173 and four units of high school mathematics including Algebra I, Algebra II, Geometry and Trigonometry or equivalent. Completion of MTH 163 or MTH 166 is highly recommended. (Credit will not be awarded for more than one of MTH 173, MTH 175, or MTH 273.) Lecture 5 hours per week.

MTH 174 Calculus with Analytic Geometry II (5 cr.)

Continues the study of analytic geometry and the calculus of algebraic and transcendental functions including rectangular, polar, and parametric graphing, indefinite and definite integrals, methods of integration, and power series along with applications. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 173 or equivalent. (Credit will not be awarded for more than one of MTH 174, MTH 176, or MTH 274.) Lecture 5 hours per week.

MTH 175 Calculus of One Variable I (3 cr.)

Presents differential calculus of one variable including the theory of limits, derivatives, differentials, anti-derivatives and applications to algebraic and transcended functions. Designed for mathematical, physical, and engineering

science programs. Prerequisites: a placement recommendation for MTH 175 and four units of high school mathematics including Algebra I, Algebra II, Geometry and Trigonometry or equivalent. Completion of MTH 163 or MTH 166 is highly recommended. (Credit will not be awarded for more than one of MTH 173, MTH 175 or MTH 273.) Lecture 3 hours per week.

MTH 176 Calculus of One Variable II (3 cr.)
Continues the study of integral calculus of one variable including indefinite integral, definite integral and methods of integration with applications to algebraic and transcended functions. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 175 or equivalent. (Credit will not be awarded for more than one of MTH 174, MTH 176 or MTH 274.) Lecture 3 hours per week.

MTH 177 Introductory Linear Algebra (2 cr.)
Covers matrices, vector spaces, determinants, solutions of systems of linear equations, and eigen values. Designed for mathematical, physical, and engineering science programs. Co-requisite: MTH 175. Completion of MTH 163 or MTH 166 is required. Lecture 2 hours per week.

MTH 240 Statistics (3 cr.)
Presents an overview of statistics, including descriptive statistics, elementary probability, probability distributions, estimation, hypothesis testing, and correlation and regression. Prerequisite: Completion of MTH 163 or equivalent. Lecture 3 hours per week.

MTH 241 Statistics I (3 cr.)
Covers descriptive statistics, elementary probability, probability distributions, estimation, and hypothesis testing. Prerequisites: Completion of MTH 163 or equivalent. Lecture 3 hours per week.

MTH 242 Statistics II (3 cr.)
Continues the study of estimation and hypothesis testing with emphasis on correlation and regression, analysis of variance, chi-square tests, and non-parametric methods. Prerequisite: MTH 241 or equivalent. Lecture 3 hours per week.

MTH 271 Applied Calculus I (3 cr.)
Presents limits, continuity, differentiation of algebraic and transcendental functions with applications, and an introduction to integration. Prerequisite: MTH 163 or MTH 166 or equivalent. (Credit will not be awarded for both MTH 270 and MTH 271.) Lecture 3 hours per week.

MTH 272 Applied Calculus II (3 cr.)
Covers techniques of integration, multivariable calculus, and an introduction to differential equations. Prerequisite: MTH 271 or equivalent. Lecture 3 hours per week.

MTH 273 Calculus I (4 cr.)
Presents topics in differential calculus of one variable including the theory of limits, derivatives, differentials, definite and indefinite integrals and applications to algebraic and transcendental functions. Designed for mathematical, physical, and engineering science programs. Prerequisites: a placement recommendation for MTH 273 and four units of high school mathematics including Algebra I, Algebra II, Geometry and Trigonometry or equivalent. Completion of MTH 163 or MTH 166 is highly recommended. (Credit will not be awarded for more than one of the MTH 173, MTH 175 or MTH 273.) Lecture 3 hours per week.

MTH 277 Vector Calculus (4 cr.)
Presents vector valued functions, partial derivatives, multiple integrals, and topics from the calculus of vectors. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 174 or equivalent. Lecture 4 hours per week.

MTH 279 Ordinary Differential Equations (4 cr.)
Introduces ordinary differential equations. Includes first order differential equations, second and higher order ordinary differential equations with application. Designed for mathematical, physical, and engineering science programs. Prerequisite: MTH 174 or equivalent. Lecture 4 hours per week.

MTH 285 Linear Algebra (3 cr.)
Covers matrices, vector spaces, determinants, solutions of systems of linear equations, basis and dimension, eigen values, and eigen vectors. Designed for mathematical, physical and engineering science programs. Prerequisite: MTH 174 or equivalent. Lecture 3 hours per week.

MTH 295 Topics in: (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May be also used for special honors courses. May be repeated for credit. Variable hours.

(MTS) Motorsports Management and Technology

MTS 100 Introduction to Motorsports Management (3 cr.)
Provides a survey of the motorsports industry. Includes history, growth, and economic impact of motorsports. Includes sanctioning organizations, classification and characteristics of vehicles, related businesses and industries, financial issues, career opportunities, and other motorsports-related topics. Lecture: 3 hours per week.

MTS 110 Introduction to Motorsports Marketing (3 cr.)
Provides an overview of the principles of marketing goods and services related to the motorsports industry. Includes motorsports promotion, motorsports products, media impact, use of technology in motorsports marketing, motorsports sponsors, hospitality management, public relations, and other topics related to motorsports marketing. Lecture: 3 hours per week.

MTS 205 Motorsports Safety, Environmental, and Transport Issues (3 cr.)
Provides an overview of the safety, environmental, and transportation issues related to the motorsports industry. Includes workplace regulations; materials handling; transport of vehicles and other equipment; moving complex operations; housing of personnel; DOT regulations; and other issues related to the safety, environment, and transport in the motorsports industry. Lecture : 3 hours per week.

(MUS) Music

MUS 121-122 Music Appreciation I-II (3 cr. each)
Increases the variety and depth of the student's interest, knowledge, and involvement in music and related cultural activities. Acquaints the student with traditional and twentieth century music literature, emphasizing the relationship music has as an art form with man and society. Increases the student's awareness of the composers and performers of all eras through listening and concert experiences. Lecture 3 hours per week.

MUS 131-132 Class Voice I-II (2 cr. each)
Introduces the many aspects of singing from the physical act through the aesthetic experience. The course is designed for the beginning singer who desires vocal improvement, and for the voice major as an addition to and extension of skills and knowledge necessary for artistic development. Introduces appropriate repertoire. Lecture 1 hour per week. Laboratory 2 hours per week. Total 3 hours per week.

(NAS) Natural Sciences

NAS 105 Natural Science Topics for Modern Society (3 cr.)
Emphasizes method of the scientific disciplines as applied to selected topics pertinent to modern society. Lecture 3 hours per week.

NAS 110 Elementary Physical Science (3 cr.)
Introduces physical concepts such as measurements, mechanics, heat, light, and electricity and magnetism. Lecture 2 hours per week. Recitation and laboratory 2 hours per week. Total 4 hours per week.

(NUR) Nursing

NUR 25 Nursing Assistant (3 cr.)
Teaches fundamentals of patient care with laboratory experience in foods and fluids, elimination, moving patients, morning, afternoon and evening care, care of hospital equipment, means of providing special comforts and safety, and admission and discharge procedures. Lecture 2 hours. Laboratory 4 hours. Total 6 hours per week.

NUR 27 Nursing Assistant Advanced (3 cr.)
A course providing theory in basic nursing care of the resident in the long-term care facility or home setting. This course will follow the Virginia State Health Department and Virginia Board of Nursing Curriculum. It is offered in conjunction with NUR 25 and NUR 98.

NUR 98 Seminar & Project (3 cr.)
A course providing theory, demonstration and practical clinical experience in measuring vital signs. It is offered concurrently in conjunction with NUR 27 and NUR 25.

NUR 111 - Nursing I (7 cr.)
Introduces nursing principles including concepts of health and wellness and the nursing process. Develops nursing skills to meet the biopsychosocial needs of individuals across the lifespan. Includes

math computational skills, basic computer instruction related to the delivery of nursing care, communication skills, introduction to nursing, health, the health care system, legal aspects of nursing care, diagnostic testing, assessment, teaching and learning, asepsis, body mechanics and safety, personal care, activity/rest, wound care, nutrition, elimination, oxygenation, fluid and electrolytes, pain control, medication administration, aging populations and pre/post operative care. Provides supervised learning experiences. Lecture 1-7 hours. Laboratory 2-21 hours. Total 9-22 hours per week.

NUR 112 – Nursing II (8 cr.)
Focuses on the nursing care of adults experiencing changes along the health/illness continuum that are common, well-defined, and have predictable outcomes. Includes math computational skills, basic computer instruction related to the delivery of nursing care; acid-base balance, gastrointestinal, genitourinary, musculoskeletal; immunology, oncology, sensorineural, infectious diseases, endocrine, respiratory and blood disorders and care of the dying client. Provides supervised learning experiences in college nursing laboratories and/or cooperating agencies. Lecture 1-7 hours. Laboratory 3-21 hours. Total: 9–22 hours per week.

NUR 114 Geriatric Nursing (3-4 cr.)
Presents theoretical and clinical nursing aspects of the aging population. Includes the aging process, psychological aspects, common age-related disorders, pharmacologic aspects, care facilities, and relationships between elders and caregivers. Lecture 1-4 hours. Laboratory 0-9 hours. Total 3-13 hours per week.

NUR 135 - Drug Dosage Calculations (1 cr.)
Focuses on apothecary, metric, household conversion in medication dosage calculation for adult and pediatric clients. Provides a practical approach to learning to calculate and prepare medications and solutions. Includes calculating intravenous flow rates. Lecture 1-2 hours per week.

NUR 202 - Medical/Surgical Nursing I (4 cr.)
Focuses on the care of individuals/families requiring complex or surgical treatment. Uses all components of the nursing process with increasing degrees of skill. Includes math computational skills and basic computer instruction related to the delivery of nursing care; cardiac, neurological, renal, burn disorders and clients experiencing shock. Provides

supervised learning experiences in college nursing laboratories and/or cooperating agencies. Lecture 1-3 hours. Laboratory 2-9 hours. Total 5-10 hours per week.

NUR 208 - Acute Medical-Surgical Nursing (5 cr.)
Focuses on the use of nursing process to provide care to individuals/families with acute medical or surgical problems or to prevent such problems. Includes math computational skills and basic computer instruction related to the delivery of nursing care. Provides supervised learning experiences in cooperating agencies. Lecture 1-5 hours. Laboratory 2-15 hours. Total 7-16 hours per week.

NUR 226 - Health Assessment (3 cr.)
Introduces the systematic approach to obtaining a health history and performing a physical assessment. Lecture 0-2 hours. Laboratory 2-9 hours. Total 3-9 hours per week.

NUR 245 - Maternal/Newborn Nursing (3 cr.)
Develops nursing skills in caring for families in the antepartum, intrapartum, and post-partum periods. Lecture 1-3 hours. Laboratory 0-9 hours. Total 3-9 hours per week.

NUR 246 - Parent/Child Nursing (3 cr.)
Develops nursing skills in caring for both well and ill children in a variety of settings. Emphasizes theories of growth and development and the family as a unit. Lecture 1-3 hours. Laboratory 0-9 hours. Total 3-9 hours per week.

NUR 247 - Psychiatric/Mental Health Nursing (3 cr.)
Develops nursing skills in caring for individuals, families, and/or groups with mental health needs. Explores various treatment models, diagnostic categories, and rehabilitative measures. Lecture 1-3 hours. Laboratory 0-9 hours. Total 3-9 hours per week.

NUR 254 - Dimensions of Professional Nursing (2 cr.)
Explores the role of the professional nurse. Emphasizes nursing organizations, legal and ethical implications, and addresses trends in management and organizational skills. Explores group dynamics, relationships, conflicts, and leadership styles. Lecture 1-2 hours per week.

(PBS) Public Service

PBS 120 Introduction to Community and Social Service (3 cr.)
Examines the basic principles, scope and functions of community and social service work including practices and current trends. Examines institutions to determine why they change, or fail to change. Introduces students to careers in community and social service work at federal, state, and municipal levels. Lecture 3 hours per week.

PBS 265 Interviewing (3 cr.)
Analyzes the principles and techniques of interviewing in various organizational settings. Examines reliability and validity of information gained through information interviewing, employment and selection interviewing, performance appraisal and disciplinary interviewing, as well as counseling interviewing. Lecture 3 hours per week.

(PED) Physical Education and Recreation

PED 103-104 Aerobic Fitness I-II (1-2 cr. each)
Develops cardiovascular fitness through activities designed to elevate and sustain heart rates appropriate to age and physical conditions. Variable hours per week.

PED 109 Yoga (1-2 cr.)
Focuses on the forms of yoga training emphasizing flexibility. Lecture 1-2 hours. Laboratory 0-2 hours. Total 1-3 hours per week.

PED 111-112 Weight Training I-II (1-2 cr. each)
Focuses on muscular strength and endurance training through individualized workout programs. Teaches appropriate use of weight training equipment. Variable hours per week.

PED 117 Fitness Walking (1 cr.)
Teaches content and skills needed to design, implement, and evaluated an individualized program of walking, based upon fitness level. Laboratory 2 hours per week.

PED 123-124 Tennis I-II (1-2 cr. each)
Teaches tennis skills with emphasis on stroke development and strategies for individual and team play. Includes rules, scoring, terminology, and etiquette. Variable hours per week.

PED 135-136 Bowling I-II (1-2 cr. each)
Teaches basic bowling skills and techniques, scoring, rules, etiquette, and terminology. Variable hours per week.

PED 141-142 Swimming I-II (1-2 cr. each)
Introduces skills and methods of swimming strokes. Focuses on safety and physical conditioning. Variable hours per week.

PED 160 Modern Dance (1-2 cr.)
Teaches the basic techniques of creative dance. Skills include self-expression, contemporary routines, dance forms, and basic choreography. Lecture 1-2 hours. Laboratory 0-2 hours. Total 1-3 hours per week.

PED 195 Topics in: (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May be also used for special honors courses. May be repeated for credit. Variable hours.

PED 206 Sports Appreciation (2 cr.)
Focuses on the history, trends, rules, methods, strategy, and terminology of selected sports activities. Provides student awareness as a spectator and/or participant. Lecture 2 hours per week.

PED 245 Lifeguard Training (2 cr.)
Introduces basic swimming and non-swimming rescues, swimming approaches and carries, water survival, first aid and safety. Focuses on preparation for the American Red Cross Lifeguard Certificate. Prerequisite: Ability to swim continuously for 500 yards for a minimum of 100 yards each of crawl/freestyle, breaststroke, and sidestroke; submerge to a minimum of 7 feet, retrieve a 10 pound object and return it to the surface; tread water for 2 minutes using legs only; and be 15 years of age by the first class. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

(PHI) Philosophy

PHI 100 Introduction to Philosophy (3 cr.)
Presents an introduction to philosophical problems and perspectives with emphasis on the systematic questioning of basic assumptions about meaning, knowledge, reality, and values. Lecture 3 hours per week.

PHI 115 Practical Reasoning (3 cr.)
Studies informal logic and language techniques as they relate to reasoning and argument. Provides practice in analyzing arguments and constructing sound arguments. Lecture 3 hours per week.

PHI 220 Ethics (3 cr.)
Provides a systematic study of representative ethical systems. Lecture 3 hours per week.

PHI 226 Social Ethics (3 cr.)
Provides a critical examination of moral problems and studies the application of ethical concepts and principles to decision-making. Topics may include abortion, capital punishment, euthanasia, man and the state, sexuality, war and peace, and selected issues of personal concern. Lecture 3 hours per week.

(PHT) Photography

PHT 101-102 Photography I-II (3 cr. each)
Teaches principles of photography and fundamental camera techniques. Requires outside shooting and lab work. Lecture 1 hour. Laboratory 4 hours. Total 5 hours per week.

(PHY) Physics

PHY 130 Survey of Applied Physics (3 cr.)
Surveys topics such as heat, electricity, and light with emphasis on practical applications. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

PHY 201-202 General College Physics I-II (4 cr. each)
Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. Prerequisites: MTH 163 or MTH166 equivalent. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PHY 241-242 University Physics I-II (4 cr. each)
Teaches principles of classical and modern physics. Includes mechanics, wave phenomena, heat, electricity, magnetism, relativity, and nuclear physics. Prerequisite for PHY 241: MTH 173 or MTH 273 or divisional approval. Prerequisite for PHY 242: MTH 174 or MTH 274 or divisional approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

(PLS) Political Science

PLS 211-212 U.S. Government I-II (3 cr. each)
Teaches structure, operation, and process of national, state, and local governments. Includes in-depth study of the three branches of the government and of public policy. Lecture 3 hours per week.

PLS 241 International Relations I (3 cr.)
Teaches geographic, demographic, economic, ideological, and other factors conditioning the policies of countries and discusses conflicts and their adjustment. Lecture 3 hours per week.

PLS 242 International Relations II (3 cr.)
Teaches foreign policies of the major powers in the world community with an emphasis on the role of the United States in international politics. Lecture 3 hours per week.

(PNE) Practical Nursing

PNE 135 Maternal and Child Health Nursing (5 cr.)
Examines pregnancy, childbirth, and postpartum and newborn care from a family centered approach. Covers complications related to childbearing. Emphasizes growth and development and exploration of common childhood disorders at various stages. Lecture 4 hours. Laboratory 3 hours. Total 7 hours per week.

PNE 145 Trends in Practical Nursing (1 cr.)
Studies the role of the Licensed Practical Nurse. Covers legal aspects, organizations, and opportunities in practical nursing. Assists students in preparation for employment. Lecture 1 hour per week.

PNE 146 Fundamentals of Practical Nursing (6 cr.)

Introduces students to practical nursing history, legal and ethical aspects, and current trends. Teaches nursing knowledge and skills with emphasis on meeting basic patient needs. Utilizes nursing process. Provides learning experiences through classroom instruction, laboratory practices, and supervised clinical experience. Lecture 2 hours. Laboratory 12 hours. Total 14 hours per week.

PNE 151 Medical-Surgical Nursing II (4 cr.)

Studies etiology, symptoms, prescribed treatment, and experiences in the nursing care of patients with selected disorders. Selects learning experiences to correlate related patient care with classroom instruction whenever possible. Provides observational experiences when available. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PNE 152 Medical-Surgical Nursing II (4-5 cr.)

Studies etiology, symptoms, prescribed treatment, and experiences in the nursing care of patients with selected disorders. Lecture 3-4 hours. Laboratory 3-6 hours. Total 6-9 hours per week.

PNE 155 Body Structure and Function (3-4 cr.)

Studies the structure and function of the body. Lecture 3-4 hours per week.

PNE 158 Mental Health and Psychiatric Nursing (1-2 cr.)

Recognizes emotional needs of patients. Provides knowledge of the role that emotions play. Enables students to understand their own behavior as well as patient behavior. Lecture 1-2 hours per week.

PNE 161 Nursing in Health Changes I (6-7 cr.)

Focuses on nursing situations and procedures necessary to assist individuals in meeting special needs related to human functions. Lecture 2-4 hours. Laboratory 6-15 hours. Total 10-17 hours per week.

PNE 162 Nursing in Health Changes II (10-11 cr.)

Continues the focus on nursing situations and procedures necessary to assist individuals in meeting special needs related to human functions. Lecture 4-6 hours. Laboratory 12-21 hours. Total 18-25 hours per week.

PNE 163 Nursing in Health Changes III (8-9 cr.)

Continues the focus on nursing situations and procedures necessary to assist individuals in meeting special needs related to human functions. Lecture 4-5 hours. Laboratory 9-15 hours. Total 14-19 hours per week.

PNE 173 Pharmacology for Practical Nurses (1-2 cr.)

Studies history, classification, sources, effects, uses and legalities of drugs. Teaches problem solving skills used in medication administrations. Emphasizes major drug classes and specific agents within each class. Lecture 1-2 hours per week.

PNE 174 Applied Pharmacology for Practical Nurses (1-2 cr.)

Applies problem-solving skills in preparing and administering medications. Lecture 0-1 hour. Laboratory 3-6 hours. Total 3-6 hours per week.

PNE 181-182 Clinical Experience I-II (5 cr. each)

Provides guided nursing experiences in the hospital setting. Practices skills and applies principles of nursing basic areas. Includes supervision in administration of medicines. Encourages students to develop basic skills in analyzing patient needs and making nursing decisions. Laboratory 15-18 hours per week.

PNE 195 Topics in: (1-5 cr.)

Provides an opportunity to explore topical areas of interest to or needed by students. Variable hours.

(PNT) Printing

PNT 110 Survey of Reproduction Processes (3 cr.)

Presents history of printing, job safety, and career opportunities. Evaluates various printing processes including letterpress, offset, gravure, heat transfer, flexographic and screen printing. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

PNT 131 Principles of Lithography I (4 cr.)

Presents principles of lithography printing, its safety practices and equipment operation. Covers job planning, copy preparation, stripping, pre-sensitized plates, small press operation, ink, paper handling, finishing operations. Corequisite: PNT 155 or department approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PNT 132 Principles of Lithography II (4 cr.)

Studies lithographic process including more complex types of production techniques and operations. Covers close register work, 2-color printing, types of imposition, ruled forms, scribing, stripping multiple page flats. Prerequisite: PNT 131 or department approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PNT 135 Print Imaging (2 cr.)

This course is designed to introduce the student of graphic imaging as it relates to the printing industry. Specific topics will include capturing and reproduction of line art, line copy and continuous tone by conventional and electronic methods. Co-requisite: PNT 131 or departmental approval. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

PNT 141-142 Printing Applications I-II (3 cr. each)

Provides instruction in the production of college-related publications and print shop management. Provides classroom and laboratory experiences in photography, layout and design, copy preparation, presswork, inventory control and production management. Lecture 1 hour. Laboratory 4 hours. Total 5 hours per week.

PNT 211-212-213 Electronic Publishing I-II-III (3 cr. each)

Teaches principles of typography and graphics, word processing and page layout. Survey of electronic publishing, hardware systems, peripherals, laser printers and image setters. Concentrated use of application software utilizing Macintosh microcomputers to achieve a high degree of proficiency in completing a variety of laboratory projects. Prerequisite: PNT 131; Co-requisites: PNT 221-222-223 or department approval. Lecture 2 hours, laboratory 2 hours. Total 4 hours per week.

PNT 221-222-223 Layout and Design I-II-III (3 cr. each)

Analyzes production art necessary to prepare camera-ready copy for photomechanical printing. Teaches basic drawing concepts and techniques with emphasis on design principles, and care and use of instruments. Studies production methods to prepare ruled forms, overlays, bendays, bleeds, two and multicolor forms for advertising and publication work. Prerequisite: PNT 131; Co-requisites: PNT

211, 212, 213 or department approval. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

PNT 231 Lithographic Chemistry I (2 cr.)

Introduces chemistry and how it involves the printer. Covers the role of water in lithography, pH of solutions, plate coatings and film emulsions. Studies relationship of paper and ink, emulsification, water logging, effect of humidity, and causes and control of static electricity. Prerequisite: PNT 132 or department approval. Lecture 2 hours per week.

PNT 241 Advanced Printing Applications (3 cr. each)

Continues PNT 141 and 142 to provide additional experience in production and shop management. Lecture 1 hour per week. Laboratory 4 hours per week. Total 5 hours per week.

PNT 245 Production Planning and Estimating (4 cr.)

Teaches theory and gives experience in planning and quality control for printing production. Includes printing plant supervision and management techniques, organization, maintenance and inventory control systems. Discusses estimating for printing, including job layout, purchasing, pricing and trade customs. Prerequisite: PNT 260, 264 and BUS 121, or department approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PNT 251-252 Offset Press Operations I-II (4 cr. each)

Explains procedures for practical operation of offset equipment including adjustments, setup make-ready, and imposition for single-color and multi-color production jobs. Studies feeder registration, printing and delivery systems, roller and blanket problems, ink and dampening problems, and quality control. Prerequisite: PNT 132 or department approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PNT 260 Color Separation (3 cr.)

Introduces study of color theories and principles as they apply to process color printing. Provides classroom and laboratory experiences in dot gain, densitometry, creation and manipulation of color images and electronic color separation. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

PNT 264 Color Image Assembly (4 cr.)
Teaches principles of color image assembly. Includes types of mechanical art; stripping materials, register systems; process color stripping; spot color stripping; complementary flats; use of color charts and butting screen tints. Prerequisite: PNT 260 or department approval. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

(PSY) Psychology

PSY 126 Psychology for Business and Industry (3 cr.)
Focuses on the application of psychology to interpersonal relations and the working environment. Includes topics such as group dynamics, motivation, employee-employer relationship, interpersonal communications, and techniques for selection and supervision of personnel. Lecture 3 hours per week.

PSY 200 Principles of Psychology (3 cr.)
Surveys the basic concepts of psychology. Covers the scientific study of behavior, behavioral research methods and analysis, and theoretical interpretations. Includes topics such as: physiological mechanisms, sensation/perception, motivation, learning, personality, psychopathology, therapy, and social psychology. Lecture 3 hours per week.

PSY 201-202 Introduction to Psychology I-II (3 cr. each)
Examines human and animal behavior, relating experimental studies to practical problems. Includes topics such as sensation/ perception, learning, memory, motivation, emotion, stress, development, intelligence, personality, psychopathology, therapy, and social psychology. Lecture 3 hours per week.

PSY 215 Abnormal Psychology (3 cr.)
Explores historical views and current perspectives of abnormal behavior. Emphasizes major diagnostic categories and criteria, individual and social factors of maladaptive behavior, and types of therapy. Includes methods of clinical assessment and research strategies. Prerequisite: PSY 200 or PSY 201. Lecture 3 hours per week.

PSY 230 Developmental Psychology (3 cr.)
Studies the development of the individual from conception to death. Follows a life-span perspective on the development of the person's physical, cognitive, and psychosocial growth. Lecture 3 hours per week.

PSY 231 Life Span Human Development I (3 cr.)
Investigates human behavior through the life cycle. Describes physical, cognitive, and psycho-social aspects of human development from conception to death. Lecture 3 hours per week

PSY 235 Child Psychology (3 cr.)
Studies development of the child from conception to adolescence. Investigates physical, intellectual, social, and emotional factors involved in the child's growth. Lecture 3 hours per week.

PSY 236 Adolescent Psychology (3 cr.)
Studies development of the adolescent. Investigates physical, intellectual, social, and emotional factors of the individual from late childhood to early adulthood. Lecture 3 hours per week.

PSY 295 Topics in: (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May be also used for special honors courses. May be repeated for credit. Variable hours.

(REA) Real Estate

REA 100 Principles of Real Estate (4 cr.)
Examines practical applications of real estate principles. Includes a study of titles, estates, land descriptions, contracts, legal instruments and concepts, real estate mathematics, financing, agency, appraisal, fair housing, and management of real estate. Lecture 4 hours per week.

(REL) Religion

REL 200 Survey of the Old Testament (3 cr.)
Surveys books of the Old Testament, with emphasis on prophetic historical books. Examines the historical and geographical setting and place of the Israelites in the ancient Middle East as background to the writings. Lecture 3 hours per week.

REL 210 Survey of the New Testament (3 cr.)
Surveys books of the New Testament, with special attention upon placing the writings within their historical and geographical setting. Lecture 3 hours per week.

REL 230 Religions of the World (3 cr.)
Introduces the religions of the world with attention to origin, history, and doctrine. Lecture 3 hours per week.

REL 235 Major Religious Thinkers (3 cr.)
Examines the works of one or more important people in religious thought. Lecture: 3 hours per week.

REL 255 Selected Problems and Issues in Religion (3 cr.)
Examines selected problems and issues of current interest in religion. May be repeated for credit. Lecture 3 hours per week.

(SAF) Safety

SAF 126 Principles of Industrial Safety (3 cr.)
Teaches principles and practices of accident prevention, analysis of accident causes, mechanical safeguards, fire prevention, housekeeping, occupational diseases, first aid, safety organization, protection equipment and general safety principles and promotion. Lecture 3 hours per week.

SAF 195 Shop Safety (1 cr.)
This course will teach general shop safety (correct clothing, eye protection, hair protection, foot protection, etc.,) and government guidelines (MSDA sheets, hazardous material, OSHA guidelines and confined spaces). Lecture 1 hour per week.

SAF 246 Hazardous Chemicals, Materials, and Waste in the Workplace (3 cr.)
Introduces the rules and regulations governing use, exposure to, and disposal of hazardous chemicals, materials and waste by-products. Discusses OSHA "Right to Know Laws," EPA and RCRA regulations. Provides the techniques to interpret and understand the code of Federal Regulations. Emphasis on management mandates, strategies, and options to comply with these regulations. Lecture 3 hours per week.

(SOC) Sociology

SOC 200 Principles of Sociology (3 cr.)
Introduces fundamentals of social life. Presents significant research ad theory in areas such as culture, social structure, socialization, deviance, social stratification, and social institutions. A student taking SOC 200 may not enroll in SOC 201 or 202. Lecture 3 hours per week

SOC 201-202 Introduction to Sociology I-II (3 cr. each)
Introduces basic concepts and methods of sociology. Presents significant research and theory in areas such as socialization, group dynamics, gender roles, minority group relations, stratification, deviance, culture, community studies. Includes population, social change, and social institutions (family, education, religion, political system, economic system). SOC 201 is a prerequisite for SOC 202. Lecture 3 hours per week.

SOC 215 Sociology of the Family (3 cr.)
Studies topics such as marriage and family in social and cultural context. Addresses the single scene, dating and marriage styles, child-rearing, husband and wife interaction, single parent families, alternative lifestyles. Prerequisite: SOC 200 or SOC 201, or permission of instructor. Lecture 3 hours per week.

SOC 235 Juvenile Delinquency (3 cr.)
Studies demographic trends, casual theories, and control of juvenile delinquency. Presents juveniles' interaction with family, schools, police, courts, treatment programs, and facilities. Prerequisite: ADJ 100 and SOC 201, or permission of instructor. Lecture 3 hours per week.

SOC 236 Criminology (3 cr.)
Studies research and causal theories of criminal behavior. Examines crime statistics, crime victims, and types of criminal offenses. Introduces role of police, judicial and correctional system in treatment and punishment of offenders. Is also approved for ADJ Criminology. Prerequisites: ADJ 100, SOC 201, SOC 235 or permission of instructor. Lecture 3 hours per week.

SOC 268 Social Problems (3 cr.)
Applies sociological concepts and methods to analysis of current social problems. Includes delinquency and crime, mental illness, drug addiction, alcoholism, sexual behavior, population crisis, race relations, family and community disorganization, poverty, automation, wars, and disarmament. Prerequisite: SOC 200, SOC 201 or permission of instructor. Lecture 3 hours per week.

(SPA) Spanish

SPA 101-102 Beginning Spanish I-II (4 cr. each)
Introduces understanding, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure. May be also used for special honors classes. May include an additional hour of oral drill and practice per week. Lecture 4 hours per week.

SPA 103-104 Basic Spoken Spanish I-II (3 cr. each)
Teaches oral communications and introduces cultural mores and customs to students with no prior instruction in the language. Lecture: 3 hours per week.

SPA 150 Spanish for Law Enforcement (3 cr.)
Introduces Spanish to those in the criminal justice field. Emphasizes oral communication and practical first-hand police and justice vocabulary. May include oral drill and practice. Lecture 3 hours per week.

SPA 163 - Spanish for Health Professionals I (3 cr.)
Introduces Spanish to those in the health sciences. Emphasizes oral communication and practical medical vocabulary. May include oral drill and practice. Part I of II. Lecture 3 hours per week.

SPA 195 - Topics In (1-5 cr.)
Provides an opportunity to explore topical areas of interest to or needed by students. May be used also for special honors courses. May be repeated for credit. Variable hours.

SPA 203-204 Intermediate Spanish I-II (3 cr. each)
Continues to develop understanding, speaking, reading, and writing skills. Classes conducted in Spanish. Prerequisite: SPA 102 or equivalent. May include oral drill and practice. Lecture 3 hours per week.

SPA 211 - Intermediate Spanish Conversation I-II (3 cr.)
Continues to develop fluency through emphasis on idioms and other complex sentence structures. Prerequisite SPA 202 or equivalent. Part I of II. Lecture 3-4 hours per week.

SPA 212 - Intermediate Spanish Conversation I-II (3 cr.)
Continues to develop fluency through emphasis on idioms and other complex sentence structures. Prerequisite SPA 202 or equivalent. Part II of II. Lecture 3-4 hours per week.

(SPD) Speech and Drama

SPD 100 Principles of Public Speaking (3 cr.)
Applies theory and principles of public address with emphasis on preparation and delivery. Lecture 3 hour per week.

SPD 126 Interpersonal Communications (3 cr.)
Teaches interpersonal communication skills for both daily living and the world of work. Includes perception, self- concept, self-disclosure, listening and feedback, nonverbal communication, attitudes, assertiveness and other interpersonal skills. Lecture 3 hours per week.

SPD 130 Introduction to the Theatre (3 cr.)
Surveys the principles of drama, the development of theatre production, and selected plays to acquaint the student with various types of theatrical presentations. Lecture 3 hours per week.

SPD 131-132 Acting I-II (3 cr. each)
Develops personal resources and explores performance skills through such activities as theatre games, role playing, improvisation, work on basic script units, and performance of scenes. Lecture: 2 hours. Laboratory: 3 hours. Total: 5 hours per week.

SPD 151-152 Film Appreciation I-II (3 cr. each)
Aims to increase the student's knowledge and enjoyment of film and film criticism through discussion and viewing of movies. Lecture 3 hours per week.

(SDV) Student Development

SDV 100 College Success Skills (1 cr.)
Assists students in transition to colleges. Provides overviews of college policies, procedures, and curricular offerings. Encourages contacts with other students and staff. Assists students toward college success through information regarding effective study habits, career and academic planning, and other college resources available to students. May include English and math placement testing. It is

strongly recommended that students take within their first 15 credits. Required for graduation. Lecture 1 hour per week.

SDV 101 Orientation to College (1-3 cr.)
Introduces students to the skills which are necessary to achieve their academic goals, to services offered at the college and to the discipline in which they are enrolled. Covers topics such as services at the college including the learning resources center; counseling, and advising; listening, test taking, and study skills; and topical areas which are applicable to their particular discipline. Lecture 1-3 hours per week.

SDV 104 Study Skills (1-3 cr.)
Assists students in planning strategies to overcome nonproductive study habits and in implementing positive study behaviors. Includes management, memory improvement, note taking, and test taking. Lecture 1-3 hours per week

SDV 106 Job Search Strategies (1 cr.)
Provides experience in resume writing, preparation of applications, letters of application, and successfully preparing for and completing the job interview. Assists students in identifying their marketable skills and aptitudes. Develops strategies for successful employment search. Assists students in understanding effective human relations techniques and communication skills in job search. Pre-requisite: ENG 134, ENG 135, and ITE 115 or departmental approval. Lecture 1 hour per week.

SDV 108 College Survival Skills (1-2 cr.)
Provides an orientation to the college. Introduces study skills, career and life planning. Offers an opportunity to engage in activities aimed at self-discovery. Emphasizes development of "coping skills" such as listening, interpersonal relations, competence, and improved self-concept. Recommended for students enrolled in developmental courses. Lecture 1-2 hours per week.

SDV 195 Electronic Portfolios (1 cr.)
Teaches the techniques and skills needed to develop an electronic portfolio that can be used when applying for a job. Students will post resumes, cover letters, pictures of projects or activities, narration, short movies, hobbies, etc., on the Internet, as well as placing them on a self-starting CD. Total 1 hour per week. Web based.

(WEL) Welding

WEL 116 Welding I (Oxyacetylene) (2 cr.)
Teaches oxygen/acetylene welding and cutting including safety of equipment, welding, brazing and soldering procedures and cutting procedures. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

WEL 120 Fundamentals of Welding (2 cr.)
Introduces history of welding processes. Covers types of equipment, and assembly of units. Stresses welding procedures such as fusion, non-fusion, and cutting oxyacetylene. Introduces arc welding. Emphasizes procedures in the use of tools and equipment. Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

WEL 123-124 Arc Welding I-II (3 cr. each)
Teaches operation of AC transformers and DC motor generator arc welding sets, welding polarities, heats and electrodes for use in joining various metal alloys by the arc welding process. Deals with running beads, butt, and fillet welds in all positions. Emphasizes safety procedures. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

WEL 135 Inert Gas Welding (2 cr.)
Introduces practical operations in use of inert gas shielded arc welding. Studies equipment operation, setup, safety and practice of GMAW (MIG) and GTAW (TIG). Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

THE PEOPLE OF DCC

COLLEGE MANAGEMENT TEAM

Dr. B. Carlyle Ramsey	President
Mr. Scott J. Barnes	Vice President of Financial and Administrative Services
Dr. Christopher C. Ezell	Vice President of Academic and Student Services
Vacant	Vice President of Workforce Services
Dr. A. Wade Davenport	Dean, Arts and Sciences Division
Dr. Edward T. White	Dean, Business and Engineering Technologies Division
Mr. Jeffrey D. Arnold	Director of Business, Industry and Economic Assistance
Ms. Andrea J. Burney	Director of Public Relations & Minority Concerns
Mr. Peter A. Castiglione	Director of Student Development & Enrollment Management
Mr. William L. Dey	Director of Learning Resources & Distance Learning
Dr. Sherri H. Huffman	Director of Planning, Effectiveness & Research
Dr. Janet T. Laughlin	Director of the Student Success Center
Mr. Albert K. "Buddy" Rawley	Director of Development
Ms. Lisa Johnson-Knight	Business Manager
Ms. Amy Abbott	Trainer and Instructor III and Webmaster

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as of 03/01/08

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VCCS COMPUTER ETHICS GUIDELINES

Thousands of users share VCCNet computing resources. Everyone must use these resources responsibly since misuse by even a few individuals has the potential to disrupt VCCS business or the works of others. Therefore you must exercise ethical behavior when using VCCNet resources. State Law (Article 7.1 of Title 18.2 of the Code of Virginia) classifies damage to computer hardware or software (18.2-152.4), unauthorized examination (18.2-152.5), or unauthorized use (18.2-152.6) of computer systems as (misdemeanor) crimes. Computer fraud (18.2-152.3) and use of a computer as an instrument of forgery (18.2-152.14) can be felonies. The VCCS's internal procedures for enforcement of its policy are independent of possible prosecution under the law.

Definition
VCCNet resources include mainframe computers, minicomputers, microcomputers, networks, software, data, facilities and related supplies.

Guidelines
The following guidelines shall govern the use of all VCCNet resources:
1. You must use only those computer resources that you have the authority to use. You must not provide false or misleading information to gain access to computing resources. The VCCS may regard these actions as criminal acts and may treat them accordingly. You must not use the VCCNet resources to gain unauthorized access to computing resources of other institutions, organizations or individuals.
2. You must not authorize anyone to use your computer accounts for any reason. You are responsible for all use of your accounts. You must take all reasonable precautions, including password maintenance and file protection measures, to prevent use of your account by unauthorized persons. You must not, for example, share your password with anyone.
3. You must use your computer resources only for authorized purposes. Students or staff, for example, may not use their accounts for private consulting. You must not use your computer resources for unlawful purposes, such as the installation of fraudulently or illegally obtained software. Use of external networks connected to the VCCNet must comply with the policies of acceptable use promulgated by the organizations responsible for those networks.
4. Other than material known to be in the public domain, you must not access, alter, copy, move or remove information, proprietary software or other files (including programs, members of sub-routine libraries, data and electronic mail) without prior authorization. The college or VCCNet data trustee, security officer, appropriate college official or other responsible party may grant authorization to use electronically stored materials in accordance with policies, copyright laws and procedures. You must not copy, distribute, or disclose third party proprietary software without prior authorization from the licenser. You must not install proprietary software on systems not properly licensed for its use.
5. You must not use any computing facility irresponsibly or needlessly affect the work of others. This includes transmitting or making accessible offensive, annoying or harassing material. This includes intentionally, recklessly, or negligently damaging systems, intentionally damaging or violating the privacy of information not belonging to you. This includes the intentional misuse of resources or allowing misuse of resources by others. This includes loading software or data from untrustworthy sources, such as free-ware, onto official systems without prior approval.

6. You should report any violation of these regulations by another individual and any information relating to a flaw or bypass of computing facility security to the Information Security Officer or the Internal Audit department.

Enforcement Procedure

1. Faculty, staff and students at the college or VCCNet facility should immediately report violations of information security policies to the local Chief Information Officer (CIO).

2. If the accused is an employee, the CIO will collect the facts of the case and identify the offender. If, in the opinion of the CIO, the alleged violation is of a serious nature, the CIO will notify the offender's supervisor. The supervisor, in conjunction with the College or System Office Human Resources Office and the CIO, will determine the appropriate disciplinary action. Disciplinary actions may include but are not limited to:

   a. Temporary restriction of the violator's computing resource access for a fixed period of time, generally not more than six months.

   b. Restitution for damages, materials consumed, machine time, etc. on an actual cost basis. Such restitution may include the costs associated with determining the case facts.

   c. Disciplinary action for faculty and classified staff in accordance with the guidelines established in the State Standards of Conduct Policy.

3. In the event that a student is the offender, the accuser should notify the Vice President of Academic and Student Services. The Vice President, in cooperation with the CIO, will determine the appropriate disciplinary actions which may include but are not limited to:

   a. Temporary restriction of the violator's computing resource assess for a fixed period of time, generally not more than six months.

   b. Restitution for damages, materials consumed, machine time, etc. on an actual cost basis. Such restitution may include the costs associated with determining the case facts.

   c. Disciplinary action for student offenders shall be in accordance with the college student standards of conduct.

4. The College President will report any violation of state and federal law to the appropriate authorities.

5. All formal disciplinary actions taken under this policy are grievable and the accused may pursue findings through the appropriate grievance procedure.

Approval

This guideline shall remain in effect, until superseded or suspended.

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Enhancing Student Learning