Welcome to Blue Ridge Community College

The 2010-2011 Blue Ridge Community College Catalog and Student Handbook is a source of valuable information concerning academic programs, courses, student services, and college policies and procedures. Please take time to review this document and refer to it throughout your career at the College.

Note especially our Mission, Vision, Values Statements, and General Education Outcomes. These are our commitments to you.

Please let us how we may assist you in meeting your educational and career goals. We wish you the very best for a successful and rewarding experience at BRCC.

Sincerely,

Dr. John Downey
President
College Calendar 2010-2011

The calendar is subject to change at any time due to emergencies or causes beyond the reasonable control of the institution, including severe weather, loss of utility services, or orders by federal or state agencies. Students are encouraged to refer to the calendar in the Schedule of Classes to determine if there are any variances for a given semester.

<table>
<thead>
<tr>
<th></th>
<th>Summer 2010**</th>
<th>Fall 2010</th>
<th>Spring 2011</th>
</tr>
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<tbody>
<tr>
<td>Classes Begin</td>
<td>May 24</td>
<td>Aug. 23</td>
<td>Jan. 10</td>
</tr>
<tr>
<td>Martin Luther King, Jr. Day</td>
<td></td>
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<td>Jan. 17</td>
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<tr>
<td>Semester Break*</td>
<td>Oct. 11-12</td>
<td>Nov. 24-26</td>
<td>Mar. 7-11</td>
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<tr>
<td>Thanksgiving Holiday</td>
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<tr>
<td>Classes End</td>
<td>August 2</td>
<td>Dec. 10</td>
<td>May 2</td>
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<tr>
<td>Final Exams</td>
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<td>Dec. 13-17</td>
<td>May 3-9</td>
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<tr>
<td>Graduation</td>
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<td>May 14</td>
</tr>
</tbody>
</table>

*semester break or make-up days as necessary

**10-week summer session

Accreditation

Blue Ridge Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Georgia 30033-4097; telephone number 404-679-4501) to award the associate degree.

The associate degree curricula of the College also have been approved by the State Council of Higher Education for Virginia. The Veterinary Technology program is licensed by the Virginia Board of Health Professions and accredited by the American Veterinary Medical Association. The Nursing program is approved by the Virginia State Board for Nursing and the National League for Nursing Accrediting Commission. The Automotive Analysis and Repair program is certified by the National Automotive Technicians Education Foundation.

All degree and diploma programs offered at the College are approved by the State Department of Education for payment of veteran’s educational benefits.

Equal Opportunity/Affirmative Action Policy Statement

It is the policy of the Virginia Community College system and Blue Ridge Community College to maintain and promote equal opportunity without regard to race, sex, color, national origin, religion, age, political affiliation, veteran’s status, or sexual orientation. Inquiries concerning the equal opportunity policy should be addressed to the Vice President of Finance and Administration, whose office is located in Armstrong Hall, room C108A, and who can be reached at 540-453-2281 or at baldygor@brcc.edu.

Disclaimer

This catalog and student handbook has been prepared from information obtained from the appropriate college officials and is intended to be complete and accurate. However, the College reserves the right to make changes in the substance and procedures set forth in this document without notice. The catalog and student handbook found at the College’s website (www.brcc.edu) contains the most current curricular and student information.

This Catalog is an Official Publication of Blue Ridge Community College

Editor: Elizabeth Hall, Student Services
Design and Production: Lance Foster, Graphic Design Supervisor; Elizabeth Tucker, Graphic Artist
Photography: Lance Foster, Bridget B. Baylor, Coordinator of Public Relations
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Quick Reference

Weyers Cave Campus

**BRCC Buildings***

A Building................................................................. Commonwealth Classroom, Drafting,
Engineering Lab, Manufacturing Lab,
Multipurpose Classrooms

B Building...........................................................................Automotive & Veterinary Labs

Armstrong Hall................................................................. Administration and Business Office

D Building ..........................................................................Multipurpose Classrooms

E Building ...........................................................................Academic Deans' Offices,
Physics, Geology, Electronics Labs,
Multipurpose Classrooms

F Building ..........................................................................Multipurpose Classrooms, Computer Labs

Houff Student Center.................................................. First Floor: Admissions & Records, Cashier,
Student Financial Services, Counseling Center, Financial Aid,
Cafeteria, Fitness Center & Student Lounge
Second Floor: Houff Library, Learning Assistance Center, &
Preparedness Testing

V Building (Fine Arts Center)..........................................Art Gallery, Black Box Theatre, Box Office,
Computer Lab, Multipurpose Classrooms, Studios

J Building......................................................................Biology and Chemistry Labs, Multipurpose Classrooms

Robert E. Plecker Workforce Center.........................Workforce Services and Continuing Education

The college Bookstore facility is located behind the Houff Student Center.

*The Advanced Technology Center (T building) will open in Spring 2011.
Blue Ridge Community College Locations

Classrooms, laboratories, offices, and other college facilities are located on the main campus near Weyers Cave, Virginia, on U.S. Route 11 off Exit 235 of Interstate 81. The College’s Harrisonburg Center is located at 160-C North Mason Street, Harrisonburg. The BRCC Augusta Center is located on the campus of Augusta Health in Fishersville. In addition, the College offers classes at various high schools and other off-campus locations in the service area.

Directions

**Weyers Cave Campus**

The Weyers Cave Campus is located halfway between Harrisonburg and Staunton on Interstate 81. Take Exit 235 off Interstate 81. Turn west at the top of the exit ramp (Route 256). In a very short distance, Route 256 terminates in a junction with U.S. Route 11. Turn left (South) on U.S. Route 11. BRCC Weyers Cave Campus is about a half-mile on the left.

**Harrisonburg Center**

The Harrisonburg Center is located in downtown Harrisonburg. From Interstate 81, take Exit 247B onto Market Street (Route 33 West). Proceed into downtown. Turn right (North) on Mason Street. The Harrisonburg Center is located on the right—directly across from the parking deck—at the corner of North Mason and Wolfe Streets.

**BRCC Augusta Center at Augusta Health**

The Augusta Center is located on the campus of Augusta Health in Fishersville, between Interstate 64 and Route 250. From I-64, go north on Tinkling Spring Road (608) and turn left on Mule Academy Road. From Route 250, go south on Tinkling Spring Road (608) and turn right on Mule Academy Road. The BRCC Augusta Center is located at the corner of Mule Academy Road and Sports Medicine Drive.
Office Guide and Telephone Numbers

From Harrisonburg 234-9261 • From Staunton 213-7002 • From Waynesboro 943-7002
Other Areas in Virginia 1-888-750-BRCC (2722) • TDD 234-0848

**Academic Deans’ Offices**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hara Charlier, Dean</td>
<td>E109</td>
<td>2264</td>
<td><a href="mailto:charlierh@brcc.edu">charlierh@brcc.edu</a></td>
</tr>
<tr>
<td>Life Sciences and Human Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kevin Ratliff, Dean</td>
<td>E109</td>
<td>2331</td>
<td><a href="mailto:ratlifk@brcc.edu">ratlifk@brcc.edu</a></td>
</tr>
<tr>
<td>Business, Humanities, and Workforce Services and Continuing Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kimberly Blosser, Dean</td>
<td>E109</td>
<td>2260</td>
<td><a href="mailto:blosserk@brcc.edu">blosserk@brcc.edu</a></td>
</tr>
<tr>
<td>Mathematics, Physical Sciences and Technology</td>
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**Admissions and Records**

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<th>Name</th>
<th>Office</th>
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<tbody>
<tr>
<td>Annette Williams</td>
<td>Houff Center</td>
<td>2332</td>
<td><a href="mailto:williamsa@brcc.edu">williamsa@brcc.edu</a></td>
</tr>
<tr>
<td>Dean, Student Services</td>
<td></td>
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**Bookstore**

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Bookstore Bldg.</td>
<td></td>
<td>234-8606</td>
<td><a href="mailto:brcc@bkstr.com">brcc@bkstr.com</a></td>
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**Business Office**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Franki Hampton</td>
<td>Armstrong 105C</td>
<td>2285</td>
<td><a href="mailto:hamptonf@brcc.edu">hamptonf@brcc.edu</a></td>
</tr>
<tr>
<td>Associate Vice President of Finance and Facilities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agnes Rexrode, Cashier</td>
<td>Houff Center</td>
<td>2316</td>
<td><a href="mailto:rexrodea@brcc.edu">rexrodea@brcc.edu</a></td>
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**Counseling Center**

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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Annette Williams</td>
<td>Houff Center</td>
<td>2332</td>
<td><a href="mailto:williamsa@brcc.edu">williamsa@brcc.edu</a></td>
</tr>
<tr>
<td>Dean, Student Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beth Styers</td>
<td>Houff Center</td>
<td>2252</td>
<td><a href="mailto:styersb@brcc.edu">styersb@brcc.edu</a></td>
</tr>
<tr>
<td>Student Services Coordinator/Coordinator of Disability Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elizabeth Hall</td>
<td>Houff Center</td>
<td>2237</td>
<td><a href="mailto:halle@brcc.edu">halle@brcc.edu</a></td>
</tr>
<tr>
<td>Coordinator of Career Services</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Faith Lewis</td>
<td>Houff Center</td>
<td>2407</td>
<td><a href="mailto:lewisf@brcc.edu">lewisf@brcc.edu</a></td>
</tr>
<tr>
<td>Student Services Coordinator/Academic Support Coach</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Rajan Shore</td>
<td>Houff Center</td>
<td>2382</td>
<td><a href="mailto:shorer@brcc.edu">shorer@brcc.edu</a></td>
</tr>
<tr>
<td>Student Services Coordinator/Coordinator of First Year Experience</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Kathy MacHardy</td>
<td>Houff Center</td>
<td>2222</td>
<td><a href="mailto:machardyk@brcc.edu">machardyk@brcc.edu</a></td>
</tr>
<tr>
<td>Student Services Coordinator</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ann Smith, Counselor</td>
<td>Houff Center</td>
<td>2221</td>
<td><a href="mailto:smitha@brcc.edu">smitha@brcc.edu</a></td>
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**Financial Aid and Scholarships**

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<tr>
<th>Name</th>
<th>Office</th>
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<tbody>
<tr>
<td>Robert Clemmer, Director</td>
<td>Houff Center</td>
<td>2209</td>
<td><a href="mailto:clemmerr@brcc.edu">clemmerr@brcc.edu</a></td>
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**Finance and Administration**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
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<tbody>
<tr>
<td>Robert Baldygo, Vice-President</td>
<td>Armstrong 108A</td>
<td>2281</td>
<td><a href="mailto:baldygor@brcc.edu">baldygor@brcc.edu</a></td>
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**Fine Arts Center**

<table>
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<tr>
<th>Name</th>
<th>Office</th>
<th>Phone</th>
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<tbody>
<tr>
<td>Sandi Belcher, Program Manager</td>
<td>Box Office V146</td>
<td>2215</td>
<td><a href="mailto:belchers@brcc.edu">belchers@brcc.edu</a></td>
</tr>
<tr>
<td>Jennifer Whitmore, Program Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art Gallery V121</td>
<td></td>
<td>2380</td>
<td><a href="mailto:whitmore@brcc.edu">whitmore@brcc.edu</a></td>
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**Institutional Development**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
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<tbody>
<tr>
<td>Amy Laser Kiger, Director</td>
<td>Armstrong 105</td>
<td>2211</td>
<td><a href="mailto:kigera@brcc.edu">kigera@brcc.edu</a></td>
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**Instruction and Student Services**

<table>
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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>Lloyd Meadows, Interim Vice-President</td>
<td>Armstrong 107</td>
<td>2314</td>
<td><a href="mailto:meadowsl@brcc.edu">meadowsl@brcc.edu</a></td>
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**Learning Assistance Center**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
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<tbody>
<tr>
<td>Treva Shifflett</td>
<td>Houff 202</td>
<td>2323</td>
<td><a href="mailto:shifflettt@brcc.edu">shifflettt@brcc.edu</a></td>
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**Library**

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
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<tbody>
<tr>
<td>Frank Moran, Dean, Learning Resources</td>
<td>Houff 209</td>
<td>2269</td>
<td><a href="mailto:moranf@brcc.edu">moranf@brcc.edu</a></td>
</tr>
</tbody>
</table>
Mary Baldwin College Adult Degree Program
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Robert Robinson, Academic Advisor E112 2345 wcadp@mbc.edu
Susan Schemising, Asst. Director E112 2345 wcadp@mbc.edu

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Harrisonburg Center 3690/2566
Nola Dunsmore, Augusta Center at Augusta Health 2439 dunsmoren@brcc.edu
Augusta Center at Augusta Health, Fishersville 942-2722

Old Dominion University Distance Learning
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Treva Shifflett Houff 202 2250 shifflettt@brcc.edu

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Lester Smith, Director Houff 120 2346 smithl@brcc.edu

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Supervisor, Plecker Center Rentals
Wayne Huffman P123B 2609 huffmanw@brcc.edu
Instructor, Commercial Driving Program
Ann Leatherwood P123 2304 leatherwooda@brcc.edu
Director, Community and Cultural Special Programs
Lisa Long P111 2215 longl@brcc.edu
Supervisor, Administrative Support Operations
Patty Lotts P114 2340 lottsp@brcc.edu
Coordinator, Professional Development Programs and Small Business Outreach
Amanda Schaefer
Enrollment Services Specialist P111 2215 schaefera@brcc.edu
Mary Sullivan P125 2320 sullivannm@brcc.edu
Coordinator, Workforce Development Programs
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The College

Founded in 1967, Blue Ridge Community College is one of 23 community colleges within the Virginia Community College System. The College offers credit courses and programs through the associate degree level, as well as non-credit, workforce development, and continuing education opportunities.

Mission

Blue Ridge Community College anticipates the educational needs of the central Shenandoah Valley, providing comprehensive programs and services within an environment of academic excellence.

Vision

Blue Ridge Community College—a model educational institution recognized for
- innovation and excellence in programs and services
- leadership contributions at the local, state, and national levels
- its supportive environment for learning and working
- graduates who make a difference.

Values

In fulfilling our mission, the College is guided by the following values:

Learning
- promoting outstanding teaching and learning practices
- supporting life-long learning
- emphasizing general education in its curricula
- encouraging scholarly activity and professional development
- advocating free exchange of ideas and beliefs
- providing educational access.

Excellence
- encouraging initiative and innovation
- rewarding exemplary achievement
- expecting personal responsibility
- evaluating and improving effectiveness
- implementing successful support services

Positive Community Relationships
- anticipating and responding to education and training needs
- planning educational programs through community relationships
- collaborating with organizations and other educational institutions
- providing resources for the intellectual growth and enrichment of the community
- encouraging active involvement in public service

Campus Culture
- maintaining a welcoming environment
- nurturing inclusion and respect
- maintaining a governance structure that ensures shared decision-making
- promoting effective organizational communication at all levels
- using technology to enhance instruction, improve efficiency, and increase educational opportunity
- nurturing the development and practice of leadership
- modeling integrity and ethical decision-making
- providing an attractive, accessible, and functional environment for learning and working
What Faculty Expect of Students

Those who teach your classes desire that you learn. They want you to learn essential information in subjects they have studied and enjoyed for years, to develop some of the skills which they have mastered, and to acquire informed perspectives. Using various teaching techniques, your instructors seek to promote your learning and success. Instructors seek to guide you, to motivate you, and to outline for you the body of knowledge to be learned. The instructor “teaches,” but only you can learn. Knowing what faculty members expect of you may help you to maximize your learning opportunities.

Your faculty member expects you to...

1. be informed about your instructor’s policies which are presented in the course outline, as well as the policies of the College published in the BRCC Catalog and Student Handbook.
2. attend all classes, except when emergencies arise. If health and weather allow, your instructor will be present and on time for every scheduled class meeting. So should you.
3. be an active participant in class, taking notes and asking appropriate questions. Your involvement will benefit you and your classmates.
4. treat the instructor and fellow students with courtesy and to refrain from any behaviors that may distract others. You expect to be treated with tolerance and respect. You expect a learning environment free of unnecessary distractions. So does everyone else.
5. cultivate effective study strategies. Being an effective student is not instinctive. Use your study time wisely. Seek help from the instructor when you need it. Avail yourself of resources provided by the College.
6. study course material routinely after each meeting or so. Study according to a regular schedule. Avoid “cramming.” Do not postpone working on assignments. Submit finished assignments on time.
7. accept the challenge of collegiate studying, thinking, and learning. Anticipate that the level and quantity of work in some courses will exceed your prior experiences. If you have significant responsibilities besides your studies, such as work and family, set realistic academic goals and schedules for yourself. Select an academic load whose work demands do not exceed your available time and energy.
8. let no temptation cause you to surrender your integrity.

What Students May Expect of Faculty

Your instructor is an experienced student! He or she has experienced most of the challenges, frustrations, stresses, and triumphs you are experiencing or will experience as a student. Your faculty member knows what students need to do to succeed in the course you are taking, and your instructor wants you to succeed.

You may expect your instructor to...

1. provide you with a syllabus that outlines the content and objectives of the course and spells out the instructor’s grading and attendance policies. Your instructor will follow the policies of the College.
2. start class on time, be prepared, and use time-tested and/or innovative teaching strategies and learning activities intended to promote learning of the subject material.
3. make effective use of class time. Although some topics may not seem very important or interesting to you, the structure of the subject or the objectives of the course may dictate the topics. Your instructor will endeavor to be enthusiastic and to help you to perceive the central material of each topic.
4. strive to create a positive environment in which you may pursue learning. Each student’s need to understand the subject will be respected. Each student will be treated with courtesy.
5. be accessible and approachable. Your instructor knows that he or she is the key resource provided by the College to help you to succeed as a student.
6. organize and schedule the subject topics and assignments. The quantity and nature of assigned work and the evaluation standards will be based upon the instructor’s experiences with, and expectations for college courses at this level in this subject.
7. preserve the academic honesty of the course. The basic content of college courses must meet the well-established expectations of transfer institutions, employers, and accrediting agencies.
8. be a professional who will treat you fairly and honestly. Grading will be impartially based upon the quality and quantity of student work. Assignments will be graded in a timely manner.

General Education

The collegiate experience nurtures a yearning for knowledge that lasts a lifetime, and is more than the sum of its parts. A liberal arts education teaches students how to reason and learn through studies that are intended to provide knowledge and foster intellectual abilities, rather than more specialized occupational or professional skills. This happens both inside and outside the classroom, as students meet and learn with a diverse array of peers and teachers. The liberal arts provide the foundation for future academic experiences, and help develop the skills, aptitudes and perspectives characteristic of an educated person.

Blue Ridge Community College’s general education offerings intentionally strive to develop this liberal arts perspective. The program exposes students to a broad body of knowledge of the major social, cultural, historical, and scientific forces that have shaped human identity and the world. General education enables students to integrate knowledge in order to address fundamental questions about the nature of the world and its inhabitants. Blue Ridge Community College believes general education is an important component for all students whether they are going immediately into the workforce or continuing their education.

The implementation of General Education differs depending upon the type of associate degree or diploma program that students are interested in pursuing. In diploma and applied associate degree programs (AAS degrees) faculty employ general education courses to introduce students to the concept of a liberal education while simultaneously striving to help students integrate knowledge and apply broad academic concepts in a practical manner in the world of work. In comprehensive transfer degree programs (AA&S degrees) faculty not only introduce the liberal arts perspective but also strive to provide a depth to general knowledge that prepares students for upper level educational experiences at the bachelor’s degree level and beyond. In transfer programs, faculty strive to help students integrate the interdisciplinary nature of theoretical concepts and reveal how historical, philosophical, cultural and other academic concepts influence human interactions.


General Education Outcomes

Blue Ridge Community College provides students with a broad educational experience enabling them to acquire the knowledge, skills, attitudes, and values associated with productive and fulfilling lives. Graduates of the associate degree programs should have developed the following skills:

- Communication (Written and Oral)
- Mathematics (Quantitative Reasoning)
- Scientific Reasoning
- Human Community
- Computer/Information Seeking Skills
- Wellness
- Critical Thinking
### Rationale for General Education Courses in the Associate of Arts and Sciences Degree Programs

<table>
<thead>
<tr>
<th>We Require</th>
<th>Because We Expect Students To</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111-112 (6 Credits)</td>
<td>…develop exceptional writing skills, understand the importance and correct procedures for citing sources, develop a depth of writing ability, and be able to develop a persuasive argument in written form.</td>
</tr>
<tr>
<td>CST 110 (3 Credits)</td>
<td>…develop exceptional oral communication skills, increase knowledge of verbal and non-verbal language, become effective communicators in interpersonal situations for both small group and dyadic communication, orally articulate arguments for persuasive speaking and ideas for informative occasions.</td>
</tr>
<tr>
<td>General Mathematics (6 credits)</td>
<td>…demonstrate effective quantitative methodology skills, develop quantitative reasoning ability, and expand computational proficiency. General education mathematics courses also provide students with a foundation for understanding the mathematical aspects of scientific methodology.</td>
</tr>
<tr>
<td>General Science (8 credits)</td>
<td>…understand scientific methodology and critical inquiry. Students must also learn to apply those concepts in the laboratory setting.</td>
</tr>
<tr>
<td>Student Development &amp; Wellness SDV (1 credit) HLT/PED (2 credits)</td>
<td>…understand concepts of personal development, health, and wellness.</td>
</tr>
<tr>
<td>ITE 115 or CSC 200 or ITE 120 (3 Credits)</td>
<td>…understand the fundamental concepts and methodologies associated with information literacy, especially those necessary for the ethical and safe use of modern technology.</td>
</tr>
<tr>
<td>Social and Behavioral Sciences (6 credits)</td>
<td>…develop an understanding of scientific methodology in social science disciplines and expand the understanding of the breadth and depth of personal, interpersonal, social, economic, and cultural behaviors.</td>
</tr>
<tr>
<td>History (6 credits)</td>
<td>…to understand the connections between and progress of human thought, culture, and historical events spanning generations, and to establish a methodology for critical inquiry.</td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (6 credits)</td>
<td>…to deepen understanding of historical and modern human thought and reasoning.</td>
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Course content represents a broad body of general knowledge about one or more of the major social, cultural, historical, or scientific forces that have shaped human identity and the world. Content is not focused upon a particular occupation or on professional skills. While most courses transfer readily to senior institutions, it is the student’s responsibility to determine if particular courses transfer to a given school.
## Rationale for General Education Courses
### in the Associate of Science Degree Programs

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Rationale for General Education Courses in the Associate of Applied Science Programs

<table>
<thead>
<tr>
<th>We Require</th>
<th>Because We Expect Students To</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111 or ENG 137 (3 credits)</td>
<td>…develop proficiency in communicating ideas, thoughts, and persuasive arguments.</td>
</tr>
<tr>
<td>Mathematics or Science (3 credits)</td>
<td>…develop quantitative or scientific reasoning for use in critical inquiry.</td>
</tr>
<tr>
<td>Student Development &amp; Wellness SDV (1 credit) and HLT/PED (2 credits)</td>
<td>…understand concepts of personal development, health, and wellness.</td>
</tr>
<tr>
<td>Social and Behavioral Sciences (3 credits)</td>
<td>…develop an awareness of historical or scientific methodologies and how those methods are applied to understand and affect individual and social behaviors.</td>
</tr>
<tr>
<td>Humanities &amp; Fine Arts (6 credits)</td>
<td>…to deepen understanding of historical and modern human thought and reasoning.</td>
</tr>
</tbody>
</table>

**Programs**

As a comprehensive institution of higher education, Blue Ridge offers diverse programs of instruction generally extending not more than two years of full-time study.

1. Occupational-Technical—Programs to meet the increasing demands for technicians, paraprofessional workers, and skilled craftspeople for employment in industry, business, the professions, and public service.
2. College Transfer—A program to meet standards acceptable for transfer to baccalaureate degree programs in four-year colleges and universities.
3. General Education—That portion of the collegiate experience which addresses the knowledge, skills, attitudes, and values characteristic of educated persons. It is unbound by disciplines and honors the connections among bodies of knowledge.
4. Developmental Studies—Courses numbered 01-09 to help individuals obtain knowledge and skills to succeed in curriculum courses in occupational-technical or college transfer programs, to meet current and future job requirements, or to meet personal goals.
5. Continuing Education—Programs and courses for adults who wish to continue their education part-time. College credits or continuing education units (c.e.u.’s) may be earned.
6. Community Service—Cultural and non-credit educational services for citizens and groups in the region.
7. Workforce Development Services—Specialized training and retraining programs custom-tailored by Workforce Services and Continuing Education Division to meet the workforce development needs of area employers.

**Computer Competency Requirements**

Blue Ridge Community College believes that all students should experience a teaching-learning environment that promotes computer and information literacy in accessing electronic resources and applying knowledge through technology. In accordance with Virginia Community College System (VCCS) policy, students must be able to demonstrate the entry-level computer skills necessary for academic success and discipline-specific skills necessary for successful transfer or employment.
Admissions, Tuition and Fees, and Financial Aid Information

General Admission to the College

Any person who has a high school diploma, its equivalent, OR who is 18 years of age and able to benefit from a program of study at Blue Ridge Community College may be admitted. All degree, diploma or certificate-seeking students (excluding Career Studies), without a high school diploma or the equivalent, must demonstrate ability to benefit before being accepted to the institution. Blue Ridge Community College will utilize General Education Diploma tests, independently administered by local agencies, and College Preparedness tests as evidence of ability to benefit.

The College reserves the right to evaluate special cases and to refuse admission to applicants when considered advisable in the best interest of the College. Students also may be denied admission if there is reason to believe that they present a danger to themselves, other students, and/or faculty members. Blue Ridge Community College has the right to deny, or revoke, the admission of convicted sex offenders (http://www.brcc.edu/Student/right/so.htm).

Admission Requirements

Curriculum Students

Curriculum students are those who wish to work full or part-time toward the completion of a degree, diploma, or certificate offered by the College. To be officially admitted to a curriculum, the following items are required:

1. completed application for admission;
2. demonstrated proficiency in reading, writing and mathematics. Students may demonstrate this proficiency in one of three ways:
   - Take the College Preparedness Test (CPT) in mathematics and/or English,
   or
   - Submit Scholastic Aptitude Test (SAT) scores of 530/Reading, 530/Writing, and 520/Math or ACT scores of 22 or higher/Math, 22 or higher/English, 22 or higher/reading. Placement testing, in addition to SAT or ACT scores, may be required for some higher level math courses.
   or
   - Submit proof of successful completion of developmental or college-level English or mathematics classes.
3. Official transcripts from all colleges and universities attended if transfer credit is requested by student.

Admission to the College or a curriculum does not necessarily guarantee admission to a particular program. Additional qualifications may be required for admission to a specific program, such as Nursing or Veterinary Technology.

In addition to the general admission requirements listed earlier, specific requirements are usually prescribed for each curriculum of the College. Among the items generally considered in determining the eligibility of a student for admission to a curriculum in the College are educational and occupational experiences and the application of reasonable standards to ensure that the student possesses the potential to meet program requirements. The College offers a comprehensive program in Developmental Studies to correct academic deficiencies.

Persons entering associate degree (Associate of Arts & Sciences, Associate of Science, or Associate of Applied Science) programs shall be high school graduates or the equivalent, or have demonstrated ability to benefit.

Non-Curricular Students

Non-curricular students are those who do not currently intend to apply credits toward completion of a degree, diploma, or certificate offered by the College. A non-curricular student is, therefore, not formally admitted to the curricula of the College, but attends classes on a part-time basis under special conditions. Completion of the application for admission and proof of completion of prerequisites for some courses are the only requirements. In addition, a College Preparedness Test may be required if the student wishes to take English or mathematics courses or if the student:
1. lacks basic skills necessary for the successful completion of a course, or
2. completes nine credits at BRCC, has a grade point average below 2.0, and has never been assessed with a College Preparedness Test.

Classification of Students

All students are classified according to the following categories:

Curriculum Student: A student who has satisfied all college admission requirements and has been admitted to a curriculum.

Non-curriculum Student: A student who is not formally admitted to one of the curricula or developmental studies but who is classified according to one of the following student goals or conditions:
1. upgrading employment skills for present job,
2. personal satisfaction and general knowledge,
3. high school student, or
4. auditing a course.

High School Student Enrollment

Based on the guidelines developed and approved by the State Department of Education and the Virginia Community College System, BRCC provides opportunities for qualified high school students to enroll in courses at the College.

The purpose of enrolling high school students in college classes is to provide a wider range of course options for high school students and to avoid unnecessary duplication of programs. In order to be eligible, students must be high school juniors and seniors who are prepared for the demands of college work and who can benefit from the opportunity. Because enrolling freshman and sophomore students is considered exceptional, each freshman and sophomore student will be considered on a case-by-case basis. Formal approval by the college president and documentation of parental permission are required.

BRCC has developed the following programs and procedures in order to accommodate qualified high school students in college classes.

Concurrent High School Student Admission

Concurrent high school student admission is designed for high school students who are juniors or seniors who wish to take a course at BRCC based on their special interest or ability area. Students are part-time and remain as full-time students in their high school.

To qualify for this program, the student must complete or submit the following prior to registration: an application for admission, an official high school transcript, an approval letter signed by the high school principal or guidance counselor which indicates the course for which the student wishes to enroll, written parental permission for enrollment, and the College Preparedness Test or appropriate SAT/ACT scores.

In lieu of the high school principal or guidance counselor approval letter, home-schooled students must provide a copy of a home school agreement approved by the school district or a letter from the local school board or a copy of the letter filed by the parent/legal guardian declaring home schooling for religious exemption.

Dual Enrollment High School Student Admission

Dual enrollment is designed for qualified high school juniors and seniors who are enrolled in special BRCC courses offered at the high school during the regular school day. The school system and the College must approve courses within this program.

To qualify for this program, the student must complete or submit the following prior to registration: an application for admission, an official high school transcript, documentation of parental permission for enrollment, and the College Preparedness Test or appropriate SAT/ACT scores. Documentation of parental permission is required for all dual enrollment students. Because enrolling freshman and sophomore students is considered exceptional, the college-ready status of each prospective freshman and sophomore student will be evaluated on a case-by-case basis. Formal approval by the college president is required.
Senior Citizens

Policies of the Commonwealth of Virginia (Virginia State Code 23-38.56) and the Virginia Community College System (VCCS Policy 4.3.0.2) encourage senior citizens to take college-level classes at Blue Ridge Community College. On the first day of class, senior citizens may enroll tuition-free (except for fees for course materials or lab fees) in credit classes on a space-available basis after all tuition-paying students have been accommodated.

To be eligible for free tuition and comprehensive fees for credit courses you must:
1. be 60 years of age or older prior to the semester of enrollment,
2. have been legally domiciled in Virginia for the last 12 months,
3. had a taxable individual income that did not exceed $15,000 for Virginia income tax purposes for the year preceding the semester you wish to enroll, (documentation of taxable income will be required), and
4. be admitted to the College as a student.

To be eligible for free tuition for audit of credit courses, you must:
1. be 60 years of age or older prior to the semester you wish to enroll,
2. be a legal resident of Virginia,
3. be admitted to the College as a student.

Interested senior citizens should contact the Admissions and Records Office for information and registration materials.

International Students

Blue Ridge Community College is authorized by the United States Department of Homeland Security to enroll non-immigrant international students who meet academic, financial, and language requirements. The Admissions and Records Office must comply fully with federal and state laws and regulations regarding admission of non-immigrant students.

Further information about applying as an international student may be obtained by contacting the Admissions and Records Office or by referring to (www.brcc.edu), the BRCC website.

It is the policy of the College to admit qualified resident alien students already legally residing in the service area. VCCS policy permits the admission of applicants who are immigrants residing in Virginia who have graduated from a Virginia high school with a high school diploma or equivalent, even if they are unable to document their legal presence. Applicants who are undocumented will pay tuition at the out-of-state rate.

Students Transferring from Other Colleges

Students must be officially enrolled in a curriculum in order to be eligible for transfer credit.

An official transcript from each previously attended institution is required for an official evaluation of credits to be completed. Students seeking transfer credit from another college or university should send official transcripts and the Transcript Evaluation Request form to the Office of Admissions and Records at least one month prior to the semester of enrollment.

Generally, no credit will be given for courses with a grade lower than “C”. Transfer students may be advised to repeat courses if it is clearly to their advantage to do so in order to make satisfactory progress in the curricula.

Enrollment Priorities

When enrollments must be limited for any curriculum, first priority will be given to all qualified students who are residents of the political subdivisions supporting the College, provided such students apply for admission to the program by the announced date. The priority list is as follows:
1. residents of the political subdivisions supporting the College,
2. other Virginia residents,
3. out-of-state and resident alien students.
Student Level

Freshman: Fewer than 30 credits completed in the designated curriculum.

Sophomore: 30 or more credits completed in the designated curriculum, including relevant transfer credits.

Student Status

Full-time: 12 or more credits.

Part-time: Fewer than 12 credits.

Transcripts

A student may request that a copy of the student permanent record (transcript) from Blue Ridge Community College be forwarded to other educational institutions, state or federal agencies, employers, or any person(s) designated by the student. The request must be authorized by the individual student by making an electronic request through the My BRCC link on the BRCC website or completing and signing a “Transcript Request Form” available in the Admissions and Records Office or on our website at (http://www.brcc.edu/forms.htm).

Due to limitations on access to student information under the Family Educational Rights and Privacy Act of 1974 (Public Law 93-380), telephone and third party requests for transcripts cannot be honored. Normally, transcripts from other educational institutions which have become part of the student’s folder at Blue Ridge may not be duplicated or released, although such records are available for inspection by the individual student.

Records Disposal

The academic records of a student are maintained in the Admissions and Records Office. At the end of three years from the date of the student’s separation from the College, those records, with the exception of the BRCC permanent academic record or transcript, are destroyed. Students who wish to re-enroll in the College after an absence of three semesters must complete another application for admission. For a more detailed written policy on the disposal of academic records, contact the Dean of Student Services.

Tuition and Fees (Note: Subject to Change)

Tuition rates are established each year by the State Board for Community Colleges. Payment is due at the time of registration or by specified deadlines. The current tuition rates, payment deadlines, and refund dates are published on the BRCC web site. Tuition and fees at the time of this catalog printing were:

- Virginia Domicile: $101.00 per credit *
- Out-of-State Domicile: $279.60 per credit
- Technology Fee: $6.50 per credit
- Comprehensive Student Fee: $5.10 per credit
- Capital Fee (Out-of-State Students only): $15.00 per credit
- Business Contract Rate: $153.00 per credit
- Military Contract Rate: $101.00 per credit
- Auxiliary Capital Fee: $8.00 per credit

Registration is not complete until payment for all tuition and fees has been received. Payment can be made by cash, check or credit card (VISA®, MasterCard®, or American Express®). There will be a $20.00 charge for all returned checks.

Dishonored checks received from the bank must be made good within ten (10) business days after notification from the Student Financial Services Office. If payment is not received, the student will be administratively withdrawn from classes.

* Price is net of $2 waiver per credit hour funded by AARA stimulus dollars (in-state only.)
Comprehensive Student Fee

Students will be charged a $4.10 per credit hour student activity fee each semester. The funds support the Blue Ridge Community College Student Activities program. The fee is refunded if the student withdraws from classes within the appropriate refund periods.

Technology Fee

All students in the Virginia Community College System will be charged a $5.50 per credit hour technology fee. The funds are used to implement major improvements in information technology for the 23 community colleges in Virginia. The fee is refunded if the student withdraws from classes within the appropriate refund periods.

Auxiliary Capital Fee

All students will be charged a $8.00 per credit hour auxiliary capital fee each semester. The funds will support the design, construction, and operation of college construction project(s) that are not state-funded. The fee is refundable if the student withdraws from classes within the appropriate refund periods.

Tuition Refunds

Students shall be eligible for a full refund of fees for classes dropped during the specified add/drop periods as listed on the College’s website. It is the student’s responsibility to know the appropriate refund dates. There will be NO REFUNDS after the add/drop period has passed, unless written documentation is submitted to support the existence of one of the following special circumstances:

- Unanticipated medical emergency, resulting in extended incapacitation/hospitalization of the student.
- Extreme sudden and unforeseen financial hardship.
- Death of an immediate family member.
- Institutional errors by BRCC personnel that cause the delay of administrative processes related to registration or withdrawal. The request for refund in these instances must be initiated through the BRCC office that made the error.
- A national emergency or mobilization declared by the President of the United States and in accordance with Section 23-9.6.2 of the Code of Virginia.

More detailed information about the Tuition Refund Appeals process can be obtained from the Office of Admissions and Records or the BRCC website (www.brcc.edu/forms).

Note: Special session courses (less than a term in length) have shorter add/drop dates. Consult the Academic Calendar listing on the BRCC web site for exact dates.

Eligibility for In-State Tuition Rates

The Office of Admissions and Records is responsible for making an initial determination of eligibility for in-state tuition rates, based on information provided by the student on the “Application for Virginia In-State Tuition Rates,” included with college application materials. Eligibility is determined by using State Council for Higher Education guidelines pertaining to Section 23.7-4 of the Code of Virginia.

In order to be eligible for in-state tuition rates, the student must have been a legal “domicile” of Virginia for a period of at least one full year prior to the planned term of enrollment at the College. Domicile is a technical legal concept, which means more than simple “residency” in the state of Virginia. A legal domicile must demonstrate the intention of remaining in Virginia indefinitely. Demonstration of intent is usually accomplished through objective evidence. For a listing of acceptable documents for demonstrating legal residency, please see (www.dmv.state.va.us/webdoc/pdf/dmv141.pdf). A student under the age of 24 generally assumes the domicile of the parent(s), unless the student meets one or more of seven exceptions. Applications for reclassification of domicile status and all supporting documents must be submitted prior to the first day of the semester. The domicile status in effect on the first day of the semester determines the tuition rate for that semester. Additional information about eligibility can be obtained in the Admissions and Records Office.

Students who disagree with an initial determination of eligibility made by the Office of Admissions and Records may appeal the decision following the “Domicile Appeals Process” outlined in the Student Handbook.
Books, Tools, and Supplies

Students are expected to obtain their own books, tools, supplies, and consumable materials needed in their studies. The estimated cost of these items will average $1,000.00 per semester for a full-time student.

Indirect Costs

In addition to tuition, fees, books and supplies, the following are estimated costs based on full-time attendance for one academic year: transportation $2,800; room and board off-campus $6,000; miscellaneous $1,900. These are only estimates and vary greatly with student needs and lifestyle.

Non-Payment of Financial Obligations

When a student fails to satisfy bad checks, library fines, parking tickets, or other financial obligations, the student is not issued transcripts or allowed to register again until the obligation is satisfied.

Tuition-Free Education for Certain Children

Section 23-7.1:01 of the Code of Virginia provides free tuition and required fees for children of law-enforcement officers, fire fighters and members of a rescue squad. Entitled is any child between the ages of 16 and 25 whose parent has been killed in the line of duty while employed or serving as a law-enforcement officer, fire fighter, or member of a rescue squad in Virginia. Contact the Office of Admissions and Records for information.

Financial Aid

The student financial aid program at Blue Ridge Community College assists students who are eligible for financial aid and who may not be able to attend BRCC without it. During the 2009-2010 academic year, BRCC awarded over $10 million to students seeking financial assistance. Most financial aid awards are based upon financial eligibility (the difference between the amount the student and the student’s family can contribute and the cost of attending BRCC). The expected family contribution (EFC) is determined by an analysis of the information on the Free Application for Federal Student Aid (FAFSA). The expected family contribution amount will be the same at most schools because eligibility is determined by the same method (Federal Need Analysis Methodology). Although paying for a college education is primarily the responsibility of students and their families, assistance is available through a variety of federal, state, and institutional programs for those who demonstrate a financial need.

How and When to Apply

The best time for students to apply for financial aid are the months of January or February proceeding the academic year in which students plan to enroll. BRCC’s priority deadline for submission of the financial aid application is March 15. For example: a student planning to enroll in fall semester 2011 should submit the FAFSA application by March 15, 2011 in order to receive primary consideration. Since most aid programs have limited funding, it is critical that students file as early as possible. Students may apply for financial aid by completing and submitting the Free Application for Federal Student Aid (FAFSA). The FAFSA form may be submitted several ways by:

- Completing the FAFSA on-line form on the Web www.fafsa.ed.gov (the preferred method); or
- Mailing the FAFSA form to the federal processing center

Note: A new financial aid application must be submitted for each academic year of enrollment.

General Eligibility Requirements

In order to qualify for financial aid at BRCC, a student must:
- demonstrate financial need, except for some loan programs.
- have a high school diploma or a General Education Development (GED) Certificate, pass an ATB test approved by the U.S. Department of Education, or complete a high school education in a home school setting (certain age restrictions apply).
- be enrolled or accepted for enrollment as a regular student working toward a degree or certificate in an eligible program.
- be a U.S. citizen or eligible non-citizen.
- have a valid Social Security Number.
• meet satisfactory academic progress standards set by the College.
• certify that you will use federal student aid only for educational purposes.
• certify that you are not in default on a federal student loan and that you do not owe money on a federal student grant.
• comply with the Selective Service registration, if required. If you’re a male age 18 through 25, and you haven’t yet registered, you can give the Selective Service permission to register you by checking a box on the FAFSA. You can also register through the Internet at www.sss.gov.

Types of Aid Available
The following list represents the major federal and state financial aid programs at BRCC. Some students may qualify for more than one program depending on need. Please note that state grants are only awarded to qualifying domiciliary residents of Virginia.

Federal Pell Grant is a federal grant entitlement program, which means that the federal government will pay all applicants who meet all program eligibility criteria. Students who have previously earned a baccalaureate degree are not eligible for grant aid. Awards are for both direct and indirect educational expenses. In some cases, an eligible student may receive a Pell Grant if enrolled for less than 6 credits.

Academic Competitiveness Grant (ACG) is a federal grant program. Qualifying students who have completed a rigorous secondary school program and are eligible for federal Pell grants may be eligible to receive additional funds from the Academic Competitiveness Grant Program. Eligible recipients may receive up to $750 for the first year of study and up to $1,300 for the second academic year of study.

Federal Supplemental Educational Opportunity Grant (SEOG) is a federal grant program that is awarded to the “neediest” students. Preference is given to Federal Pell Grant recipients with the greatest financial need. There are limited SEOG funds and students should meet the March 15 priority application deadline to ensure consideration. Students must be enrolled on at least a half-time basis.

Federal Work-Study Program (FWS) is an award from federal funds that enables a student to earn money to help meet their educational expenses. A student must have “financial need” to qualify. A work-study award does not guarantee a job, as the placement of a student into a job will be based upon the available jobs and the student’s qualifications to meet the requirements for these available jobs. Work-study employees are usually assigned an average of 15 to 20 hours of work per week and will receive a paycheck every two weeks.

College Scholarship Assistance Program (CSAP) is a state grant program administered by the State Council of Higher Education for Virginia. To qualify, a student must be domiciled in Virginia, demonstrate exceptional need, and must be enrolled on at least a half-time basis.

Commonwealth Award (COMA) is a state-funded grant program under which students may receive support up to the average full cost of tuition. To qualify, a student must be a domiciliary resident of Virginia, demonstrate financial need, and be enrolled on at least a half-time basis.

Virginia Guaranteed Assistance Program (VGAP) is a state-funded grant program under which first time freshmen with financial need can receive up to the average full-time tuition and an allowance for textbooks. In order to be considered, a student must be a: first-time freshman, dependent, high school graduate with a high school GPA of at least a 2.5, Virginia resident, and demonstrate financial need. Recipients must be enrolled as a full-time student to qualify. Recipients must maintain a 2.0 GPA 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) is a state grant program funded by the Virginia Community College System. These grants are based on need and are awarded to eligible students who are enrolled for one to eight credits per semester.

Federal Stafford Loans provide students with the option to receive long-term, low interest educational loans. Students must be enrolled on at least a half-time basis to be considered. All Stafford Loans are either subsidized (the government pays the interest while the student is in school) or unsubsidized (the student pays all the interest, although payments can be deferred until after graduation). To receive a subsidized Stafford Loan, financial need must be demonstrated. With the unsubsidized Stafford loan, payments can be deferred until after graduation by capitalizing the interest. This adds the interest payments to the loan balance, increasing the size and cost of the loan. All students, regardless of need, are eligible for the unsubsidized Stafford Loan.
Federal Parent Loan for Undergraduate Students (PLUS) enables parents of dependent undergraduate students to borrow funds to supplement their children's aid packages. Repayment normally begins 60 days from the date of disbursement and can continue over a ten-year period. Students must be enrolled on at least a half-time basis.

Financial Aid Program Refund Policy

All students receiving financial aid may be required to repay all or part of any aid received to the appropriate federal program(s) if they withdraw from all classes.

The amount that the student may be required to return to the program(s) will be determined by the amount disbursed, the amount which could have been disbursed, and the percentage of the enrollment period the student has completed.

If a student withdraws on or before the 60% point in time of the period of enrollment, calculated using calendar days, a portion of the total of financial aid funds awarded a student (excluding federal work-study) must be returned according to the provisions of the Higher Education Amendments of 1998. The calculation of the return of these funds may result in the student owing a balance to the College and/or the federal government.

Sample refund calculations are available in the Office of Student Financial Aid and Scholarships.

Institutional Aid Programs

BRCC Scholarship Assistance

The BRCC Educational Foundation, Inc. assists the College in providing academic as well as need-based scholarships. The Foundation is a charitable, non-profit corporation that provides a venue for individuals, organizations, business and industry to contribute to the College. Active scholarships supported by the Foundation are listed in this publication. You may apply for scholarship assistance by completing the Institutional Scholarship Application. We strongly recommend that you also complete and submit the Free Application for Federal Student Aid (FAFSA) as many of the scholarships offered are based in part on financial need. A FAFSA may be submitted on-line at www.fafsa.ed.gov. For more information call our Scholarship Coordinator at 1-540-234-9261 ext 2223.

Scholarship Applications

Scholarship Applications for the 2011-2012 award year must be submitted to the Financial Aid Office by March 15, 2011. The Office of Student Financial Aid & Scholarships reviews scholarship applications on the basis of a completed Institutional Scholarship Application (incomplete or faxed applications will not be considered), Free Application for Federal Student Aid (FAFSA) data, specific scholarship criteria, academic achievement, financial need, extracurricular activities and community involvement. A minimum 2.0 GPA is required to receive and maintain a scholarship award. Blue Ridge Community College reserves the right to adjust scholarship award amounts, as well as to revise the number of scholarships offered each year, without notice. The most current scholarship information may be found on the BRCC Financial Aid Homepage at www.brcc.edu/financial_aid. Additional tips for creating competitive scholarship applications can be found at http://www.brcc.edu/financial_aid/scholarships.htm.

Scholarship Programs

Adult

Harrisonburg Jaycees Endowed Scholarship—This scholarship was established by the Harrisonburg Jaycees to assist adult students from Harrisonburg and Rockingham County in attaining their educational goals and is available to a student in any program. The student recipient must be 25 years of age or older and have resided in Harrisonburg or Rockingham County for one year prior to receiving the scholarship. Minimum 2.0 GPA is required.

Houff Family Endowed Scholarship—General scholarship awarded to student(s) who may otherwise have difficulty in attending college. The amount and number of awards will be determined each year. Preference may be given to working adults returning to college, single parents furthering their education, or other students with unmet financial need. Minimum 2.0 GPA is required.

Terry G. and Vickie G. Slaubaugh Endowed Scholarship—This scholarship was established to assist working adults returning to college and single parents furthering their education and have a demonstrated financial need. This scholarship will be renewed for the second year provided the student remains in good academic standing. Minimum 2.0 GPA is required. (FAFSA required)
Wood/Ward “Pass It On” MBC/BRCC Scholarship—This scholarship was established for a student enrolled in BRCC and working with an MBC Adult Degree Program Advisor. Strong candidates for this scholarship are students who demonstrate a passion for making a contribution to the world. Students interested in teaching, human services, or other altruistic ventures preferred though all applicants will be considered. Minimum 2.0 GPA is required.

Automotive Analysis and Repair Scholarships
Lloyd Meadows Memorial Endowed Scholarship—Students accepted into the Automotive Analysis & Repair program will be eligible for this scholarship. Selection is based on financial need and career potential. Applications will be made available to students admitted in the Automotive Program soon after the beginning of the Fall semester. Minimum 2.0 GPA is required. (FAFSA required)

Old Dominion Packard Club Scholarship—Students enrolled in or planning to enter the Automotive Analysis and Repair Program at BRCC will be eligible for this scholarship. Selection will be based on financial need and a strong potential for a successful career in the Automotive field. Recipient of scholarship must maintain 2.5 GPA each subsequent semester to retain award. Applications will be made available to students admitted in the Automotive Program soon after the beginning of the Fall semester. (FAFSA required)

Business Scholarships
Dr. George Lennox Endowed Scholarship—This scholarship was established for students enrolled in a business certificate or degree program. Preference will be given to students who demonstrate financial need. Minimum 2.0 GPA is required. (FAFSA required.)

StellarOne Scholarship—This scholarship will be available for students enrolled in the business or accounting degree or certificate programs. Minimum 2.0 GPA required.

John and Marguerite Simonetti Scholarship—This scholarship was established for students enrolled in the Business Management program and is to be used for the purpose of tuition/fees and books. Selection will be based on financial need. Minimum 2.0 GPA required. (FAFSA required)

College Transfer Scholarships
David Allen McKnight Memorial Scholarship—Students enrolled in the College Transfer Program are eligible for this scholarship. Preference may be given to those students who intend to pursue an education in the fields of Philosophy or Religion after transferring from BRCC. Minimum 2.0 GPA is required. (FAFSA required)

NTELOS Endowed Scholarship—Recipients of this scholarship must be enrolled full-time in a terminal degree or college transfer program. Priority goes to residents of Waynesboro, Staunton and Augusta County; second priority will be for residents of Harrisonburg and Rockingham County. Selection is based on rank in the high school graduating class and reference letters. This scholarship may be renewed for a second year if the recipient completes 24 credit hours with a cumulative GPA of 2.75.

Anthony and Jessica Zaccaria Memorial Endowed Scholarship—First priority for this scholarship will be given to members of the Augusta Stone Presbyterian Church with second priority to residents of Staunton/North Augusta County. Students planning to transfer to a four-year institution are eligible. Selection will be based on academic potential, financial need, and personal references. Minimum 2.0 GPA is required. (FAFSA required)

High School Seniors/Entering Freshmen Scholarships
Augusta Military Academy Alumni Association Scholarship—Ten scholarships will be awarded to students entering BRCC as freshmen from the following Augusta County High Schools: Buffalo Gap, Fort Defiance, Riverheads, Stuarts Draft, and Wilson Memorial. Each high school will be asked to nominate two individuals for this award (one male and one female). Nominees must have a GPA of 3.0 or higher and exhibit a need for scholarship assistance as determined by the high school. Contact your high school guidance office concerning application procedures and deadlines.

Harry V. Boney, Jr. Endowed Scholarship—Entering freshman students enrolled in a degree or certificate program at BRCC are eligible for this scholarship. Scholarships may be renewed for a second year. Preference may be given to a student demonstrating financial need. Minimum 2.0 GPA is required. (FAFSA required)
John W. Clore, Jr. Memorial Endowed Scholarship—A First Union National Bank of Virginia endowed scholarship awarded to a first time student at BRCC. The scholarship is awarded for two years and pays all tuition/fees. Recipients must be enrolled full-time in an Associate Degree program and maintain a cumulative GPA of 2.5. Selection is based on applicant’s leadership and scholastic qualities. (FAFSA required)

Commonwealth Legacy Scholarship—This scholarship will be awarded to an entering freshman student each year. To be eligible for this merit-based scholarship, applicants must be full-time, associate degree-seeking students attending college for the first time, who have demonstrated academic excellence during high school as well as a commitment to develop their leadership skills. Applicants also must have plans to graduate from a Virginia community college. Scholars selected will become part of a program that will promote community college education and will become mentors to future Legacy scholars. Selection will be based upon merit, demonstrated leadership potential and a willingness to promote community college education. To apply contact your high school guidance office.

Daily News-Record/Mims Achievement Award—High school seniors residing in the College service region and entering any Associate Degree curriculum will be eligible for this scholarship. Selection is based on financial need, leadership, and academic performance. Minimum 2.0 GPA is required. (FAFSA required)

Houff Family Endowed Scholarship for Area High Schools—Graduating seniors from Fort Defiance (two), Turner Ashby (one), and Buffalo Gap (one) high schools are eligible for this scholarship. Selection will be made by the appropriate high school guidance counselors or their representatives. Applications are available in the high school guidance departments and must be submitted to the appropriate high school guidance department for consideration. Contact your high school guidance office concerning application procedures and deadlines.

Massanutten Lions Club James Martin Memorial Scholarship—This scholarship was established for entering freshman from Spotswood High School. Selection is based on financial need and a 3.0 or higher GPA. This scholarship may be renewed for the second year if the student remains in good academic standing and retains a minimum 2.0 GPA. (FAFSA required)

MGW Communications Endowed Scholarship—This scholarship is available to full-time entering freshmen from Bath, Highland or Buffalo Gap High School or home-schooled in the MGW service area. Minimum 2.0 GPA is required. (FAFSA required)

Rosberg Family Endowed Scholarship—Students graduating from Waynesboro High School with a 2.5 GPA or better are eligible to receive this scholarship. The recipient of this scholarship must also have a demonstrated record of community service and/or involvement in extracurricular activities. Demonstrated leadership or leadership potential may also be a factor in the selection of the successful recipient. Second preference may be given to students from the remaining Augusta County high schools, as well as Robert E. Lee High School.

S.G.A. High School Scholarship—High school seniors in the College service area who plan to enroll full-time at BRCC are eligible for this scholarship. Selection for one scholarship is based on academic performance, extracurricular, and community activities. The other scholarship will be based on financial need and academic performance. Minimum 2.0 GPA is required. (FAFSA required)

Nursing Scholarships

AHC Community Health Foundation Scholarship—Scholarships awards will be available to students currently enrolled in, or planning to enter, the BRCC Nursing Program. Recipients must be residents of Staunton, Waynesboro, and/or Augusta County. Selection is based on a demonstration of a strong potential for a successful career in Nursing. Preference may be given to a student demonstrating financial need. This scholarship may be renewed for the second year if the student remains in good standing. Minimum 2.0 GPA required (FAFSA required)

Blue Ridge A.A.C.N. (American Association of Critical-Care Nurses) Nursing Scholarship—This scholarship will be available to a student currently enrolled in, or planning to enter, the BRCC Nursing Program. The scholarship recipient will be selected because he/she demonstrates a strong potential for a successful career in Nursing; in particular, the student must demonstrate an interest in working in the field of critical care upon completion of the program. Preference may be given to a student demonstrating financial need. (FAFSA required)
Bridgewater Retirement Community Endowed Scholarship in honor of Pearl R. Parks, RN, Director of Nursing—This scholarship was established to assist a student in the nursing program. Preference may be given to students with financial need. The scholarship may be renewable providing the student remains in good academic standing with a minimum 2.5 GPA. (FAFSA required)

Elton Stearn Estep Memorial Endowed Scholarship—Students enrolled in the BRCC Nursing Program are eligible for this scholarship. Preference will be given to students with financial need. (FAFSA required)

Graves Family Endowed Scholarship—This scholarship was established to assist students in the Nursing program in attaining their educational goals.

Highlands Nursing Endowed Scholarship—This scholarship was established to assist a student in the BRCC Nursing program. The student must reside in Highland, Bath or Pendleton County. Selection is based on academic potential with preference to be given to students with financial need. (FAFSA required)

Carolyn Lauritsen Jochen Nursing Scholarship—Students enrolled in or planning to enroll in the BRCC Nursing Program are eligible for this scholarship. Selection is based on the student’s demonstrated financial need and a strong potential for a successful career in nursing. (FAFSA required)

Hallie Sayers Lee Endowed Scholarship in Nursing—This scholarship was established to assist a student currently enrolled in, or planning to enter the BRCC Nursing program. Selection is based on demonstrated financial need and a strong potential for a successful career in Nursing. Student must maintain a 2.5 GPA to retain scholarship for 2nd semester. (FAFSA required)

Gladys Cleek McHone Endowed Scholarship in Nursing—This scholarship is available to assist a student enrolled in the BRCC Nursing program. First priority will be given to a student who is a resident of Bath County with second priority to be given to a student who resides in Rockingham County.

Sunnyside Communities/Kramer Nursing Scholarship—This scholarship was established to assist a student currently enrolled in, or planning to major in, the BRCC Nursing program. Scholarship recipients will be selected based upon their strong academic potential and their demonstrated intent to work in a long-term care facility. Preference may be given to a student demonstrating financial need. (FAFSA required)

Brenda F. Wilkinson Endowed Scholarship in Nursing—This scholarship is available to a nursing student. Selection will be based on academic potential with preference given to applicants with financial need. (FAFSA required)

Open Scholarships

Louise B. Adams Memorial Scholarship—This scholarship was established in memory of Louise B. Adams, in recognition of her distinguished career at Blue Ridge Community College. Students who have demonstrated an interest in liberal arts—either the visual arts or the performing arts are eligible for this scholarship. Minimum 2.0 GPA is required.

Sandra Bonin Anderson Endowed Scholarship—Students enrolled for six or more credit hours are eligible for this scholarship. Minimum 2.0 GPA is required.

James A. and Odella M. Armstrong Endowed Scholarship—Students enrolled in any program are eligible to receive this scholarship. Criteria will be based on scholarship, character, and merit. Minimum 2.0 GPA is required.

Augusta Lumber Company Scholarship—This scholarship will be awarded to Full-time students with a demonstrated financial need. Minimum 2.0 GPA (FAFSA required)

BRCC Educational Foundation Scholarships—Several scholarships are available. The amount of the scholarships will vary each year. Selection is based on academic potential, GPA of at least 3.0, two letters of reference and financial need. Full-time enrollment is required. (FAFSA required)

Warren Lloyd Braun, Jr. Endowed Scholarships—This scholarship award will be based on academic achievement and potential as well as financial need. Students must be full-time and may be enrolled in any degree program. Minimum 2.0 GPA is required. (FAFSA required)

Central Shenandoah-Regional Literacy Coordinating Committee-IV GED Annual Scholarship—This scholarship seeks to recognize the significant accomplishments of area GED graduates. GED graduates will be given special consideration if they score at least 2500 points, and/or have attended an Adult Education or Literacy program. This information should be included in your application. Preference will be given to a student who has participated in an Adult Education program in Virginia.
George M. and Lee Stuart Cochran Endowed Scholarship—This scholarship award will be available to a student enrolled in any certificate or degree program. Selection may be based on financial need. Minimum 2.0 GPA is required. (FAFSA required)

Henry C. Clark and Mary Ann B. Clark Endowed Scholarship—This scholarship will be available to a full-time student enrolled in any program. Minimum 2.0 GPA is required.

Daniel Family Scholarship—First preference for this scholarship will be students who reside in Craigsville or western Augusta County. Minimum 2.0 GPA is required.

Harry F. and Margaret M. Flippo Foundation Scholarship—Students enrolled in a degree or certificate program and who reside in Harrisonburg or Rockingham County are eligible for this scholarship. Minimum 2.0 GPA is required.

F.H. Harrison, Jr. Endowed Scholarship—This scholarship is available for full- or part-time students enrolled in any certificate or degree program. Preference will be given to a graduate of Broadway High School. Selection may be based on financial need. Minimum 2.0 GPA is required. (FAFSA required)

Ola M. Hoover Scholarship—Full-time degree-seeking students who reside in Harrisonburg or Rockingham County who demonstrates financial need will be eligible for this scholarship. Minimum 2.0 GPA is required. (FAFSA required)

Kiwanis Club of Waynesboro Memorial Endowed Scholarship—First preference will be given to students who are graduates of Waynesboro High School, Fishburne Military School, and/or Stuarts Draft High School. Second preference will be given to students who are graduates of the other Augusta County high schools. Student may be enrolled in any degree or certificate program. Selection will also be based on financial need and GPA of 2.5 or higher. (FAFSA required)

Lawrence Transportation Systems/Community Foundation of the Central Blue Ridge Scholarship—This scholarship was established to honor the employees and customers of Lawrence Transportation Systems and to assist a student who resides in the City of Staunton, Waynesboro or the County of Augusta. Students may be enrolled in any program. Selection is based on good academic standing and financial need. Minimum 2.0 GPA is required. (FAFSA required)

Charles Pascale Memorial Endowed Scholarship—Students enrolled in any certificate or degree program will be eligible for this scholarship. Selection is based on determination, academic performance, and financial need. Minimum 2.0 GPA is required. (FAFSA required)

Harry L. and Reba S. Rawley Endowed Scholarship—This scholarship was established to assist a deserving student at BRCC in attaining their educational goals. Preference will be given to a student who is currently working or plans to work in the field of agriculture and has demonstrated financial need. (FAFSA required)

Right Start (For You) Endowed Scholarship—This scholarship is intended to benefit a first-year student in the Human Services program and may be renewed for the second year if the student remains in good standing. Selection will also be based on financial need. Minimum 2.0 GPA required. (FAFSA required)

Mr. and Mrs. John W. Root Endowed Scholarship—Students may be enrolled in any degree or certificate program to be eligible for this scholarship. Selection will be based on demonstrated financial need. Minimum 2.0 GPA is required. (FAFSA required)

S.G.A. Open Scholarships—Up to two awards for full-time students may be made. One scholarship will be based on academic performance. The other scholarship will be based on financial need and academic performance. Minimum 2.0 GPA is required. (FAFSA required)

Thelma Showker Endowed Scholarship—This scholarship will be available for a student enrolled in any certificate or degree program and has demonstrated financial need. Minimum 2.0 GPA is required. (FAFSA required)

Zane D. Showker Endowed Scholarship—This scholarship was established for full-time students enrolled in any degree program. Selection will be based on academic potential and demonstrated financial need. Minimum 2.0 GPA is required. (FAFSA required)

Catherine O. and Lyall O. Steger, Jr. Endowed Scholarship—This scholarship will be available for students enrolled in any degree or certificate program at BRCC. Preference will be given to students with demonstrated financial need. Minimum 2.0 GPA is required. (FAFSA required)
SunTrust Endowed Scholarship—A scholarship will be available to a student in any program. Past academic history is a factor in the selection process. Minimum 2.0 GPA is required.

Waynesboro Kiwanis Foundation Endowed Scholarship—One or more scholarships will be awarded to students from Waynesboro, Wilson Memorial or Stuarts Draft High Schools. Recipients must be enrolled full-time in a degree or certificate program. Criteria for selection will be based on grades, extracurricular activities, and the required student essay. Minimum 2.0 GPA is required.

United Bank Endowed Scholarship—This scholarship is intended to benefits students with financial need. Preference may be given to students from the Augusta County area. Minimum 2.0 GPA is required. (FAFSA required).

Returning Sophomore Students Scholarships

BRCC Faculty Senate Endowed Scholarship—This scholarship was established to assist a student who has completed a minimum of 24 credits and has achieved a grade point average of at least 3.0. Preference may be given to students with demonstrated financial need. (FAFSA required)

BRCC Support Staff Association Endowed Scholarship—This scholarship will be awarded to a returning student who has completed 30 or more credit hours with a cumulative GPA of 3.2.

Technology Scholarships

Aviation Maintenance Scholarships

Dynamic Aviation Scholarship—Scholarship awards will be available to students enrolled in the Aviation Maintenance Technology program. Selection will be based on demonstrated financial need and a strong potential for a successful career in Aviation Maintenance Technology. Applications will be made available after the beginning of the Fall semester. (FAFSA required)

Electronics Technology Scholarships

Benjamin Cooper Memorial Endowed Scholarship—This scholarship will be awarded to a student studying in the fields of Computer and Electronics Technology, Information Systems Technology, or Mechanical Engineering Technology. Preference may be given to a student who resides in the Waynesboro area. Minimum 2.0 GPA is required.

ComSonics, Inc. Electronics Scholarship—This scholarship was established for students entering the electronics program. Recipients must be full-time and, if funded, the scholarship will be renewed for a second year with an additional allowance for required textbooks. Selection is based on academic performance. Minimum 2.0 GPA is required.

ComSonics, Inc./Dr. James R. Perkins Scholarship—This scholarship was established for students in the electronics program or planning to enter the electronics program. Recipients must be full-time. Selection is based on academic performance. Minimum 2.0 GPA is required.

Mechanical Design/Engineering Technology Scholarships

Joseph Nielsen Endowed Scholarship—Scholarships will be available for students enrolled in the Mechanical Design or Drafting programs on at least a half-time basis. Selection will be based on financial need, academic potential, and leadership ability as provided on the scholarship application and academic records. Minimum 2.0 GPA is required. (FAFSA required)

Riddleberger Brothers, Inc. Endowed Scholarship—This scholarship will be available to a student enrolled in the Mechanical Engineering Technology program. Preference may be given to the student who demonstrates financial need and enrolls full-time. Minimum 2.0 GPA is required. (FAFSA required)

Veterinary Technology Scholarships

Blue Ridge Equine Clinic Equine and Large Animal Scholarship—Students in the Veterinary Technology Program are eligible for this scholarship. Selection will be based on a demonstrated financial need and a strong potential for a successful career in Veterinary Technology. First preference will be given to a student who plans to enter the field of equine medicine. Second preference will be given to a student who plans to work in the field of large animal medicine. Information on application deadlines will be available after the beginning of the Fall semester.

Mr. and Mrs. Rodney L. Martin Veterinary Technology Endowed Scholarship—This scholarship will be available to a full-time second-year Veterinary Technology student. Selection is based on grade point average and student essay. Minimum 2.0 GPA is required. Information on application deadlines will be available after the beginning of the Fall semester.
**William Walter Reams Endowed Scholarship**—This scholarship was established to assist students in the Veterinary Technology Program. Selection of the recipients will be based, in part, on an essay in which the applicants highlight why they wish to be veterinary technicians and what their plans are for the future. Further emphasis in the selection process should include enthusiasm for this type of work and practical skills, such as animal care, lab work, externship, etc. Information on application deadlines will be available after the beginning of the Fall semester.

**Veterinary Technology Equine and Large Animal Scholarship**—This scholarship will be awarded to a second-year Veterinary Technology student. First preference will be given to a student who plans to enter the field of equine medicine. Second preference will be given to a student who plans to work in the field of large animal medicine. Information on application deadlines will be available after the beginning of the Fall semester.

**Veterinary Technology Scholarships**—Several scholarships will be available for students enrolled in the Veterinary Technology Program. Information on application deadlines will be available after the beginning of the Fall semester.

**Community-Based Job Training Grant Manufacturing Scholarships**
Scholarships are available for manufacturing related courses, career studies certificates and AAS degrees. Contact a member of the Community Based Job Training Grant Office at (540) 234-9261, Ext. 2325 for more information.

**Veterans Educational Benefits**
Application forms and assistance with veterans’ educational benefits are available in the Admissions and Records Office. Most programs at the College are approved by the State Department of Education for the payment of veterans’ educational benefits. Students using their benefits for the first time must complete an “Application for Educational Benefits” (22-1990) and provide an original or court certified copy of their discharge papers (DD-214), plus documentation on dependents, if any. Veterans who are new to BRCC but who have used their educational benefits at another school must complete a “Request for Change of Program or Place of Training” (22-1995).

In order to receive veterans’ educational benefits, classes must be applicable to the veteran’s program of study as outlined in this catalog and student handbook. The student is responsible for notifying the Admissions and Records Office of any changes in enrollment or curriculum.

**Active Service Duty Benefits**
Active duty personnel may qualify for either VA assistance (contact the Admissions and Records Office) or for the tuition assistance programs of the Armed Forces. For information about the Armed Forces Tuition Assistance program, students should contact their education service officer.

**Virginia War Orphans Educational Benefits**
Section 23-7.1 of the Code of Virginia provides for free tuition and fees to attend state-supported institutions of higher education for children of persons deceased, disabled, prisoners of war, or missing in action as a result of any armed conflict after December 6, 1941, involving the Armed Forces of the United States. Applications and information are available in the Admissions and Records Office.

**Notification of Rights Under FERPA**
The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. They are:

1. The right to inspect and review the student’s education records within 45 days of the day Blue Ridge Community College receives a request for access.
   Students should submit to the Dean of Student Services, Vice President, Dean or other appropriate official, written requests that identify the record(s) they wish to inspect. The College official will make arrangements for access and notify the student of the time and place where the records may be inspected. If the records are not maintained by the College official to whom the request was submitted, that official shall advise the student of the correct official to whom the request should be addressed.

2. The right to request the amendment of the student’s education records that the student believes are inaccurate or misleading.
Students may ask the College to amend a record that they believe is inaccurate or misleading. They should write the College official responsible for the record, clearly identify the part of the record they want changed, and specify why it is inaccurate or misleading.

If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of the student’s right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

3. The right to consent to disclosures of personally identifiable information contained in the student’s education records, except to the extent that FERPA authorizes disclosure without consent.

One exception which permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by Blue Ridge Community College in an administrative, supervisory, academic or research, or support staff position; a person or company with whom the College has contracted (such as an attorney, auditor, or collection agent); a person serving on the Blue Ridge Community College Board; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks.

A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

Upon request, the College discloses education records without consent to officials of another school in which a student seeks or intends to enroll.

4. The right to withhold the disclosure of any and all categories of “directory information.” Blue Ridge Community College defines directory information to include: name, address, telephone listing, electronic mail listing; major field(s) of study; degrees, awards and honors; date(s) of attendance; enrollment status; participation in officially recognized activities and sports, course credit load, and the most recent previous educational agency or institution attended by student. Students who wish to prevent disclosure of directory information to persons outside the College may do so by completing the Request For Non-Disclosure of Information form in the Admissions & Records office within the first three weeks of each semester.

5. Parents or legal guardians who can document through their federal tax return from the previous year that a student is claimed as a dependent may request the release of academic information. The student will be notified in writing of the parent’s request before information is released. Please contact the Dean of Student Services for additional information.

5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by Blue Ridge Community College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA are:

   Family Policy Compliance Office
   U.S. Department of Education
   400 Maryland Avenue, SW
   Washington, DC 20202-4605
Academic Advising

Blue Ridge Community College believes that a timely, appropriate, and interactive academic advising process is vital for providing our students with the tools they need for success. The College is committed to providing students with the guidance necessary to make appropriate academic and career decisions. Therefore, the goals of academic advising are to provide students with:

- the information and guidance needed to complete course requirements in degree, diploma and certificate programs;
- an individual, professional point of contact for issues and concerns related to their success at the College;
- information and guidance on transfer to four-year colleges and universities and to the workplace.

New students are advised initially by Counseling Center staff members. Students who complete the process for being placed in a curriculum may also contact any full-time faculty member for academic guidance. Academic advisors help students develop realistic goals, plan their programs of study, and make connections with appropriate resources. While academic advisors can provide students with valuable assistance throughout their academic careers at Blue Ridge Community College, the responsibility for knowing and fulfilling all requirements for graduation lies with the student.

Advanced Standing Information

Students may be eligible for advanced standing when previous studies, training, or work experience has provided them with the knowledge and skills required in a course. Each student is responsible for contacting the Counseling Center to determine the appropriate procedure for evaluation before registering for classes. Students must be officially enrolled in a curriculum in order to be eligible for advanced standing credit.

Blue Ridge Community College may grant credit in appropriate courses on the basis of proficiency examinations, including the College Level Examination Program (CLEP), when the student scores at or above the minimum level recommended by the American Council on Education; and the Advanced Placement Program (AP) when the student scores a 3, 4 or 5. The College may also grant credit in appropriate courses based on an evaluation of the student's work experience. The process of awarding “Credit for Life Experience” follows guidelines established by the Council for the Assessment of Experiential Learning (CAEL). Students may also seek advanced standing through administration of a comprehensive institutional examination (credit-by-exam). Achievement of advanced standing by credit-by-exam or credit-by-portfolio is not available for all courses. Students who plan to transfer to another college or university are responsible for determining if the institution they plan to attend will accept advanced standing credits awarded by Blue Ridge Community College.

Blue Ridge Community College has a time limit for accepting credit for technical courses taken previously at BRCC or other institutions. The Dean of Student Services, in consultation with the appropriate faculty, will determine if courses taken more than five years before the student was accepted in the program at BRCC can be used in the student’s current program of study. The student may be encouraged to take credit-by-exam or credit for life experience, if deemed appropriate.

Please refer to the publication, College Credit Through Advanced Standing, available on the BRCC website, for specific advanced standing guidelines and procedures.

Attendance

While individual instructor’s policies may vary, punctual and regular attendance is required. When absence from a class becomes necessary, the student is responsible for informing the instructor prior to the absence whenever possible. The student also is responsible for the subsequent completion of all work missed during an absence. Instruction missed may affect the student’s grade, regardless of the reason for the absence. Frequent absences may result in the termination of veterans' educational benefits and other programs of financial assistance. Failure to attend the first and second class sessions may result in administrative withdrawal from the course.
Auditing a Course

Students may register for a course on an audit basis, which means they are exempt from taking the examinations and do not receive college credit. Changes from audit to credit or from credit to audit must be made by the official last day to add a course. These dates are published on the BRCC web site.

Change of Registration

In all cases, students who wish to make changes in their schedules after initial registration must follow the established guidelines and complete the add/drop process. Failure to do so may place their college record in jeopardy. Any questions concerning the process should be directed to the Division of Student Services.

The guidelines listed below are for courses which meet throughout the course of an entire fifteen-week semester. Courses of other lengths have unique deadlines which are listed in each semester’s Schedule of Classes, found on the BRCC web site. Students are responsible for knowing the deadline dates for add, drop and withdrawal each semester.

1. Addition of a course: usually students may add a new course during the first five class days of a semester.
2. Dropping a course with a tuition refund: usually students may drop a course and receive a tuition refund during the first eleven class days of a semester.
3. Withdrawal from a course: usually students may withdraw from a course and receive a “W” grade from the twelfth class day through the ninth week of a semester, which represents 60% of the semester. A withdrawal after 60% of the semester has passed will result in a “F” grade except under mitigating circumstances, which requires the documented approval of a Dean. Students who wish to request withdrawal under mitigating circumstances must meet with a College counselor to initiate the process. The request for withdrawal under mitigating circumstances and all supporting documentation must be submitted no later than 10 days after the start of the subsequent semester.
4. Withdrawal from the College: students who wish to withdraw from the College should contact the Counseling Center for appropriate procedures.

Class Cancellation Policy

The College reserves the right to cancel individual classes due to low enrollment or various other factors.

If a class is cancelled, an attempt is made to notify students and the tuition refund process will be initiated automatically. If students wish to add another class, they must complete the add/drop process within the specified time frame to add a course.

Course Repeat Policy

Enrollment in a course is limited to two times. Grades of “W”, “X”, and “I” shall count as first or subsequent attempts (enrollments). Students who wish to enroll in a course for a third time must have written approval from the Vice President of Instruction and Student Services. If a student elects to repeat a course, all grades, credits attempted, and quality points for previous enrollments are no longer applicable. This means that if a class is repeated, the last grade earned (lower or higher) will be the course grade used in the computation of the cumulative grade point average (GPA).

Credits

The credit for each course is indicated after the title in the Course Description section. One credit is equivalent to one collegiate semester hour credit. Each credit given for a course is based on approximately three hours of study in that course weekly by each student. This may consist of lectures, out-of-class study, laboratory and shop study, or combinations thereof as follows:

1. one hour of lecture plus an average of two hours of out-of-class study;
2. two hours of laboratory or shop study plus an average of one hour of out-of-class study;
3. three hours of laboratory or shop study with or without out-of-class assignments;
4. developmental courses are usually one to five credit courses;
5. general usage courses (On-Site Training, Seminar and Project, Supervised Study, etc.) are one to five credits with variable hours.
Academic Load

The typical academic course load for a full-time student is 15-17 credits. The minimum full-time load is 12 credits and the maximum full-time load is 18 credits. A student who wishes to carry an academic load of more than 18 credits must have a minimum grade point average of 3.0 and must have approval of the Dean of Student Services. For courses taken during any special sessions, such as during the abbreviated summer sessions, a proportional limit applies. Please consult the BRCC website for the Summer Session Academic Load policy.

Any student enrolled for fewer than 12 credits is classified as a part-time student.

The minimum course load required to receive veteran's benefits is determined by the current regulations of the Veterans Administration. The rate of progress is generally expected to equal that required to graduate within the established training time.

Developmental Course Credits

Courses numbered 01-09 will not count toward meeting graduation requirements and will not transfer to four-year institutions. Each developmental course carries one to five credits for the purpose of tuition payment.

Degrees, Diplomas and Certificates

The College offers the following degrees, diplomas, or certificates for students who successfully complete approved programs at the College:

1. An Associate of Arts & Sciences (A.A.&S.) or Associate of Science (A.S.) degree is awarded to students who plan to transfer to a baccalaureate degree program at a four-year college or university.
2. An Associate of Applied Science (A.A.S.) degree is awarded to students who major in one of the career and technical curricula and who plan to obtain employment immediately upon graduation from the College.
3. A Diploma is awarded to students who complete a non-degree career and technical curriculum.
4. A Certificate is awarded to students who complete a non-degree curriculum of at least 30 credits.
5. A Career Studies Certificate is awarded to students who complete a non-degree career and technical program of 9 to 29 credits.

Grades for Developmental Studies

Developmental course grades are not included in a student's semester or cumulative grade point average (G.P.A.). The state limits enrollment in any one developmental course to two semesters.

R - Re-enroll Awarded for satisfactory progress for an entire semester in a developmental course (01-09) which requires two or more semesters of individualized studies in preparation for further work in the subject or curriculum being pursued. Students are generally limited to two semesters in any one developmental course.

S - Satisfactory Awarded for satisfactory completion of each developmental course (courses numbered 01-09).

U - Unsatisfactory Awarded for unsatisfactory progress in a developmental course (01-09). Students who receive a grade of "U" should consult with their instructor and a counselor prior to re-enrolling in the same developmental course.

Final Examinations

All students are expected to take their final examinations at the regularly scheduled times. No exceptions will be made without the approval of the instructor of the class.

Grades for College-Level Courses

**Letter Grades**

- A - Excellent Four grade points per credit
- B - Good Three grade points per credit
C - Average Two grade points per credit
D - Poor One grade point per credit
F - Failure Zero grade points per credit
W - Withdrawal No grade point credit (a grade of withdrawal implies that the student was making satisfactory progress in the course at the time of the student’s withdrawal).
I - Incomplete No credit; used for verifiable unavoidable reasons. To be eligible to receive an “I” grade, the student must (1) have satisfactorily completed more than 50% of the course requirements and (2) must request the faculty member to assign the “I” grade and indicate why it is warranted. The faculty member has the discretion to decide whether the “I” grade will be awarded. Since the “incomplete” extends enrollment in the course, requirements for satisfactory completion shall be established through consultation between the faculty member and the student. In assigning the “I” grade, the faculty member must complete documentation that (1) states the reasons for assigning the grade; (2) specifies the work to be completed and indicates its percentage in relation to the total work of the course; (3) specifies the date by which the work must be completed; and (4) identifies the default (B, C, D, F, P, R, or U) based upon course work already completed. Completion dates may not be set beyond the subsequent semester (to include summer term) without written approval of the chief academic officer of the campus. The student will be provided a copy of the documentation. An “I” grade will be changed to a “W” grade only under documented mitigating circumstances which must be approved by the chief academic officer of the campus.
P - Pass No grade point credit; applies only to selected non-developmental studies courses.
X - Audit No grade point credit Students desiring to change status in a course from audit to credit or from credit to audit must do so within the add/drop period for the course. Students who desire to earn credit for a previously audited course must re-enroll in the course for credit and pay normal tuition to earn a grade other than “X.”

Final Grades
Final grades are made available to students at the official end of each semester. If a student has reason to believe that an error has been made in calculating or recording any grade, he/she should bring it to the attention of the instructor for that class pursuant to the guidelines indicated in the Grade Appeal Procedure policy (below). Official transcripts of grades for each semester will not be available for distribution to prospective employers or other colleges for approximately two weeks after the end of the semester.

Grade Appeal Procedure
The faculty of Blue Ridge Community College is unequivocally committed to the principle that evaluation of student work and assignment of grades is a responsibility and a prerogative to be exercised solely by the faculty. Therefore, at no point may an administrator change a grade assigned by an instructor. When a student believes that a final grade has been determined incorrectly, the student must file a written report with the instructor, (with a copy to the instructor’s Dean) identifying specifically the reason(s) for the appeal and including any supporting documentation. This written report must be filed with the instructor as soon as possible and no later than ten calendar days after the first day of class of the next regular (fall/spring) semester. If the matter is not mutually resolved at this level, the student may appeal to the appropriate Dean and subsequently to the Vice President of Instruction and Student Services.

At each level of appeal, each response to the appeal and subsequent appeal must be made in writing within ten calendar days. No new matter may be appealed at any higher level which was not identified by the student in the original written appeal to the instructor. If appropriate, at the sole discretion of the Vice President of Instruction and Student Services, the Vice President may appoint a faculty committee to review the case. If the Vice President does not appoint a committee, the grade assigned by the faculty member will remain unchanged. The decision of the Vice President as to whether or not to appoint a committee cannot be appealed by either party.

If the Vice President appoints a committee, it will consist of three instructional faculty members, at least one of whom instructs in the same or similar discipline as the faculty member who assigned the grade. The student should be aware that the committee review process may result in the grade
being raised, lowered, or unchanged. The committee will meet and report its findings within fifteen calendar days from its appointment by the Vice President. The decision of the committee is final and binding and will be reported to the Vice President of Instruction and Student Services with copies to the Division Dean and the Dean of Student Services, who will record the grade. A copy of the finding of the committee will be placed in the student’s file in the Admissions and Records Office.

**Grade Point Average**

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. Courses which do not generate grade points are not included in credits attempted.

- **Semester Grade Point Average**—Semester GPA is determined by dividing the total number of grade points earned in courses attempted for the semester by the total number of credits attempted.
- **Cumulative Grade Point Average**—Cumulative GPA, which includes all courses attempted, is computed each semester and is maintained on a continuing basis as a record of a student’s academic standing. (See page 26 for Course Repeat Policy).
- **Curriculum Grade Point Average**—A curriculum GPA, which includes only those courses applicable to a student’s curriculum, is computed in order to ensure that a student satisfies the graduation requirements for that curriculum. When a student repeats a course, only the last grade earned is counted in the computation of the curriculum GPA.

**Academic Renewal**

Students who return to the College after a separation of five years or more may petition for academic renewal. The request must be made by completing the Academic Renewal Application form and submitting it to the Admissions and Records Office.

For students who are found eligible for academic renewal, “D” and “F” grades earned prior to re-enrollment will be deleted from the cumulative and curriculum grade point average (GPA), subject to the following conditions:

- Prior to petitioning for academic renewal, students must demonstrate a renewed academic interest and effort by earning at least a 2.5 GPA in the first twelve (12) semester hours completed after re-enrollment.
- All grades received at the College will be a part of the student’s official transcript.
- Students will receive degree credit only for courses in which grades of “C” or better were earned prior to academic renewal, providing that such courses meet current curriculum requirements.
- Total hours for graduation will be based on all coursework taken at the College after re-enrollment, as well as former coursework for which a grade of “C” or better was earned, and credits transferred from other colleges or universities.
- The academic renewal policy may be used only once and cannot be revoked once approved.

**Academic Standing**

**President’s List**

A student who achieves a semester grade point average of 3.8 or higher and earns a minimum of 12 credit hours will be placed on the President’s List.

**Vice President’s List**

A student who achieves a semester grade point average of 3.5 or higher and earns a minimum of 12 credit hours will be placed on the Vice President’s List.

**Merit List**

A student who achieves a semester grade point average of 3.5 or higher and earns 11 or fewer credit hours will be placed on the Merit List.
Good Standing
A student who achieves a semester grade point average between 2.00 and 3.49, who is eligible to re-enroll at the College, and who is not on academic suspension or dismissal is considered to be in good academic standing.

Academic Warning
Any student who fails to attain a minimum grade point average of 2.0 for any semester will be placed on Academic Warning.

Academic Probation
(minimum of 12 credit hours attempted)
Any student who fails to maintain a cumulative grade point average of 1.5 will be placed on Academic Probation. A student on Academic Probation must consult with a counselor and may be limited to less than the normal academic course load in the next semester.

Academic Suspension
(minimum of 24 credit hours attempted)
Any student on Academic Probation who does not attain a 1.5 grade point average during the next semester in attendance is subject to Academic Suspension. Normally, Academic Suspension is for one semester. The statement “Academic Suspension” is placed on the student’s permanent record. The student must apply for readmission with a counselor under all circumstances of Academic Suspension. Readmission will be considered on an individual basis. If the student wishes to appeal the readmission decision, the student must appeal to the Student Admissions Appeals Committee.

Academic Dismissal
(minimum of 24 credit hours attempted)
Any student who does not maintain at least a 2.0 average for the semester following reinstatement to the College, after being on Academic Suspension, will be academically dismissed from that curriculum. A student who has been placed on Academic Suspension and who achieved a 2.0 grade point average for the semester following reinstatement must maintain at least a 1.5 grade point average in each subsequent semester of attendance. The student remains on probation until the overall grade point average reaches a minimum of 1.5. Failure to obtain a 1.5 grade point average in each subsequent semester will result in Academic Dismissal.

Academic Dismissal from the College is permanent. A student whose circumstances have changed significantly following a substantial period of time may make a written request for reinstatement to the Dean of Student Services. Requests for reinstatement are considered on an individual basis by an ad-hoc Admissions Committee that is convened by the Dean of Student Services. The student will be notified in writing of the Admissions Committee’s decision. A student who wishes to appeal the Admissions Committee’s decision may do so in writing to the Vice President of Instruction and Student Services within 10 days of notification of the Admission Committee’s decision. The decision of the Vice President is final and may not be appealed further.

After readmission, the student must maintain a 2.0 grade point average in each semester following reinstatement or permanent dismissal from the College with no further appeal will result.

Graduation

Benefits of Graduation
1. Personal growth and self-satisfaction
2. Wider variety of job and career opportunities
3. Comprehensive educational experience
4. Achievement of technical skills for work
5. Higher probability of admission to a four-year college or university
6. In the case of the A.A.&S. degree, satisfaction of lower-division general education requirements at most public four-year colleges and universities in Virginia
Catalog Used for Graduation

Each new catalog becomes effective with the summer session of the year in which it is published. The catalog to be used to determine graduation requirements shall be either of the following, at the student’s option:

1. The catalog in effect at the time of the student’s placement in the curriculum from which the student intends to graduate or
2. Any subsequent catalog which came into effect while the student was enrolled in that curriculum at BRCC. The catalog on the College’s website (www.brcc.edu) is the most current catalog.

If a student is discontinued because of absence of enrollment, graduation requirements will be determined by the catalog in effect during the semester in which the student re-applies for admission OR any catalog issued subsequent to the re-enrollment. Students who have not attended for three consecutive years must re-apply for admission. Please note: the catalog to be used to certify graduation requirements shall have been in effect no more than seven years prior to the time of graduation.

Nursing A.A.S. degree candidates: Students must satisfy the graduation requirements listed in the catalog in effect at the time they began the clinical component of the Nursing program.

Requirements for Graduation

The responsibility for knowing and fulfilling all graduation requirements lies with the student. To receive an associate degree, diploma, certificate or career studies certificate from the College, a student must:

1. file an application for graduation with the Admissions and Records Office by the publicized deadline;
2. fulfill all of the course and credit hour requirements as specified in the appropriate College catalog, according to the Catalog Used for Graduation policy stated above;
3. complete at the College a minimum of:
   a. 25% of the total credit hours for the Associate Degree;
   b. 25% of the total credit hours for the Diploma;
   c. 25% of the total credit hours for the Certificate.
4. have a grade point average of at least 2.0:
   a. in all courses attempted applicable toward graduation in the curriculum (Associate of Arts & Sciences, Associate of Science candidates);
   b. in specialized or major field courses applicable toward graduation in the curriculum (certificate, diploma, and Associate of Applied Science candidates);
5. resolve all financial obligations to the College and return all library books and other materials.
6. complete a general education assessment instrument(s) provided by the College (Associate degree candidates only). Test results are used to assess and improve the effectiveness of programs and services.

Graduation Honors

Appropriate honors are awarded for degrees, diplomas and certificates based upon the student’s cumulative grade point average as follows:

3.8 Grade Point Average—Summa Cum Laude (with highest honors)
3.5 Grade Point Average—Magna Cum Laude (with high honors)
3.2 Grade Point Average—Cum Laude (with honors)

Honor Code

The functioning of an academic community depends on the integrity of all of its members. Blue Ridge Community College values truthfulness, respect for the property of others, and honesty in academic work. Violations of these values may result in permanent dismissal from the College. The Statement on Student Rights and Responsibilities, located in the Catalog and Student Handbook, and the Statement on Academic Honesty below, provide specific guidelines which encompass this code.
Academic Honesty

When College officials award credit, degrees, diplomas, and certificates, they must assume the absolute integrity of the work done by students; therefore, it is important that each student maintains the highest standard of honor in his or her scholastic work. Academic dishonesty cannot be condoned. When such misconduct is established as having occurred, students are subject to possible disciplinary actions ranging from admonition to dismissal, along with any grade penalty the instructor may impose in accord with their syllabus and college policies. Procedural safeguards of limited due process and appeal are available to students in disciplinary matters. Grade disputes about a grade assigned as a result of academic dishonesty can only be resolved through the grade appeal procedure. No withdrawal policy outlined in the College Catalog and Student Handbook can supersede a grade penalty assigned as a consequence of an academic honesty violation.

Academic dishonesty includes, but is not limited to, one of the following acts:
1. Cheating on an examination or quiz, including the giving, receiving or soliciting of information, the unauthorized use of notes or other materials during the examination or quiz.
2. Buying, selling, stealing or soliciting any material purported to be the unreleased contents of a forthcoming examination, or the use of such material.
3. Substituting for another person during an examination and/or quiz, including online exams or quizzes, or allowing such substitution for one’s self.
4. Plagiarism. This is the act of using content and/or ideas from the work of another individual, either word for word or in substance, and representing them as one’s own work. This includes any submission of written work other than one’s own. There are three types of plagiarism as listed in Donald A. Sears’ book Harbrace Guide to the Library and Research Paper, 3rd Edition (New York: Harcourt, 1972, p. 45). They are:
   a. Word-for-word plagiarism: The submission of the work of another source without proper acknowledgment of that source by footnote, bibliography or reference in the paper.
   b. Patchwork plagiarism: Submitting a work that is stitched together from a variety of sources that does not indicate direct quotes or acknowledgment of those sources.
   c. Unacknowledged paraphrase: Restatement or rewording of another author’s original thought or idea must be acknowledged. Restatement by means of paraphrase does not remove the necessity of giving credit to original sources. Refer to the Library website for more information on plagiarism. (http://www.brcc.edu/library/)
5. Collaboration with another person in the preparation or editing of assignments submitted for credit without advance approval from the instructor.
6. Knowingly furnishing false information to the College including, but not limited to, forgery, alteration or use of College documents, or instruments of identification with intent to defraud.

Alpha Beta Gamma Honor Society

Alpha Beta Gamma is an International Business Honor Society established in 1970 to recognize and encourage scholarship among two-year college students in business curricula. The society’s purpose is to nurture academic excellence among community, junior, and technical college students enrolled in a business program, to provide opportunity for leadership training, to foster an intellectual climate for ideas and ideals, and to imbue scholars with desire for continuing education.

The requirements for membership in Blue Ridge’s Nu Alpha Chapter of Alpha Beta Gamma are:
1. have a cumulative grade point average of 3.0 or above;
2. be enrolled in a business or business-related program;
3. have completed at least 15 semester hours in a business or business-related program at BRCC.

Qualified students receive a letter of invitation to join the honor society at the beginning of the fall and spring semesters.

Phi Theta Kappa Honor Society

Phi Theta Kappa is a national honor society for community colleges. The purpose of Phi Theta Kappa is to recognize and to encourage scholarship among associate degree students.

The requirements for membership in Blue Ridge’s Alpha Xi Xi Chapter of Phi Theta Kappa are:
1. have a cumulative grade point average of 3.5 or above for induction, and must maintain a minimum cumulative grade point average of 3.25 thereafter;
2. be enrolled in a degree program;
3. have completed at least 12 semester hours in a degree program at BRCC.

Qualified students receive a letter of invitation to join the honor society at the beginning of the fall and spring semesters.

Tech-Prep

The Blue Ridge Tech-Prep Consortium supports students in preparing for successful careers by building partnerships between the school systems of Augusta, Highland, and Rockingham counties, and Harrisonburg, Staunton, and Waynesboro cities; Blue Ridge Community College; and area employers. The consortium accomplishes this mission in two ways:
1. by building a unified curriculum which relies on the input of employers, provides career development opportunities, and offers secondary/post-secondary career paths that provide a seamless transition for students from secondary to post-secondary education and/or the world of work, and
2. by initiating and supporting educational improvement at the secondary and postsecondary levels by enhancing the academic and technical competence of educators.

For more information about the Blue Ridge Tech-Prep Consortium, contact Lester Smith at (540) 234-9261, ext. 2346 or visit the Consortium’s website at http://www.brcc.edu/techprep/.

Distance Learning

Blue Ridge Community College values the opportunities for access that it provides for its students and it views distance education as an important aspect of educational access. The College offers distance learning courses in a variety of disciplines and many classroom-based courses incorporate distance learning technology to enhance student learning. Some courses are delivered entirely through distance learning technology.

Internet-based courses can be taken entirely on the Internet, although some courses require on-campus or off-campus proctored testing. These courses are a great option for students who want the flexibility to complete courses at home, work, or even at the College, but on their own schedule. Students should expect to use electronic mail, word processing, and Web browsing software in these courses.

Interactive video is a technology that uses live, two-way video connections to send and receive courses and programs between Blue Ridge Community College and other educational institutions. Although students attend interactive video classes on campus in the Commonwealth Classroom, courses received by the College are actually offered by other colleges in the state. Therefore, students access these courses using the admission and registration procedures of the sending institution. This program allows students to access courses and programs not normally offered at Blue Ridge Community College.

Additional information about distance learning classes, including a listing of computer skills required for successful completion of Internet-based courses, can be found online at http://www.brcc.edu/dl/.

Bachelor’s Degree Opportunities

Blue Ridge Community College values the educational partnerships that have been developed with many of Virginia’s four-year colleges and universities. As a result of these partnerships, BRCC graduates have a variety of options which allow them to transfer college credits earned at BRCC while working toward their associate degrees and apply them to a baccalaureate degree.

Virtually all Virginia public four-year colleges and universities are in compliance with the State Policy on Transfer. This policy states that “students who have earned an associate degree based upon a baccalaureate-oriented sequence of courses should be considered to have met lower-division general-education requirements of senior institutions. These students will be considered to have attained junior standing (typically defined by credits completed at the senior institution). It may, however, take transfer students longer than two years to complete the baccalaureate because of prerequisites in the major or other requirements or circumstances.” At Blue Ridge Community College, this policy applies to graduates of the Associate of Arts and Sciences (A.A.&S.) degree in the College/University Transfer Program and the Associate in Science (A.S.) degree (including the Associate in Science, Engineering specialization). Visit the Virginia Community College Website at (http://www.vccs.edu/vccsasr/vccstransfer.htm) for additional information on the State Policy on Transfer.
Ridge Community College also has more specific guaranteed admission and articulation agreements with a number of Virginia senior institutions. Details about these agreements may be found at www.brcc.edu/services/advising/transfer/gaa.htm. Visit the College Counseling Center or the Student Services website at www.brcc.edu/services/program/transfer.html for further information on any of these agreements.

Cooperative Education Program with Mary Baldwin College

Personal advising, flexibility and multiple academic opportunities characterize Mary Baldwin College. Blue Ridge students can pursue their B.A. or B.S. degrees through either Mary Baldwin’s traditional program or Adult Degree Program (ADP). Young women are encouraged to apply to Mary Baldwin’s traditional program, which accepts up to 66 transfer credits from BRCC and offers scholarship opportunities depending on grade point average. Adult Men and women who have earned their associate degree or are 21 years of age or greater may transfer up to 99 credits from BRCC and other accredited colleges, attend full or part-time, and/or receive credit for work experience. Because the Adult Degree Program recognizes that adult students are juggling work, family, and community responsibilities, ADP offers independent study options in addition to traditional on-campus classes. Financial aid is available to both adult and traditional students. Mary Baldwin offers over thirty majors, as well as the opportunity to earn teacher certification. For additional information, contact Ms. Susie Schmeissing at 234-9261, ext. 2345 or toll free at 1-888-750-2722, ext. 2345; TDD 234-0848; or in room E112 on the Weyers Cave campus. E-mail address: (wcadp@mbc.edu).

Old Dominion University Distance Learning Program

In partnership with Blue Ridge Community College, Old Dominion University offers students opportunities to earn Bachelor’s, Master’s, and Doctoral degrees by taking courses at the Blue Ridge Community College campus without having to leave the Shenandoah Valley.

Eligible students seeking a Bachelor’s degree typically complete the first two years of college course work at Blue Ridge Community College. ODU offers guaranteed and immediate on-site admission to qualified BRCC students. To assist students in the transition, a detailed academic advising guide has been created for students transferring into ODU programs.

Among the Bachelor’s degrees offered are Accounting, Finance, Information Systems, Management, Marketing, Computer Science, Criminal Justice (online), Health Sciences, Human Services, Nursing (on-site and online options available), Work and Professional Studies, Communications, Professional Writing, Occupational and Technical Studies, Mechanical, Civil, and Electrical Engineering Technologies (General or Computer option), and Teacher Education (Pre-K-6 or Special Education). Master’s degrees offered are Community Health, Public Health, Counseling, Nursing, Elementary Education PK-6, Special Education, Recreation and Tourism Studies, and Occupational and Technical Studies. Doctoral degrees offered are Community College Leadership, Instructional Design, English, Nursing, and Occupational and Technical Studies.

For more information, call (540) 234-9345, or contact the ODU office located at BRCC in room E112 (moving to A108 in 2010-2011). E-mail address: (ttnbrcc@odu.edu). Visit ODU’s website at (http://www.brcc.edu/odu).
Services for Students

Counseling

The Counseling Center offers educational support services to enrolled students. These services help students to acquire skills and to access resources and information that are necessary for academic success. Trained counselors and advisors are available to help students establish their occupational and educational goals, and to identify and address obstacles to academic achievement. Advisement and counseling services include, but are not limited to:

Academic Advising

Counselors work with degree and non-degree seeking students to help them select courses and programs that meet their occupational and educational goals. Counselors also provide information and resources on transfer requirements of four-year colleges and universities.

Academic Support

Through course offerings, workshops, and advising sessions, students may learn how to manage time, study more effectively, and minimize test anxiety. Counselors can also refer students to appropriate professionals and community support services if personal problems are inhibiting the learning process.

Career Services

The Division of Student Services provides resources and services to assist students and graduates in carrying out decisions related to obtaining a rewarding career. Comprehensive career resources, advising sessions, and classroom presentations help students learn how to acquire self-knowledge, knowledge of careers and employers, transfer opportunities, and the lifelong ability to conduct a job search. Graduates and current students also are notified of job listings through postings on the BRCC website (www.brcc.edu), on the Weyers Cave campus and at the Harrisonburg and Augusta Centers. Students should contact the Coordinator of Career Services at extension 2257 for additional information.

College Preparedness Testing

Students who wish to enroll in a curriculum or in English or mathematics classes are required to take an adaptive, computerized, untimed test unless they are exempt. The testing helps to ensure that students either possess at the time of admission, or acquire through appropriate developmental studies, the basic skills of reading, writing and mathematics. Students may be required to meet minimum levels of reading proficiency in order to enroll in most credit-level courses.  Students who have scores of 530/Reading, 530/Writing, and/or 520/Math on the Scholastic Aptitude Test (SAT) or ACT scores of 22 or higher English/Reading/Math, or who have successfully completed development or college-level English and mathematics are exempt from taking all or portions of the College Preparedness Test.  Students with baccalaureate degrees may also be exempted from College Preparedness testing (except for nursing program applicants), although they are strongly encouraged to test in order to ensure success in college-level English and mathematics courses.

Disability Services

The Office of Disability Services is part of the Blue Ridge Community College Counseling Center. Its mission is to provide disabled students with the support services needed to access the College and its programs. Any individual who has a physical or mental impairment that substantially limits one or more major life activities and who has a record of such impairment is eligible for services. Relevant documentation of a disability is required in order to obtain requested services. Students must contact the Coordinator of Disability Services to be considered for any accommodation. Individual instructors do not grant accommodations.

Peer Tutoring

The College offers one-on-one and small group academic support to students. The concept of students tutoring students has proven to be a successful, enriching endeavor for participants. This service is coordinated through the Division of Student Services and involves no cost for those who participate. The College pays qualified tutors a competitive wage.

Applications to become a tutor can be obtained by contacting the Academic Support Coach at extension 2407.

Shuttle Service

The BRCC Shuttle offers free transportation for students from Rockingham and Augusta Counties, as well as the cities of Harrisonburg and Staunton. The shuttle schedule is located at http://www.brcc.edu/student/shuttle.htm.
Student Activities

The College offers a variety of student activities that cater to student interests in educational, cultural and social experiences. Student government, intramural athletics, honor societies and special interest groups operate with the approval of the Student Government Association and the College administration. The procedures and policies necessary for official recognition can be obtained from the Student Activities coordinator.

A student activities fund is established to support the program. The fund consists of a portion of the comprehensive student fee, receipts from student activities, and other local contributions. These funds support only student activities which have been authorized by the duly-elected student government, its advisors, the College administration and College Board. The College Board is responsible for the control of these funds under the procedures established by the Virginia Community College System. Accounts for all student organizations are maintained by the Vice President of Finance and Administration and all funds must be deposited and disbursed through that office. Off-campus accounts are prohibited.

Computers for Student Use

Computer support for students is available on campus in F112/F114 seven days a week. Hours are posted in the Lab, on the Internet at (http://www.brcc.edu/computer_lab/) or call ext. 2219 for details. Other networked computing labs at Weyers Cave (D115, F108, F109, F115) are also available to students when they are not being used for classes. There are also networked computers available for student use in the DEF Building, Houff Library, Learning Assistance Center, and the Fine Arts Center. Computer labs are open for use by currently enrolled BRCC students only. Computers for public use are available in the College Library. Due to increasing volume and rising costs, students should print only what is needed for their BRCC courses. Additional computing facilities are available at the BRCC Harrisonburg and Augusta Centers (hours may vary).

Learning Assistance Center

The Learning Assistance Center provides instructional resources in a variety of disciplines for students. College preparedness testing and make-up testing are also scheduled in the Learning Assistance Center. The Learning Assistance Center is equipped with calculators, cassette and videotape players, and microcomputers. The center is open Monday through Thursday, 8:30 a.m. until 9 p.m., and on Friday, 8:30 a.m. until 4:30 p.m.

The Houff Library

The Houff Library provides access to a broad range of print and digital resources that support courses offered at the College. The current collection includes over 50,000 volumes and approximately 10,000 print and online journal subscriptions. The library maintains a sizable children’s book section and a local Virginia Collection. The library participates in resource sharing through memberships in VIVA (Virtual Library of Virginia), Lyrasis, and the VCCS (Virginia Community College System).

Resources

Students have access to WebPac (the library’s online catalog) and over 300 periodical indexes and research databases from networked computers on campus. The library also provides access to these resources from the Harrisonburg and Augusta Centers as well as 24-hour-a-day access from any internet-ready computer located off-campus. Please call 453-2247 or contact the staff at www.brcc.edu/library for assistance.

Services

The library staff provides research and instructional services to support the general curriculum and specific courses. Interlibrary Loan (ILL) services are provided, free of charge, to enable students to request books and journal articles that are not available in the Houff Library collection.

Students and community members are urged to take advantage of the library’s collection and reference sources. As a community service, the Houff Library is open to the public free of charge.

Information

| Hours:     | Monday-Thursday | 7:45 a.m. to 9:00 p.m. |
|           | Friday         | 7:45 a.m. to 5:00 p.m. |
|           | Saturday       | 10:00 a.m. to 3:00 p.m. (during academic semesters only) |

During breaks and holidays, hours may vary and are posted in the library and on the library’s web site at (www.brcc.edu/library).
Workforce Services and Continuing Education

BRCC’s Division of Workforce Services and Continuing Education (WSCE) provides a dynamic program of workforce development services along with a varied and growing community education program that features personal enrichment courses, community service programs, and special events. WSCE manages the operations of two off-campus centers and two facilities on campus, the Fine Arts and the Robert E. Plecker Workforce Centers, and coordinates and hosts numerous events in these two facilities. WSCE also supports community and economic development initiatives that promote an excellent quality of life and a prosperous business climate for the region.

Programs and services include customized training and related performance improvement services to meet workforce development needs of public and private employers; personal and professional development courses for residents that respond to a wide range of needs and interests, such as the latest in computer software training, specialized career enhancement courses, including some that lead to licensure and/or certification, self-improvement courses, and leisure activities; a summer program for youth; special community services programs; and community and economic development activities. While non-credit instruction is its primary focus, WSCE also coordinates specialized credit initiatives.

For further information on any of the following WSCE programs and services, please visit the WCSE website at www.brcc.edu/wsce or call 540 453-2215.

Career Switcher Program

Want to switch careers and teach? The Virginia Community College Career Switcher Program is an initiative by the Virginia Community College System (VCCS) that proves it’s never too late to teach. As a Department of Education-approved alternate route to licensure in high-need areas, eligibility for the program includes qualifications such as having a bachelor’s degree from a regionally-accredited institution, five years work experience, and successful scores on the Virginia Communication and Literacy Assessment (VCLA) test and Praxis II.

For full eligibility requirements and further details, visit: educateva.com or contact Michael Bedwell at 540-453-2530 or via email at mbedwell @ccwa.vccs.edu.

Commercial Driving School

BRCC’s Commercial Driving School provides instruction to equip beginning or experienced drivers with the skills they need to be successful and earn either a Class A or Class B Commercial Driver’s License (CDL). A full-time, five week tractor-trailer driving (Class A) program is offered for which students can earn 12 hours of college credit. For those students unable to attend full-time, WCSE offers a part-time non-credit Class A CDL program customized to meet individual needs and schedules. Customized training for companies is also available.

All programs feature classroom, practice range, and extensive “hands-on” over-the-road training. Students apply what they have learned and gain real industry experience by hauling loads throughout Virginia and by backing into customer docks under the supervision and guidance of their professional trainers.

Computer Training Center

BRCC’s Computer Training Center provides high-quality, hands-on computer training to individuals and businesses throughout the central Shenandoah Valley. Course offerings are determined by technological change and advancement and individual and industry demands. Training can be provided on-site or in state-of-the art computer labs on the Weyers Cave campus, at the Harrisonburg Center, or at the Augusta Center on the Augusta Health campus.

The Computer Training Center offers:

- Introductory computer and keyboarding courses, for personal or professional use
- Introductory and advanced training in a variety of software applications
- Web development and Internet courses
- Hardware courses
- MOS certification preparation courses
Learning Can Be Fun

The “Learning Can Be Fun” (LCBF) summer youth program offers a “hands-on” approach to a variety of fascinating topics for students preparing to enter grades K-12. Class size is kept to a minimum to allow for flexibility and individual instruction. Classes begin in June and typically consist of 15 hours of instruction within a one-week period. Children are grouped appropriately by rising grade level and subject matter, which ranges from art and science to sports and career exploration.

Personal Enrichment Courses

For those who just want the opportunity to learn something new or different in a relaxed, non-threatening environment, Workforce Services and Continuing Education offers a variety of courses for many different interests. From motorcycle riding and bluegrass banjo to digital photography and salsa dancing, BRCC’s personal enrichment courses can instruct, entertain, enhance leisure time, and improve your quality of life.

Professional and Career Development

A number of courses and seminars focus on topics ranging from performance management, employee training, and managing people to synergistic teamwork, writing skills, and active listening. Career development courses in health care, such as Dental Radiation Safety, Certified Pharmacy Technician, Personal Fitness Training, and Medical Office Assisting are offered. Other certificate programs include Associated General Contractors’ Supervisory Training Program for the Construction Industry, the Basic Contractor Business Licensing course, license renewal courses for HVAC, Plumbing, Electrical, and Gas Fitter Tradesmen, Motor Vehicle Dealer Operator license course, and Command Spanish® for the workplace. Additionally, WSCE hosts online courses and career certificate opportunities from nationally recognized vendors.

Shenandoah Valley Small Business Development Center

The Shenandoah Valley Small Business Development Center has offices at Blue Ridge Community College and James Madison University. The Center provides prospective and existing small and medium-sized businesses with counseling, training, and specialized services regarding business formation, financing, management, and operation. High quality, in-depth, one-to-one confidential counseling services are offered free of charge. Assistance is provided to solve problems related to operations, manufacturing/engineering, technology exchange/development, personnel administration, marketing and sales, finance/accounting, business strategy development, and other topics.

Women’s Resource Center

The BRCC Women’s Resource Center assists women in making informed choices that will enable them to successfully meet challenges in the workplace and in their personal lives. While the Women’s Resource Center focuses on the needs of women, men are encouraged to attend programs of mutual interest.

The Women’s Resource Center offers a growing variety of services to the College and community, such as:

- A resource library, located in the Plecker Workforce Center, with more than 900 books on personal growth, relationships, parenting, finances, career strategies and other “real life” topics. Area residents are welcome to borrow library materials for short-term use.
- Speakers for meetings of civic organizations and other groups.
- Special interest non-credit course offerings to promote personal and professional development.
- Temporary emergency financial assistance for BRCC students (men and women).
Workforce Services for Employers

The WSCE team provides top quality educational and training services to address existing and emerging workforce development needs of area employers.

**Needs Assessment:** The WSCE division works with area employers to conduct comprehensive needs assessments to help organizations identify immediate as well as long-range training goals.

**Customized Training:** Recognizing that each organization is unique, WSCE specializes in providing customized training tailored to meet the needs of employers and their workforce. Training programs feature flexible scheduling and convenient locations. Employers may choose to have customized training programs offered at their own facility, the College’s Plecker Workforce Center on the Weyers Cave Campus, the Harrisonburg Center, or the Augusta Center at Augusta Health. Training includes topics such as: communication skills, including technical reading, writing, listening, speaking, and conflict resolution; problem-solving/decision-making skills; customer service; employee relations; computer skills; supervisory and management skills, including team-building and time management; leadership skills; and other specialized topics, such as ISO9001 and GIS/GPS Implementation Plans. The WSCE division also offers pre-employment training and assessment services for area employers.

**Job Analysis and Skills Assessment:** WSCE uses the WorkKeys® system to help employers determine “job fit” between their positions and their employees. Companies that use validated assessments typically achieve substantial benefits, including: improved employee selection and advancement procedures, reduced overtime, training time, and turnover, increased productivity and employee morale, and fewer legal challenges to hiring processes.

Senior Citizen Registration

The Senior Citizen Higher Education Act of 1974, as amended and Virginia Community College System policies permit senior citizens who meet the qualifying criteria listed below to take non-credit courses at Blue Ridge Community College without having to pay course tuition. If you are a senior citizen and you wish to take a non-credit course, you may qualify for free tuition (except fees established for the purpose of paying for course materials, such as laboratory materials) if you meet the following criteria:

1. You have completed and have on file in the office of the Division of Workforce Services and Continuing Education a current “Senior Citizen Application for Non-Credit Enrollment; the “Senior Citizen Application for Non-Credit Enrollment” form must be completed and filed annually. (Forms are available in the office of the Division of Workforce Services and Continuing Education.)
2. You are 60 years of age or older.
3. You have been legally domiciled in Virginia for the last 12 months.

In accordance with state and VCCS policies, senior citizen enrollment is processed on a space-available basis, and by law, registration is completed after all tuition-paying students have been accommodated. If space is available on the day before the course begins, the senior citizen may apply for admission to the course. All individuals must have completed course registration in order to attend a non-credit course.
Programs of Study

Accounting
Award: Associate of Applied Science Degree 40

Administration of Justice
Administration of Justice
Award: Associate of Applied Science Degree 41
Administration of Justice, Law Enforcement Specialization
Award: Associate of Applied Science Degree
Administration of Justice, Corrections Specialization
Award: Associate of Applied Science Degree
Applications in Law Enforcement
Award: Career Studies Certificate
Applications in Corrections
Award: Career Studies Certificate

Advanced Conversational Spanish
Award: Career Studies Certificate 92

American Sign Language
Award: Career Studies Certificate 92

Art: Fine Arts
Award: Fine Arts Certificate 44
Graphic Design
Award: Career Studies Certificate 45, 97
Art: Introduction to Two-Dimensional Art
Award: Career Studies Certificate 45, 93
Art: Introduction to Three-Dimensional Art
Award: Career Studies Certificate 46, 94

Automotive Analysis and Repair
Award: Diploma 46

Aviation Maintenance Technology
Award: Associate In Applied Science Degree 48
Airframe Maintenance
Award: Certificate 49
Powerplant Maintenance
Award: Certificate 49
Light Sport Aircraft Mechanic
Award: Career Studies Certificate 50, 99

Business Management
Management
Award: Associate of Applied Science Degree 51
Management, Administrative Assistant and Business Specialist Specialization
Award: Associate of Applied Science Degree
Basic Office Skills
Award: Career Studies Certificate 53, 94
Entrepreneurship
Award: Career Studies Certificate 54, 97
Leadership and Supervision
Award: Career Studies Certificate 55, 98
Quality Improvement
Award: Career Studies Certificate 56, 100
College/University Transfer Program
College/University Transfer
Award: Associate of Arts & Sciences Degree 55
College/University Transfer, Business Specialization
Award: Associate of Arts & Sciences Degree 56
College/University Transfer, Computer Science Specialization
Award: Associate of Arts & Sciences Degree 58
College/University Transfer, Radiographic Technology
Award: Associate of Arts & Sciences Degree 59
Partnership Program with Rockingham Memorial Hospital
College/University Transfer, Teacher Education Specialization
Award: Associate of Arts & Sciences Degree 60

Commercial Driving
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Computer and Electronics Technology
Computer and Electronics Technology
Award: Associate of Applied Science Degree 63
Computer and Electronics Technology, Computer Network Technologies Specialization
Award: Associate of Applied Science Degree 64
Computer Network Technologies
Award: Career Studies Certificate 65, 96

Culinary Arts and Management
Award: Associate of Applied Science Degree 66
Partnership Program with Dabney S. Lancaster Community College

Funeral Services
Award: Associate of Applied Science Degree 66
Partnership Program with John Tyler Community College

General Education
Award: Certificate 66

Gerontology
Award: Career Studies Certificate 97

Greenhouse Management
Award: Career Studies Certificate 98

Health Sciences
Award: Certificate 81

Horticulture
Award: Career Studies Certificate 98

Human Services
Human Services
Award: Associate of Applied Science Degree 67

Information Systems Technology
Information Systems Technology
Award: Associate of Applied Science Degree 68
Information Systems Technology, Information Technology for Business Specialization
Award: Associate of Applied Science Degree 70
Computer Applications for Professionals
Award: Career Studies Certificate 71, 95
Computer Help Desk
Award: Career Studies Certificate 71, 95
Computer Network Technologies
Award: Career Studies Certificate 71, 96
Computer Science
Award: Career Studies Certificate 72, 96
E-Commerce for Small Business  
Award: Career Studies Certificate

Information Technology  
Award: Career Studies Certificate

Multimedia Development and Integration  
Award: Career Studies Certificate

Web Design and Development  
Award: Career Studies Certificate

**Mechanical Engineering Technology**

Mechanical Design Technology  
Award: Associate of Applied Science Degree

Computer-Aided Drafting (CAD)  
Award: Career Studies Certificate

Quality Control  
Award: Career Studies Certificate

**Medical Coding—Hospital**

Award: Career Studies Certificate

**Nursing**

Award: Associate of Applied Science Degree

**Opticianry**

Award: Associate of Applied Science Degree  
Partnership Program with J. Sargeant Reynolds Community College

**Respiratory Therapy**

Award: Associate of Applied Science Degree  
Partnership Program with J. Sargeant Reynolds Community College

**Science**

Science  
Award: Associate of Science Degree

Science, Engineering Specialization  
Award: Associate of Science Degree

**Technical Studies**

Technical Studies, Manufacturing Engineering Technology  
Award: Associate of Applied Science Degree

Automation in Manufacturing Engineering  
Award: Career Studies Certificate

Electrical Controls Fundamentals  
Award: Career Studies Certificate

Electrical Fundamentals  
Award: Career Studies Certificate

Manufacturing Management and Productivity  
Award: Career Studies Certificate

Mechanical Maintenance Technology  
Award: Career Studies Certificate

Process Technology  
Award: Career Studies Certificate

**Veterinary Technology**

Veterinary Technology  
Award: Associate of Applied Science Degree

Veterinary Technology Distance Education Program  
Award: Associate of Applied Science Degree

Veterinary Assisting  
Award: Career Studies Certificate
**Accounting**

**Award:** Associate of Applied Science Degree  
**Major:** Accounting

*Possible occupations for graduates: accounting trainee, junior accountant, accounting technician, bookkeeper, or office manager.*

The A.A.S. degree program with a major in Accounting is designed for people who seek employment or professional development in the accounting or business field.

**Curriculum**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 211</td>
<td>Principles of Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENG 111 College Composition I a</td>
<td>(3)</td>
</tr>
<tr>
<td>ACC/BUS/IT</td>
<td>Elective b</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td>17</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 212</td>
<td>Principles of Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>ECO 120</td>
<td>Survey of Economics c</td>
<td>3</td>
</tr>
<tr>
<td>ENG 138</td>
<td>Communication Processes II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENG 112 College Composition II b</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 140</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>MTH 141</td>
<td>Business Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits</strong></td>
<td>18</td>
</tr>
</tbody>
</table>

| **Third Semester** |                                           |         |
| ACC 221    | Intermediate Accounting I                   | 3       |
| ACC 124    | Payroll Accounting                          | 3       |
| BUS 226    | Microcomputer Application in Business       | 3       |
| BUS 241    | Business Law I                              | 3       |
| FIN 215    | Financial Management                        | 3       |
| HLT/PED    | Health or Physical Education                | 1       |
|            | **Total credits**                           | 16      |

| **Fourth Semester** |                                           |         |
| ACC 231    | Cost Accounting I                           | 3       |
| ACC 215    | Computerized Accounting                     | 3       |
| ACC 275    | Capstone Seminar in Accounting              | 3       |
| BUS        | Business Elective                           | 3       |
|            | Humanities/Fine Arts Elective d             | 3       |
|            | Social/Behavioral Science Elective d        | 3       |
|            | **Total credits**                           | 18      |

---

*a Students who take ENG 111-112 must also take CST 110 or BUS 270.  
*b Students may select any ACC, BUS, or IT (ITE, ITD, ITN, ITP) course.  
*c Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 120 and ECO 202.  
*d Please refer to page 91 for the list of Humanities/Fine Arts electives and Social/Behavioral Science electives that are approved to fulfill these requirements.
**Administration of Justice**

Students who wish to pursue an education in the area of Criminal Justice have four options from which to choose. The options include:

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A.S. Degree in Administration of Justice</td>
</tr>
<tr>
<td>A.A.S. Degree in Administration of Justice, Law Enforcement Specialization</td>
</tr>
<tr>
<td>A.A.S. Degree in Administration of Justice, Corrections Specialization</td>
</tr>
<tr>
<td>Career Studies Certificate in Applications in Law Enforcement</td>
</tr>
<tr>
<td>Career Studies Certificate in Applications in Corrections</td>
</tr>
</tbody>
</table>

Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process.

**Administration of Justice**

**Award:** Associate of Applied Science Degree

**Major:** Administration of Justice

Possible occupations for graduates (depending upon the level of education and training): police officer, trooper, deputy sheriff, jailer, correctional officer, investigator, security guard, and loss prevention manager.

The A.A.S. degree program with a major in Administration of Justice is designed to be a highly flexible and customizable program for people who seek full-time employment in the criminal justice system as well as for in-service officers. This degree is for students who do not plan to earn a bachelor’s degree.

In-service sworn personnel who document graduation from the basic law enforcement school at the Virginia State Police Academy may be eligible to receive credit for some course through the College’s advanced standing process. Please contact the Admissions and Records Office for details.

**Curriculum**

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 100</td>
<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>SDV 100</td>
<td>College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td>SOC 236</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective</td>
<td>a</td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 120</td>
<td>Introduction to Courts</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 133</td>
<td>Ethics for the Criminal Justice Professional</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103 or higher math course or any laboratory science</td>
<td>b</td>
<td>3-4</td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Elective</td>
<td>c</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 140</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 105</td>
<td>Juvenile Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CST 110</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 215</td>
<td>Report Writing</td>
<td>d</td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective</td>
<td>a</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 227</td>
<td>Introduction to Constitutional Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective</td>
<td>a</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td></td>
<td>66-67</td>
</tr>
</tbody>
</table>

a Please refer to page 91 for the list of Humanities/Fine Arts and Social/Behavioral Science electives that are approved to fulfill these requirements.

b ENG 111 must be taken prior to ADJ 215.
Administration of Justice

Award: Associate of Applied Science Degree
Major: Administration of Justice
Specialization: Law Enforcement

Possible occupations for graduates (depending upon the level of education and training): police officer, trooper, deputy sheriff, jailer, correctional officer, investigator, security guard, and loss prevention manager.

The A.A.S. degree program with a major in Administration of Justice and a Law Enforcement specialization is designed to enhance the knowledge and skills of both in-service officers and those who aspire to criminal justice careers.

In-service sworn personnel who document graduation from the basic law enforcement school at a Department of Criminal Justice Services Regional Academy or the Virginia State Police Academy may be eligible to receive credit for some course through the College’s advanced standing process. Please contact the Admissions and Records Office for details.

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<th>Credits</th>
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<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>SDV 100</td>
<td>College Success Skills</td>
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</tr>
<tr>
<td>SOC 236</td>
<td>Criminology</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective a</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>16</strong></td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 120</td>
<td>Introduction to Courts</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 133</td>
<td>Ethics for the Criminal Justice Professional</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 232</td>
<td>Domestic Violence</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics/ Laboratory Science b</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>17-18</strong></td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 140</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 105</td>
<td>Juvenile Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CST 110</td>
<td>Introduction to Speech Communication</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 236</td>
<td>Principles of Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 215</td>
<td>Report Writing c</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective a</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>18</strong></td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 227</td>
<td>Introduction to Constitutional Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 211</td>
<td>Criminal Law Evidence and Procedure I</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 228</td>
<td>Narcotics and Dangerous Drugs</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social/Behavioral Science Elective a</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td></td>
<td><strong>66 - 67</strong></td>
</tr>
</tbody>
</table>

a Please refer to page 91 for the list of Humanities/Fine Arts and Social/Behavioral Science electives that are approved to fulfill these requirements.

b MTH 103 or higher math course or any laboratory science.

c ENG 111 must be taken prior to ADJ 215.
Administration of Justice

Award: Associate of Applied Science Degree
Major: Administration of Justice
Specialization: Corrections

Possible occupations for graduates (depending upon the level of education and training): police officer, trooper, deputy sheriff, jailer, correctional officer, investigator, security guard, and loss prevention manager.

The A.A.S. degree program with a major in Administration of Justice and a Corrections specialization is designed to enhance the knowledge and skills of both in-service officers and those who aspire to careers in corrections.

In-service sworn personnel who document graduation from the basic law enforcement school at a Department of Criminal Justice Services Regional Academy or the Virginia State Police Academy may be eligible to receive credit for some course through the College’s advanced standing process. Please contact the Admissions and Records Office for details.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 100</td>
<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>SDV 100</td>
<td>College Success Skills</td>
<td>1</td>
</tr>
<tr>
<td>SOC 236</td>
<td>Criminology</td>
<td>3</td>
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<tr>
<td></td>
<td>Humanities/Fine Arts Elective a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
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<tr>
<td>Second Semester</td>
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<td></td>
</tr>
<tr>
<td>ADJ 120</td>
<td>Introduction to Courts</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 133</td>
<td>Ethics for the Criminal Justice Professional</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 145</td>
<td>Corrections and the Community</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mathematics/ Laboratory Science b</td>
<td>3-4</td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED Elective</td>
<td>2</td>
<td></td>
</tr>
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<td></td>
<td></td>
<td>17-18</td>
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<tr>
<td>Third Semester</td>
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<td></td>
</tr>
<tr>
<td>ADJ 140</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 105</td>
<td>Juvenile Justice System</td>
<td>3</td>
</tr>
<tr>
<td>CST 110</td>
<td>Introduction to Speech communication</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 147</td>
<td>Local Adult Detention Facilities</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 215</td>
<td>Report Writing c</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities/Fine Arts Elective a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>Fourth Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ADJ 227</td>
<td>Introduction to Constitutional Law</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 245</td>
<td>Management of Correctional Facilities</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 248</td>
<td>Probation, Parole and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ADJ Elective</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social/Behavioral Science Elective a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>Total credits required</td>
<td>66 - 67</td>
<td></td>
</tr>
</tbody>
</table>

a Please refer to page 91 for the list of Humanities/Fine Arts and Social/Behavioral Science electives that are approved to fulfill these requirements.

b MTH 103 or higher math course or any laboratory science.

c ENG 111 must be taken prior to ADJ 215.
Career Studies Certificate Options

Applications in Law Enforcement
Award: Career Studies Certificate
Purpose: to provide a flexible set of learning experiences that will enhance the education and professional development of both in-service officers and those aspiring to criminal justice careers. Completion of this career studies certificate also will benefit people who are interested in learning how the criminal justice system works. This career studies certificate is for students who may want to earn the A.A.S. degree in Administration of Justice.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 100</td>
<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 110</td>
<td>Introduction to Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 236</td>
<td>Principles of Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 211</td>
<td>Criminal Law Evidence and Procedure I</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 228</td>
<td>Narcotics and Dangerous Drugs</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 232</td>
<td>Domestic Violence</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>24</td>
</tr>
</tbody>
</table>

Applications in Corrections
Award: Career Studies Certificate
Purpose: to provide a flexible set of learning experiences that will enhance the education and professional development of both officers working in the corrections field as well as those who aspire to careers in corrections. Completion of this career studies certificate also will benefit people who are interested in learning how the criminal justice system works. This career studies certificate is for students who may want to earn the A.A.S. degree in Administration of Justice with a specialization in corrections.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 100</td>
<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 145</td>
<td>Corrections and the Community</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 147</td>
<td>Local Adult Detention Facilities</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 245</td>
<td>Management of Correctional Facilities</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 248</td>
<td>Probation, Parole and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>21</td>
</tr>
</tbody>
</table>

Art

Students who wish to pursue an education in the area of art may choose from four options. The options include:

<table>
<thead>
<tr>
<th>Options</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certificate in Fine Arts</td>
<td>30</td>
</tr>
<tr>
<td>Career Studies Certificate in Graphic Design</td>
<td>18</td>
</tr>
<tr>
<td>Career Studies Certificate in Introduction to Two-Dimensional Art</td>
<td>15</td>
</tr>
<tr>
<td>Career Studies Certificate in Introduction to Three-Dimensional Art</td>
<td>15</td>
</tr>
</tbody>
</table>

Transfer Option: Fine Arts

Award: Certificate
The Fine Arts Certificate provides students with an art foundation course of study that could be used to transfer into a baccalaureate degree program in art or to develop the fundamental knowledge and skills necessary for a career in art. It allows students that have completed the Introduction to Two-Dimensional Art Career Studies Certificate or the Introduction to Three-Dimensional Art Career Studies Certificate to continue their academic studies in art. Students who wish to earn the Associate of Arts and Sciences Degree in College/University Transfer may apply most coursework from this certificate to the degree.
## Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 101</td>
<td>History of Western Civilization I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 102</td>
<td>History of Western Civilization II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 101</td>
<td>History &amp; Appreciation of Art I</td>
<td>3</td>
</tr>
<tr>
<td>ART 121</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 131</td>
<td>Fundamentals of Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART</td>
<td>Elective a</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 102</td>
<td>History &amp; Appreciation of Art II</td>
<td>3</td>
</tr>
<tr>
<td>ART 122</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>ART 132</td>
<td>Fundamentals of Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART</td>
<td>Elective b</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

**Total credits required**

18

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\[a\] Choose from ART 241: Painting I, ART 243: Watercolor I, or ART 153: Ceramics I

\[b\] Choose from ART 154: Ceramics II, ART 242: Painting II, ART 244: Watercolor II, ART 235: Functional Ceramics, or ART 236: Sculptural Ceramics

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### Graphic Design

**Award:** Career Studies Certificate  
Purpose: To provide the educational background and skills in graphic design for entry level positions in graphic communications and graphic design. These courses generally transfer to a four-year college or university.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 121</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 131</td>
<td>Fundamentals of Design I</td>
<td>3</td>
</tr>
<tr>
<td>PHT 264</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 283</td>
<td>Computer Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 284</td>
<td>Computer Graphics II</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total credits required**

18

### Art: Introduction to Two-Dimensional Art

**Award:** Career Studies Certificate  
Purpose: To provide a foundation for individuals interested in two-dimensional art for personal enrichment and for those interested in a career in art. The courses generally transfer to a four-year college or university. This program balances basic skills and knowledge with expressive concerns in order to encourage individuals to find their artistic vision. Courses may be applied to the Fine Arts Certificate.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>History and Appreciation of Art I</td>
<td>3</td>
</tr>
<tr>
<td>ART 102</td>
<td>History and Appreciation of Art II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 121</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 122</td>
<td>Drawing II</td>
<td>3</td>
</tr>
</tbody>
</table>

Plus two electives from the following:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 241</td>
<td>Painting I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 242</td>
<td>Painting II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 243</td>
<td>Watercolor I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 244</td>
<td>Watercolor II</td>
<td>(3)</td>
</tr>
</tbody>
</table>

**Total credits required**

15

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**2010-2011 Catalog and Student Handbook**

**Programs of Study**
Art: Introduction to Three-Dimensional Art

Award: Career Studies Certificate

Purpose: to provide a foundation for individuals interested in the three-dimensional arts for personal enrichment and for those interested in a career in art. The courses generally transfer to a four-year college or university. This program balances basic skills and knowledge with expressive concerns in order to encourage individuals to find their artistic vision. Courses may be applied to the Fine Arts Certificate.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>History and Appreciation of Art I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>History and Appreciation of Art II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 121</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 132</td>
<td>Fundamentals of Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 153</td>
<td>Ceramics I</td>
<td>3</td>
</tr>
<tr>
<td>plus one elective from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 154</td>
<td>Ceramics II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 235</td>
<td>Functional Ceramics</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 236</td>
<td>Sculptural Ceramics</td>
<td>(3)</td>
</tr>
<tr>
<td>total credits required</td>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Automotive Analysis and Repair

Award: Diploma

Major: Automotive Analysis and Repair

Length: Four semesters (two-year) curriculum*

Possible occupation for graduates: automotive technician in a new car dealership or independent service facility.

The Diploma in Automotive Analysis and Repair is designed for people who seek employment in the area of Automotive Technology.

Automotive students may participate in the cooperative education program during each semester. Students work at an approved site and receive credit toward graduation. Due to the sequencing of courses, students may only enter the program in the Fall semester. If student demand for the program exceeds capacity, then a waiting list for admission will be maintained. Students on the waiting list who are at college-level in English and at the MTH 09 level or higher in mathematics, or who have completed all needed developmental course work, will be given priority for admission if space becomes available in the program.

The program is Master Certified in all eight Automotive areas by the National Institute for Automotive Service Excellence and has received the Award for Excellence in Post-Secondary Vocational Education from the Motor Vehicle Manufacturers of the U.S. and the American Vocational Association.

Students must pass each AUT-prefix course in the Automotive Technology curriculum in order to continue in the program. A minimum GPA of 2.0 is required for graduation.

Automotive students must have a valid driver’s license.

* For a full-time student; part-time enrollment is not allowed.
Curriculum

Students may enter the program in the first semester of either the A or B sequence. Completion of both the A and B sequence of courses is required for graduation.

### Group A

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT 111</td>
<td>Automotive Engines I</td>
<td>4</td>
</tr>
<tr>
<td>AUT 136</td>
<td>Automotive Vehicle Inspection</td>
<td>2</td>
</tr>
<tr>
<td>AUT 141</td>
<td>Auto Power Trains I</td>
<td>4</td>
</tr>
<tr>
<td>AUT 197</td>
<td>Cooperative Education in Automotive Analysis</td>
<td>1</td>
</tr>
<tr>
<td>AUT 199</td>
<td>Supervised Study in Automotive Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>AUT 275</td>
<td>Shop Management</td>
<td>2</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HLT 100</td>
<td>First Aid &amp; CPR</td>
<td>2</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development b</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total credits required 62**

### Group B

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUT 121</td>
<td>Automotive Fuel Systems I</td>
<td>4</td>
</tr>
<tr>
<td>AUT 199</td>
<td>Supervised Study in Automotive Mechanics</td>
<td>1</td>
</tr>
<tr>
<td>AUT 241</td>
<td>Automotive Electricity I</td>
<td>4</td>
</tr>
<tr>
<td>AUT 273</td>
<td>Automotive Drivability and Tune-Up I</td>
<td>3</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>HLT 100</td>
<td>First Aid &amp; CPR</td>
<td>2</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development b</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total credits required 62**

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\[a\] ENG 137 and ENG 138 should be taken during the first year.

\[b\] SDV should be taken only once.
Aviation Maintenance Technology

Students who wish to pursue Federal Aviation Administration (FAA) Certification as a mechanic with either an airframe, powerplant, or airframe and powerplant rating may choose from four options. Students who wish to become light sport aircraft pilots or mechanics have an additional option. The options include:

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A.S. Degree in Aviation Maintenance Technology</td>
</tr>
<tr>
<td>Certificate Program in Airframe Maintenance</td>
</tr>
<tr>
<td>Certificate Program in Powerplant Maintenance</td>
</tr>
<tr>
<td>Career Studies Certificate Program in Light Sport Aircraft Mechanic</td>
</tr>
</tbody>
</table>

Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process. Examples include credit by examination or by articulation agreement.

Aviation Maintenance Technology

Award: Associate of Applied Science Degree

Possible occupations for graduates are: entry-level positions in the maintenance, repair, overhaul and modification of aircraft (following Federal Aviation Administration certification as mechanic with airframe and powerplant ratings). Students who earn the Associate of Applied Science Degree in Aviation Maintenance Technology are additionally better qualified for positions in the industry as lead mechanics, shop foreman, and directors of maintenance.

The Aviation Maintenance Technology (Airframe and Powerplant) Associate of Applied Science Degree provides students with a background to qualify for the Federal Aviation Administration (FAA) mechanic’s certificate with both airframe and powerplant ratings along with the general education skills to enhance their technical skills.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Applied Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>AMT 103</td>
<td>Basic Electricity and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 105-106</td>
<td>Aviation Science for Mechanics and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 107</td>
<td>Aircraft Drawings</td>
<td>1</td>
</tr>
<tr>
<td>AMT 109-110</td>
<td>Materials and Processes and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 111</td>
<td>Federal Aviation Regulations</td>
<td>1</td>
</tr>
<tr>
<td>AMT 261-262</td>
<td>Aircraft Electrical Systems and Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLT/PED</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>AMT 221-222</td>
<td>Non-Metallic Structures and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 223-224</td>
<td>Metallic Structures and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 241-242</td>
<td>Reciprocating Engines and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 243-244</td>
<td>Turbine Engines and Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

Third Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 231-232</td>
<td>Aircraft Landing Gear Systems and Lab</td>
<td>3</td>
</tr>
<tr>
<td>AMT 233-234</td>
<td>Communication/Navigation and Control Systems and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 253-254</td>
<td>Ignition Systems and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 255-256</td>
<td>Fuel Metering Systems and Lab</td>
<td>3</td>
</tr>
<tr>
<td>AMT 263-264</td>
<td>Aircraft Fuel, Fire, and Instrument Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>
Aviation Maintenance Technology: Airframe Maintenance

Award: Certificate

Purpose: to provide students with the content and skills needed for entry-level positions as general aircraft-overhaul mechanic, accessory mechanic, electric-shop mechanic, general cabin-equipment mechanic, maintenance-crew member, ramp-service crew member, and hangar-crew member. After obtaining experience and further training, certificate completers may advance to positions such as airframe technician (licensed), supervisor and inspector.

Students who wish to earn the Associate of Applied Science Degree in Aviation Maintenance Technology may apply all coursework from this certificate to the degree.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 103</td>
<td>Applied Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>AMT 103</td>
<td>Basic Electricity and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 105-106</td>
<td>Aviation Science for Mechanics and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 107</td>
<td>Aircraft Drawings</td>
<td>1</td>
</tr>
<tr>
<td>AMT 109-110</td>
<td>Materials and Processes and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 111</td>
<td>Federal Aviation Regulations</td>
<td>1</td>
</tr>
<tr>
<td>AMT 261-262</td>
<td>Aircraft Electrical Systems and Lab</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
</tbody>
</table>
| or
| ENG 137    | Communication Processes I | (3) |
| AMT 221-222| Non-Metallic Structures and Lab | 4 |
| AMT 223-224| Metallic Structures and Lab | 1 |

Third Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 231/232</td>
<td>Aircraft Landing Gear Systems</td>
<td>4</td>
</tr>
<tr>
<td>AMT 233/234</td>
<td>Communication/Navigation and Control Systems</td>
<td>2</td>
</tr>
<tr>
<td>AMT 263/264</td>
<td>Aircraft Fuel, Fire, and Instrument Systems</td>
<td>2</td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 225-226</td>
<td>Assembly and Rigging and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 227-228</td>
<td>Airframe Inspection and Lab</td>
<td>2</td>
</tr>
</tbody>
</table>

Total credits required 40

Aviation Maintenance Technology: Powerplant Maintenance

Award: Certificate

Purpose: to provide students with the content and skills needed for entry-level positions as general aircraft engine-overhaul mechanic, accessory mechanic, electric-shop mechanic, and general engine mechanic. After obtaining experience and further training, certificate completers may advance to positions such as powerplant technician (licensed), supervisor and inspector.

Students who wish to earn the Associate of Applied Science Degree in Aviation Maintenance Technology may apply all coursework from this certificate to the degree.
<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 103</td>
<td>Applied Technical Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>AMT 103</td>
<td>Basic Electricity and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 105-106</td>
<td>Aviation Science for Mechanics and Lab</td>
<td>4</td>
</tr>
<tr>
<td>AMT 107</td>
<td>Aircraft Drawings</td>
<td>1</td>
</tr>
<tr>
<td>AMT 109-110</td>
<td>Materials and Processes and Lab</td>
<td>2</td>
</tr>
<tr>
<td>AMT 111</td>
<td>Federal Aviation Regulations</td>
<td>1</td>
</tr>
<tr>
<td>AMT 263-262</td>
<td>Aircraft Electrical Systems and Lab</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>ENG 137</td>
</tr>
<tr>
<td>AMT 241-242</td>
</tr>
<tr>
<td>AMT 243-244</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 253-254</td>
</tr>
<tr>
<td>AMT 255-256</td>
</tr>
<tr>
<td>AMT 263-264</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 245-246</td>
</tr>
<tr>
<td>AMT 251-252</td>
</tr>
</tbody>
</table>

| Total credits required | 40 |

**Aviation Maintenance Technology: Light Sport Aircraft Mechanic**

**Award:** Career Studies Certificate

Purpose: to provide students with the content and skills needed to operate and maintain light sport aircraft. Full-time students may complete the program in two semesters; part-time students determine their own pace.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 171</td>
<td>Light Sport Aircraft Regulations</td>
<td>1</td>
</tr>
<tr>
<td>AMT 173</td>
<td>Light Sport Aircraft General Airframe</td>
<td>1</td>
</tr>
<tr>
<td>AMT 175</td>
<td>Light Sport Aircraft Engines and Propellers</td>
<td>1</td>
</tr>
<tr>
<td>AMT 177</td>
<td>Light Sport Aircraft Class</td>
<td>1</td>
</tr>
<tr>
<td>AMT 178</td>
<td>Light Sport Aircraft Maintenance and Training</td>
<td>1</td>
</tr>
<tr>
<td>ARO 120</td>
<td>Light Sport Aircraft Ground School</td>
<td>3</td>
</tr>
<tr>
<td>ARO 290</td>
<td>Coordinated Internship in Aviation</td>
<td>1</td>
</tr>
</tbody>
</table>

| Total credits required | 9 |
Students who wish to pursue an education in the area of Business Management have several options from which to choose. The curricula offerings enable students to begin with a Career Studies Certificate and to continue their studies culminating in an A.A.S. degree in Business Management.

Students who wish to pursue more than one of the programs of study should consult with an academic advisor or counselor for assistance in scheduling. The options include:

<table>
<thead>
<tr>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A.S. Degree in Business Management</td>
</tr>
<tr>
<td>A.A.S. Degree in Business Management, Administrative Assistant and Business Specialist Specialization</td>
</tr>
<tr>
<td>Career Studies Certificate in Basic Office Skills</td>
</tr>
<tr>
<td>Career Studies Certificate in Entrepreneurship</td>
</tr>
<tr>
<td>Career Studies Certificate in Leadership and Supervision</td>
</tr>
<tr>
<td>Career Studies Certificate in Quality Improvement</td>
</tr>
</tbody>
</table>

Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process. Examples include credit by examination or by articulation agreement.

### Associate Degree Options

**Award:** Associate of Applied Science Degree  
**Major:** Management

Possible occupations for graduates: assistant manager, management trainee, manager of a small business, supervisor, sales representative, and other positions related to the business field.

The A.A.S. degree program with a major in Management is for people who seek employment or professional development in the business field. Full-time students may complete the following associate in applied science degrees in two years; part-time students determine their own pace.

### Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 115</td>
<td>Applied Accounting ( a )</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 211</td>
<td>Principles of Accounting I</td>
<td>(3)</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MTH 141</td>
<td>Business Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>16</td>
</tr>
</tbody>
</table>

| **Second Semester** | | |
| ACC 212 | Principles of Accounting II | 3 |
| or | | |
| BUS | Business Elective \( b \) | (3) |
| ECO 120 | Survey of Economics \( c \) | 3 |
| ENG 138 | Communication Processes II | 3 |
| or | | |
| ENG 112 | College Composition II | (3) |
| HLT/PED | Health or Physical Education | 1 |
| ITE 140 | Spreadsheet Software | 3 |
| Business Elective \( b \) | 3 |
| | 16 |
Third Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 241</td>
<td>Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>FIN 215</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MKT 100</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social/Behavioral Science Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

Fourth Semester

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Computer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Business Elective b</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Humanities/Fine Arts Elective d</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits required 66

---

a Students who take ACC 115 must take a BUS elective in the second semester. ACC 211 must be followed by ACC 212.
b Please refer to page 54 for the list of Business courses that are approved to fulfill these requirements. Other courses may be accepted with divisional approval.
c Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 120 and ECO 202.
d Please refer to page 91 for the list of Humanities/Fine Arts and Social/Behavioral Science electives that are approved to fulfill these requirements.

Management, Administrative Assistant and Business Specialist

Specialization

**Award:** Associate of Applied Science Degree

**Major:** Management

**Specialization:** Administrative Assistant and Business Specialist

Possible occupations for graduates: administrative or executive assistant, office manager, information services specialist, and other related office administrative positions.

The A.A.S. degree program in Management with a specialization in Administrative Assistant and Business Specialist is designed for students who seek career advancement in the growing field of 21st century office technologies and senior administrative support. Studies will include integrated computer software applications, project and scheduling management, semi-structured decision-making and problem-solving, team skills, records storage and retrieval, customer service, and electronic communications.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AST 102</td>
<td>Keyboarding II</td>
<td>3</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MTH 141</td>
<td>Business Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
</tbody>
</table>

| Second Semester |                                |         |
| ECO 120        | Survey of Economics a          | 3       |
| ENG 138        | Communication Processes II     | 3       |
| or             |                              |         |
| ENG 112        | College Composition II        | (3)     |
| HLT/PED        | Health or Physical Education  | 1       |
| ITE 140        | Spreadsheet Software          | 3       |
| ITD 130        | Database Fundamentals         | 3       |
|                | Social/Behavioral Science Elective b | 3    |

Total credits required 52
Third Semester

ACC 115  Applied Accounting  3

or

ACC 211  Principles of Accounting I  3

AST 201  Keyboarding III  3

BUS 226  Computer Business Applications  3

BUS 270  Interpersonal Dynamics in the Business Organization  3

Humanities/Fine Arts Elective  3

MKT 100  Principles of Marketing  3

Fourth Semester

AST 243  Office Administration I  3

BUS 200  Principles of Management  3

BUS 241  Business Law I  3

HLT/PED  Health or Physical Education  1

ITD 110  Web Page Design I  3

ACC 212  Principles of Accounting II  3

or

BUS  Business Elective  3

Total credits required  18

---

Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 120 and ECO 202.

Please refer to page 91 for the list of Humanities/Fine Arts and Social/Behavioral Science electives that are approved to fulfill these requirements.

Students who take ACC 115 must take a BUS elective in the fourth semester. ACC 211 must be followed by ACC 212.

Please refer to page 54 for the list of Business courses that are approved to fulfill these requirements. Other courses may be accepted with divisional approval.

---

Career Studies Certificate Options

Basic Office Skills

Award: Career Studies Certificate

Purpose: to provide students with an opportunity to acquire basic skills for entry-level positions in the 21st century office environment. Studies will include foundational computer hardware and software knowledge, keyboarding, word-processing and document production, spreadsheets and fundamental accounting procedures, and essential office procedures. Once completed, courses in this career studies certificate may be applied toward other programs offered by the College, such as the A.A.S. degree in Management, with an Administrative Assistant and Business Information Specialist specialization.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 211</td>
<td>Principles of Accounting I 3</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACC 115</td>
<td>Applied Accounting (3)</td>
<td></td>
</tr>
<tr>
<td>AST 102</td>
<td>Keyboarding II 3</td>
<td></td>
</tr>
<tr>
<td>AST 243</td>
<td>Office Administration I 3</td>
<td></td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business 3</td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I 3</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I (3)</td>
<td></td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts 3</td>
<td></td>
</tr>
</tbody>
</table>

Total credits required 18
Entrepreneurship

Award: Career Studies Certificate
Purpose: to provide students with the opportunity to acquire the knowledge and skills needed to become an entrepreneur, rather than employee or manager. Students will learn how to plan, implement, and monitor a new business, understand market and capital economies, and will fully explore the role of globalization in the marketplace.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 115</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 165</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 241</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Computer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>FIN 215</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITE 160</td>
<td>Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>MKT 100</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

Leadership and Supervision

Award: Career Studies Certificate
Purpose: to provide students with an opportunity to acquire basic skills and knowledge in the areas of Leadership and Supervision. Studies will include topics in leadership skills, problem-solving, decision making, effective communications, dealing with conflict and employee relations, delegation, motivation, time management, team building, process improvement and others. Once completed, courses in this career studies certificate may be applied toward the Certificate in Supervision and the A.A.S. degree in Business Management.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>First Semester</strong></td>
<td></td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS 118</td>
<td>Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>ECO 120</td>
<td>Survey of Economics (^a)</td>
<td>3</td>
</tr>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>ENG 138</td>
<td>Communication Processes II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

\(^a\) Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 120 and ECO 202.

Quality Improvement

Award: Career Studies Certificate
Purpose: to provide students with a basic understanding in the area of Quality Improvement. Special emphasis is placed on problem-solving, teamwork, and developing an understanding of variation, statistical process control (SPC), processes, and systems. Once completed, this career studies certificate may be applied toward the A.A.S. degree in Business Management. BUS 270 and 221 have prerequisites.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>BUS 221</td>
<td>Business Statistics</td>
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Business Electives: Business Management Degree

All ACC, AST, BUS, ECO, FIN, ITE, ITD, ITP, ITN, or REA courses are approved Business electives. IND 195, IND 150, and IND 181 are also approved courses. Before enrolling in any Business elective, check catalog course descriptions for prerequisite requirements.
**College/University Transfer**

**Award:** Associate of Arts & Sciences Degree  
**Major:** College/University Transfer

The College/University Transfer program offers a core of college-level general education courses equivalent in content to those taken by freshmen and sophomores at four-year colleges and universities. The goal of this program is to provide students with a broad introduction to some of the major fields of study in the liberal arts as well as to provide the foundation for upper-level college courses. The program is flexible enough to allow students to begin to fulfill the basic transfer requirements for a variety of majors offered at senior institutions. Full-time students can complete this program in two years (excluding the time needed to complete developmental studies, if required). Part-time students determine their own pace.

In order to prepare for transfer to a four-year college or university, students are encouraged to discuss their educational plans with the admissions officers at their chosen four-year college or university. Students should request a community college transfer guide directly from the college or university in which they plan to enroll or consult that institution’s website. The Academic Advising link on the BRCC website has very useful academic advising guides for the most popular transfer majors. Students may consult this guide to assist them in planning which courses to enroll in if they plan to transfer to a specific major.

Nearly all four-year colleges and universities in Virginia, as well as some private institutions in the state, now abide by the Virginia State Policy on Transfer. The policy states that students who complete the Blue Ridge Community College A.A.&S. degree in College/University Transfer will have met all lower division general education requirements at participating institutions. The policy does not guarantee admission to these institutions nor does it imply that each individual community college course will transfer. A copy of the Virginia State Policy on Transfer and additional information on articulation agreements with Virginia four-year colleges and universities is available in the College Counseling Center.

The following certificates or career studies certificates may be applied towards the College/University Transfer degree: Fine Arts, Computer Science, and Information Technology.

Admission Requirements: A high school diploma or the equivalent is required for entry into this program. High school graduates who enroll in the College/University Transfer Program are encouraged to have completed a college preparatory program of study in high school (or the equivalent) which included English, mathematics (algebra I & II minimum), laboratory sciences, social sciences, and foreign languages.

Students may be eligible to receive credit for some courses in this curriculum through the College’s advanced standing process. Please consult a college counselor for additional information.

### Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>ENG 111</td>
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<tr>
<td>HIS 101</td>
<td>History of Western Civilization I</td>
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<td>or</td>
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</tr>
<tr>
<td>HIS 111</td>
<td>History of World Civilization I</td>
<td>(3)</td>
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<td></td>
<td>or</td>
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<td>HIS 121</td>
<td>United States History I</td>
<td>(3)</td>
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<td>MTH</td>
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<td>ITE 120</td>
<td>Principles of Information Systems</td>
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<td>CSC 200</td>
<td>Introduction to Computer Science</td>
<td>(3)</td>
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*a* HLT/PED: Health or Physical Education

*b* MTH: Mathematics

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2010-2011 Catalog and Student Handbook

Programs of Study
### Second Semester

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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<td>History of Western Civilization II</td>
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<td>or</td>
<td>HIS 112</td>
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<tr>
<td>or</td>
<td>HIS 122</td>
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<td>MTH</td>
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<td>Introduction to Speech Communication</td>
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Total credits required: 16

### Third Semester

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Total credits required: 17

### Fourth Semester

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<td>6</td>
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<tr>
<td>Science with Laboratory c</td>
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</table>

Total credits required: 16

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**Total credits required**: 63

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### Notes:

- **a** Total of two HLT/PED credits required in the program (excluding HLT 143-144)
- **b** Any of the following math sequences are recommended, depending on major at four-year college or university: MTH 151-157, 163-270, 163-164, or 173-174. MTH 277, 279, and 285 may also be taken.
- **c** BIO 101-102 or BIO 101-BIO 114, CHM 101-102, CHM 111-112, PHY 201-202, GOL 105, GOL 110 or NAS 130 in combination with one of these courses
- **d** Students may choose from ENG 241, 242, 243, 244, 251, 252.
- **e** Minimum of six credits required in Social Science electives (economics, geography, political science, psychology, or sociology courses). Choose from list of approved Social/Behavioral Sciences on page 61.
- **f** 16 credits in approved electives required. Requirements of four-year institutions may vary. Students should consult a counselor or their faculty advisor to select electives and certain required courses that will satisfy baccalaureate major requirements. In addition, they should confirm with the college or university to which they plan to transfer, that they will receive credit at the four-year institution.
- **g** Students may choose from ENG 241, 242, 243, 244, 251, 252, or ART 101, 102, CST 151, HUM 260.

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**College/University Transfer**

**Award**: Associate of Arts & Sciences Degree  
**Major**: College/University Transfer — Specialization: Business Administration

The A. A. & S. degree program with a major in College/University Transfer and a Business Administration specialization is designed for students who wish to pursue a four year degree in a business related area and a career in business.

The specialization in Business Administration prepares students with core knowledge and skills needed for entry into baccalaureate schools of business. Students should be knowledgeable about the specific requirements of the four year school to which they wish to transfer so that they may make appropriate course choices.
## Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>First Semester</strong></td>
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<td></td>
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<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>HIS 101</td>
<td>History of Western Civilization I</td>
<td>3</td>
</tr>
</tbody>
</table>
| or  
| HIS 111   | History of World Civilization I            |         |
| or  
| HIS 121   | United States History I                    | (3)     |
| ITE 115   | Introduction to Computer Applications and Concepts | (3) |
| or  
| ITE 120   | Principles of Information Systems          | (3)     |
| or  
| CSC 200   | Introduction to Computer Science           | (3)     |
| MTH       | Mathematics I a                           | 3       |
| BUS 241   | Business Law I                            | 3       |
| SDV       | Student Development                       | 1       |
| **Second Semester** |                                        |         |
| ENG 112   | College Composition II                     | 3       |
| HIS 102   | History of Western Civilization II         | 3       |
| or  
| HIS 112   | History of World Civilization II          | (3)     |
| or  
| HIS 122   | United States History II                   | (3)     |
| MTH       | Mathematics II a                          | 3       |
| BUS 221   | Business Statistics                        | 3       |
| or  
| MTH 157   | Elementary Statistics                     |         |
| BUS 270   | Interpersonal Dynamics in Business Organizations | (3) |
| **Third Semester** |                                    |         |
| ACC 211   | Principles of Accounting I                 | 3       |
| Science with Laboratory c |                             | 4       |
| Social Science Elective b |                               | 3       |
| Literature d |                                     | 3       |
| HLT/PED   | Health or Physical Education               | 2       |
| **Fourth Semester** |                                      |         |
| ACC 212   | Principles of Accounting II                | 3       |
| CST 110   | Introduction to Speech Communications      | 3       |
| Social Science Elective b |                               | 3       |
| Approved Elective f |                                | 1       |
| **Total credits required** |                               | 60      |

* MTH 163 and MTH 270 are highly recommended for this specialization
* ECO 201 and ECO 202 are highly recommended for this specialization
* BIO 101-102 or BIO 101-BIO 114, CHM 101-102, CHM 111-112, PHY 201-202, GOL 105, GOL 110 or NAS 130 in combination with one of these courses. Students may choose from ENG 241, 242, 243, 244, 251, 252.
* Students may choose from ENG 241, 242, 243, 244, 251, 252, or ART 101, 102, CST 151, HUM 260.
* For JMU transfer students – Students are advised to take COB 291 at JMU during the summer before entering JMU as a junior. Beginning in Fall of 2010, students may be able to take BUS 227, a BRCC course that transfers to JMU as COB 291. JMU transfer students are advised to take BUS 227 as an elective during the fourth semester. JMU transfer students should take either ITE 120 or CSC 200.
* Students may not receive credit for both BUS 221 AND MTH 157
* ITE 115/ITE 120/CSC-200 Students should refer to the college to which they plan to attend to see which course is accepted into the Business program. (JMU accepts CSC 200 or ITE 120).
Electives may be selected from the list of approved courses for the Associate in Arts and Sciences (AA&S) degree. See pages 61-62.

Admission to Business Majors at four-year institutions may be very competitive. Please refer to individual college catalogs for specific requirements for admission to the college of your choice.

College/University Transfer

Award: Associate of Arts and Sciences Degree
Major: College/University Transfer—Specialization: Computer Science

Possible occupations for graduates are software development, network analysis, software security, database design, etc.

The A.A.& S. degree program with a major in College/University Transfer and a Computer Science specialization is designed for students who wish to pursue a four year degree in Computer Science and a career in a field such as one of those above.

The specialization in Computer Science prepares students with core knowledge and skills needed for entry into baccalaureate schools of education. Students should be knowledgeable about the specific requirements of the four year school to which they wish to transfer so that they may make appropriate course choices.

Curriculum

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<th>Title</th>
<th>Credits</th>
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<tr>
<td>ENG 111</td>
<td>College Composition I</td>
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<tr>
<td>HIS 101</td>
<td>History of Western Civilization I</td>
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<td>or</td>
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<tr>
<td>HIS 111</td>
<td>History of World Civilization I</td>
<td>(3)</td>
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<td>CST 110</td>
<td>Introduction to Speech Communications</td>
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</table>
**Fourth Semester**

CSC 202 Computer Science II  
Science with Laboratory  
Approved electives

CSC 205 Computer Organization

**Total credits required**

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- Total of two HLT/PED credits required in the program (excluding HLT 143-144).
- Any two of the following math sequences are recommended: MTH 163-164, 166-173, 173-174.
- Cross-listed as ITP 120, Java Programming I.
- Students may choose from ENG 241, 242, 243, 244, 251, 252.
- Minimum of three credits required in Social Science electives (economics, geography, political science, psychology, or sociology courses). Choose from list of approved Social/Behavioral Sciences on page 61.
- Any two of BIO 101-102, CHM 101-102, CHM 111-112, PHY 201-202, GOL 105-110
- With the combination of CSC 201, 202, & 205, JMU will give credit for Java II (ITP 220), however, ITP 220 is recommended. Other CSC electives: MTH 286 or 287 required for CS GAA at JMU. Other recommended electives: MTH 157, 173 - all will be required of CS majors by JMU before JMU graduation.
- Students may choose from ENG 241, 242, 243, 244, 251, 252, or ART 101, 102, CST 151, HUM 260.

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**College/University Transfer**

**Award:** Associate of Arts and Sciences Degree  
**Major:** Radiologic Technology  
(Partnership Program)

Possible occupations for graduates: radiologic technicians. With further training/education, graduates may specialize in CT imaging, sonography, nuclear medicine, angiography, mammography, radiation therapy, and MRI imaging.

Blue Ridge Community College offers an Associate in Arts and Sciences in College/University Transfer for graduates of the Rockingham Memorial Hospital Radiologic Training Program who have passed the American Registry of Radiologic Technologies (AART) licensing exam. The College/University Transfer program is the result of an articulation agreement between Blue Ridge Community College and Rockingham Memorial Hospital. Four year colleges and universities may or may not accept in transfer the courses that are articulated through the agreement and students who complete the articulated degree are not eligible to participate in guaranteed admission agreements.

For information about general education requirements at BRCC, go to http://www.b dcc.edu/services/advising/partnerships or contact Ms. Beth Styers in the Counseling Center. For additional information about the Rockingham Memorial Hospital Radiologic Technology Program, call 540-433-4476.
College/University Transfer

Award: Associate of Arts and Sciences Degree
Major: College/University Transfer—Specialization: Teacher Education

Possible occupations for graduates are elementary or secondary school teachers.

The A.A. & S. degree program with a major in College/University Transfer and a Teacher Education specialization is designed for students who wish to pursue a career in elementary or secondary education.

The specialization in Teacher Education prepares students with core knowledge and skills needed for entry into baccalaureate schools of education. Students should be knowledgeable about the specific requirements of the four year school of education to which they wish to transfer so that they may make appropriate course choices.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
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<tr>
<td>HIS 101</td>
<td>History of Western Civilization I</td>
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<td>or</td>
<td>HIS 111 History of World Civilization I</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
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<td>or</td>
<td>ITE 120 Principles of Information Systems</td>
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<td>Mathematics for the Liberal Arts I</td>
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<td>MTH 157</td>
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<td>MTH 163</td>
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First Semester

Second Semester

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<td>MTH 163</td>
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<td>Social Science Elective</td>
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Third Semester

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<td>CST 110</td>
<td>Introduction to Speech Communications</td>
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</tr>
<tr>
<td>EDU 200</td>
<td>Introduction to the Teaching Profession</td>
<td>3</td>
</tr>
<tr>
<td>HIS 121</td>
<td>U.S. History I</td>
<td>3</td>
</tr>
<tr>
<td>Humanities/Fine Arts</td>
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Fourth Semester

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<td>Principles of Economics I</td>
<td>3</td>
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<td>or</td>
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</tr>
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a BIO 101-102, BIO 101-114, CHM 101-102, CHM 111-112, PHY 201-202, GOL 105-110, or NAS 130.

b 4 credits in approved electives required. Requirements of four-year institutions may vary. Students should consult a counselor or their faculty advisor to select electives and certain required courses that will satisfy baccalaureate major requirements. In addition, they should confirm with the college or university to which they plan to transfer, that they will receive credit at the four-year institution.

c Choose from list of approved Social/Behavioral Sciences on page 61.

d Students may choose from ENG 241, 242, 243, 244, 251, 252.

e Students may choose from ENG 241, 242, 243, 244, 251, 252, or ART 101, 102, CST 151, HUM 260.
Courses that Fulfill the Requirements for the AA&S Degree in College/University Transfer

1. All BRCC requirements and electives must be selected from the courses listed below. Any course taken that is not listed will not count toward graduation requirements unless students complete and have approved in advance, a “Program Adjustment Form”.

2. PLEASE NOTE: BRCC’s degree requirements do not necessarily fulfill the general education requirements of the college to which you wish to transfer unless there is a specific articulation agreement to that effect. Currently BRCC has such agreements for its graduates with many state-assisted and some private four-year colleges and universities. Many of the courses listed below do not transfer to every four-year college or university. It is the student’s responsibility to a) Check with a BRCC counselor or advisor, b) Consult the transfer guides of four-year colleges and universities, c) Look up transfer requirements on the college website and/or d) Check directly with the four-year institution to which one intends to transfer, in order to determine if particular courses transfer.

3. Students are responsible for ensuring that prerequisites have been met before registering for any course. Consult the course descriptions in this document for further information.

### Required General Education Courses

**English (6 credits required)**
- ENG 111 College Composition I
- ENG 112 College Composition II

**Health/Physical Education (2 credits required)**
- All HLT and PED courses except HLT 143 and HLT 144

**History (6 credits required)**
- HIS 101 History of Western Civilization I
- HIS 102 History of Western Civilization II
- HIS 111 History of World Civilizations I
- HIS 112 History of World Civilizations II
- HIS 121 United States History I
- HIS 122 United States History II

**Information Systems Technology (3 credits required)**
- ITE 115 Introduction to Computer Applications and Concepts or
- CSC 200 Introduction to Computer Science or
- ITE 120 Principles of Computer Information Systems
  (students may receive credit for ITE 115, CSC 200, and ITE 120)

**Humanities and Fine Arts (6 credits required; 3 credits must be in Literature)**
- CST 130 Introduction to Theatre
- CST 151 Film Appreciation I
- ENG 241 Survey of American Literature I
- ENG 242 Survey of American Literature II
- ENG 243 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
- ART 101 History and Appreciation of Art I
- ART 102 History and Appreciation of Art II
- HUM 260 Survey of 20th Century Culture

**Mathematics (6 credits required)**
- MTH 151 Mathematics for the Liberal Arts I
- MTH 157 Elementary Statistics **
- MTH 163 Precalculus I
- MTH 164 Precalculus II
- MTH 166 Precalculus with Trigonometry
- MTH 173 Calculus with Analytic Geometry I
- MTH 174 Calculus with Analytic Geometry II
- MTH 270 Applied Calculus

**Natural Science/Lab (8 credits required)**
  (Sequence preferred but not required; first half must be taken before second half.)
- BIO 101 General Biology I
- BIO 102 General Biology II *
- BIO 114 Organisms *
- CHM 101 General Chemistry I
- CHM 102 General Chemistry II
- CHM 111 College Chemistry I
- CHM 112 College Chemistry II
- GOL 105 Physical Geology
- GOL 110 Earth Science
- NAS 150 Elements of Astronomy
- PHY 100 Elements of Physics *
- PHY 201 General College Physics I
- PHY 202 General College Physics II
- PHY 241 University Physics I
- PHY 242 University Physics II

**Social and Behavioral Sciences (6 credits required)**
- ECO 120 Survey of Economics *
- ECO 201 Principles of Economics I * (Macroeconomics)
- ECO 202 Principles of Economics II * (Microeconomics)
- GEO 210 People and Land: Intro to Cultural Geography
- GEO 220 World Regional Geography
- PLS 135 American National Politics
- PSY 200 Principles of Psychology *
- PSY 201 Introduction to Psychology I *
- PSY 202 Introduction to Psychology II *
- PSY 230 Developmental Psychology *
- PSY 231 Life Span Human Development I *
- PSY 232 Life Span Human Development II
- SOC 200 Principles of Sociology
- SOC 268 Social Problems
- SSC 107 Problems of People in the Modern World

**Speech (3 credits required)**
- CST 110 Introduction to Speech Communication

**Student Development (1 credit required)**
- SDV 100 College Success Skills
- SDV 101 Orientation to Health Sciences
- SDV 107 Career Education
Approved Elective Courses

Each required general education course if not used to meet a requirement, can be used as an approved elective. The following list represents additional approved electives in this program. Sixteen elective credits are required. Additional elective courses may be approved with specific permission of the Vice President of Instruction and Student Services. The form students use to request such approval, “The Program Adjustment Form”, is available in the Admissions & Records Office.

ACC 211-212 Principles of Accounting I-II **
ACC 215 Computerized Accounting
ADJ 100 Survey of Criminal Justice
ADJ 110 Introduction to Law Enforcement
ADJ 111-112 Law Enforcement Organization & Administration I-II
ADJ 120 Introduction to Courts
ADJ 133 Ethics and the Criminal Justice Professional
ADJ 140 Introduction to Corrections
ADJ 161 Introduction to Computer Crime
ADJ 211-212 Criminal Law, Evidence and Procedures I-II
ADJ 215 Report Writing for Law Enforcement
ADJ 216 Organized Crime and Corruption
ADJ 228 Narcotics and Dangerous Drugs
ADJ 229 Law Enforcement and the Community
ADJ 232 Domestic Violence
ADJ 234 Terrorism and Counter-Terrorism
ADJ 236 Principles of Criminal Investigation
ADJ 245 Management of Correctional Facilities
ART 101-102 History and Appreciation of Art I-II
ART 121-122 Drawing I-II
ART 131-132 Fundamentals of Design I-II
ART 153-154 Ceramics I-II
ART 235 Functional Ceramics
ART 236 Sculptural Ceramics
ART 241-242 Painting I-II
ART 243-244 Watercolor I-II
ART 283-284 Computer Graphics I-II
ASL 101-102 American Sign Language I-II
ASL 201 American Sign Language III
BIO 141-142 Human Anatomy and Physiology I-II
BIO 205 General Microbiology
BIO 276 Freshwater Ecology
BUS 100 Introduction to Business
BUS 200 Principles of Management
BUS 221 Business Statistics I ***
BUS 227 Quantitative Methods
BUS 241 Business Law I
BUS 270 Interpersonal Dynamics in the Business Organization
CHM 211-213 Organic Chemistry I and Lab
CHM 241-242 Organic Chemistry II and Lab
CSC 201-202 Computer Science I-II****
CSC 205 Computer Organization
CSC 210 Programming with C++
CST 130 Introduction to the Theatre
CST 131-132 Acting I-II
CST 136 Theatre Workshop
CST 151-152 Film Appreciation I-II
EDU 200 Introduction to Teaching as a Profession
EGR 110 Engineering Graphics
EGR 120 Introduction to Engineering
EGR 125 Introduction to Engineering Methods
EGR 127 Introduction to Computer Programming
EGR 140 Engineering Mechanics: Statics
ENG 279 Film and Literature
FRE 101-102 Beginning French I-II
FRE 111-112 Intermediate French I-II
FRE 201-202 Advanced French I-II
HIS 181 History and Theory of Historical Preservation
HIS 267 The Second World War
HIS 269 Civil War and Reconstruction
HIS 276 United States History Since World War II
HIS 277 The American Experience in Vietnam
HIS 279 Age of the American Revolution
HIS 295 America in the Middle East
HRT 115 Plant Propogation
HUM 195 Honors Program (1 credit)
HUM 201-202 Survey of Western Culture I-II
ITD 110 Web Design
ITD 112 Designing Web Page Graphics
ITD 130 Database Fundamentals
ITD 210 Web Design II
ITN 208 Protocols and Communications
ITN 260 Network Security Basics

Additional elective courses may be approved with specific permission of the Vice President of Instruction and Student Services. The form students use to request such approval, “The Program Adjustment Form”, is available in the Admissions & Records Office.

* Students may not receive credit toward graduation requirements in this program of study for both BIO 102 and BIO 114, for ECO 120 and ECO 201, for both ECO 120 and ECO 202, for PHY 100 and PHY 201, for both PSY 200 and PSY 201, for both PSY 200 and PSY 202, nor for both PSY 230 and PSY 231.

** Students may not receive credit towards graduation in this program of study for both ACC 115 and ACC 211 or ACC 115 and ACC 212.

*** BUS 221 may not substitute for any math prefix course at Blue Ridge Community College. Students may not receive credit toward graduation requirements in this program of study for both BUS 221 and MTH 157.

**** Students may not receive credit for both CSC 201 and ITP 120.

***** Students may not receive credit for both CSC 202 and ITP 200.
Computer and Electronics Technology

Award: Associate of Applied Science Degree
Major: Computer and Electronics Technology

Possible occupations for graduates are: electronics technician, industrial electronics technician, instrumentation technician, consumer product repair technician, communications technician, computer network technician, and technical salesperson.

The A.A.S. degree program in Computer and Electronics Technology is designed for people who seek employment or professional development in the areas of computer and electronics technology and is structured so that students need no previous electrical or electronics knowledge. The program provides students with knowledge and skills needed to prepare for the following certification testing: Certified Electronics Technician (ISCET) and Certified Electronics Associate (EIA).

Generally, the A.A.S. in Computer and Electronics Technology is the minimum requirement for many employment opportunities in the field.

Many BRCC Computer and Electronics Technology program graduates pursue a Bachelor of Science degree in Electrical Engineering through the Old Dominion University Distance Learning program.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
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<td>D.C. and A.C. Fundamentals I</td>
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<td>ETR 123</td>
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<td>or</td>
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<td>ETR 143</td>
<td>Devices and Applications I</td>
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<td>Upgrading and Maintaining PC Hardware b</td>
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<td>ETR 225</td>
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<td>MTH 104</td>
<td>Applied Technical Math II</td>
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<tr>
<td>or</td>
<td>MTH 164  Precalculus II a</td>
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<td>ETR 241</td>
<td>Electronic Communications I</td>
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<td>ETR 273</td>
<td>Computer Electronics I</td>
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<tr>
<td>PHY 201</td>
<td>General College Physics I d</td>
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<tr>
<td>or</td>
<td>PHY 100  Elements of Physics d</td>
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<tr>
<td>or</td>
<td>CST 110  Introduction to Speech Communication</td>
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</table>
Fourth Semester
ETR 237 Industrial Electronics I 3
ETR 274 Computer Electronics II 4
ETR 296 Internship f 2
or
ETR 298 Seminar & Project in Computer and Electronics f (2)
Humanities/Fine Arts Elective e 3
Social/Behavioral Science Elective e 3
Total credits required 15

a MTH 163-164 required for transfer.
b Cross-listed as ITN 106.
c Cross-listed as ITN 208.
d PHY 201 required for transfer.
e Please refer to page 91 for the list of Humanities/Fine Arts electives and Social/Behavioral Science electives that are approved to fulfill these requirements.
f Instructor approval required.

Computer and Electronics Technology, Computer Network Technologies Specialization

Award:  Associate of Applied Science Degree
Major:  Computer and Electronics Technology
Specialization:  Computer Network Technologies

Possible occupations for graduates are: networking specialist, network technician, network installation/maintenance specialist, network administrator trainee, PC repair technician, help desk specialist, end-user support specialist.

The A.A.S. degree program in Computer and Electronics Technology, with a Computer Network Technologies specialization, is designed for people who seek employment or professional development in the field of network technology.

The knowledge and skills needed for success as a computer network technician include a combination of basic electronics, digital/microprocessor electronics, data communications, computer systems, LAN (Local Area Network) architecture and administration. These skills are an integral part of the Computer Network Technologies curriculum. The curriculum includes technical courses in both electronics technology and information systems technology. Instruction includes both the theoretical concepts and practical applications (hands-on) needed for future success in computer network technologies.

Employers are interested in skilled technicians who are certified in various areas. The Computer Network Technologies specialization provides students with knowledge and skills needed to prepare for the following certification examinations: A+ certification exam for Computer Technicians (CompTia), Network+ for Network Technicians (CompTia), Security+ for Computer Security Technicians (CompTia), Windows 2008 Server (Microsoft), Cisco Certified Network Associate.

Curriculum

<table>
<thead>
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<tr>
<td>HLT/PED</td>
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<tr>
<td>ITE 115</td>
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<td>MTH 103</td>
<td>Applied Technical Math I or II</td>
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<td>MTH 163</td>
<td>Precalculus I a</td>
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<td>Student Development</td>
<td>1</td>
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<tr>
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<td>16</td>
</tr>
</tbody>
</table>
### Second Semester

- **ENG 111** College Composition I 3
- **ETR 164** Upgrading and Maintaining PC Hardware \(^b\) 3
- **ETR 225** Data Communications \(^c\) 4
- **MTH 104** Applied Technical Math II 3
- **MTH 164** Precalculus II \(^a\) (3)
- **HLT/PED** Health or Physical Education 1
- **Social/Behavioral Science Elective** \(^d\) 3

### Third Semester

- **ETR 273** Computer Electronics I 4
- **ITN 103** Administration of Networked Servers 3
- **ITN 260** Network Security Basics 3
- **PHY 201** General College Physics I \(^e\) (4)
- **PHY 100** Elements of Physics \(^e\) 4
- **Social/Behavioral Science Elective** \(^d\) 3

### Fourth Semester

- **ETR 274** Computer Electronics II 4
- **ETR 296** Internship \(^f\) 2
- **ITE 182** User Support/Help Desk 3
- **ITN 151** Introductory Routing and Switching 3
- **Humanities/Fine Arts Elective** \(^d\) 3
- **CST 110** Introduction to Speech Communications 3

### Career Studies Certificate Option

#### Computer Network Technologies

**Award:** Career Studies Certificate

Purpose: to provide students with fundamental knowledge and skills in data communications, computer systems, LAN (Local Area Network) architecture and administration. Possible entry-level career positions are: computer networking, computer service and repair, and information systems technology.

The program emphasizes the importance of certification and assists students in preparing for certification examinations. The Computer Network Technologies Career Studies Certificate provides students with basic knowledge and skills needed to prepare for the following certification examinations: A+ certification exam for Computer Technicians (CompTia), Network+ for Network Technicians (CompTia), Security+ for Computer Security Technicians (CompTia), Windows 2008 Server (Microsoft), Cisco Certified Network Associate. All courses in this certificate may be applied to the Associate in Applied Science Degree in Computer and Electronics Technology.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
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<tr>
<td>ETR 164</td>
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<td>ETR 225</td>
<td>Data Communications (^b)</td>
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<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
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<tr>
<td>ITE 182</td>
<td>User Support/Help Desk</td>
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<tr>
<td>ITN 103</td>
<td>Administration of Networked Servers</td>
<td>3</td>
</tr>
<tr>
<td>ITN 151</td>
<td>Introductory Routing and Switching</td>
<td>3</td>
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<tr>
<td>ITN 260</td>
<td>Network Security Basics (^c)</td>
<td>3</td>
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</tbody>
</table>

**Total credits required** 68

\(^a\) MTH 163-164 required for transfer.
\(^b\) Cross-listed as ITN 106.
\(^c\) Cross-listed as ITN 208.
\(^d\) Please refer to page 91 for the list of Humanities/Fine Arts electives and Social/Behavioral Science electives that are approved to fulfill these requirements.
\(^e\) PHY 201 required for transfer.
\(^f\) Instructor approval required.
Culinary Arts and Management

Award: Associate of Applied Science Degree
Major: Culinary Arts and Management
(Partnership Program awarded at Dabney S. Lancaster Community College)

Possible occupations for graduates: pastry chef, broiler cook, restaurant owner, food service manager, caterer, and sous chef.

The Culinary Arts and Management associate of applied science degree program is a partnership program with Dabney S. Lancaster Community College. Students complete 27 credits of general education courses at Blue Ridge Community College and subsequently complete the remaining program requirements at Dabney S. Lancaster Community College. Students will gain the skills needed to begin, or advance in, the specialty field of Culinary Arts and Management. In addition to food preparation principles and practice, students will also become knowledgeable about the management of food and beverage service operations.

For information about general education requirements at BRCC, go to http://www.brcc.edu/services/advising/partnerships or contact Ms. Beth Styers in the Counseling Center. For additional information about the Culinary Arts and Management program, contact Dr. Phil McManus at Dabney S. Lancaster Community College at 540-863-2931.

Funeral Services

Award: Associate of Applied Science Degree
Major: Funeral Services
(Partnership Program awarded at John Tyler Community College)

Possible occupations for graduates: fully licensed funeral director or embalmer.

The Funeral Services associate of applied science degree program is a partnership program with John Tyler Community College. Students complete general education courses at Blue Ridge Community College and subsequently apply to John Tyler Community College to complete the remaining program requirements. Students will gain the necessary technical skills, academic background, hands-on experience, and professional attitudes to become a fully licensed funeral director and embalmer.

For information about general education requirements at BRCC, go to http://www.brcc.edu/services/advising/partnerships or contact Ms. Beth Styers in the Counseling Center. For additional information about the Funeral Services program, contact Mr. Rick Sikon at John Tyler Community College at 804-706-5113.

General Education

Award: Certificate:

The General Education Certificate provides students with a general foundation course of study that can be used to transfer into a baccalaureate degree program or used for the associate degree program. This certificate will allow students to obtain recognition for completing a minimum set of general education courses while also allowing for easier transfer to four year institutions that may recognize and accept general education certificates. Students pursuing an associate degree should refer to the curriculum guide for the program of choice for appropriate course selection.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
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<td>ENG 111-112</td>
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<td>HIS</td>
<td>History a</td>
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<td>MTH</td>
<td>Mathematics b</td>
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<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
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<tr>
<td>or</td>
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<tr>
<td>ITE 120</td>
<td>Principles of Information Systems or</td>
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<td>CSC 200</td>
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<tr>
<td>CST 110</td>
<td>Introduction to Speech Communication</td>
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</table>
Social Science Elective $^d$ 3
Humanities/Fine Arts $^e$ 3
Science with Laboratory $^c$ 4
Total credits required 32

$^a$ Students may choose from HIS 101, 102, 111, 112, 121, 122.

$^b$ MTH 151, 157, 163, 175, 174. MTH 277, 279 and 285 may also be taken. Refer to major at four-year college or university for appropriate course selection.

$^c$ Choose 8 credits from the following sequences: BIO 101, BIO 102, BIO 114, CHM 101, CHM 102, CHM 111, CHM 112, PHY 101, PHY 202, GOL 105, GOL 110 or NAS 150. (GOL 105 is a prerequisite to GOL 110). Refer to major at four-year college or university for appropriate course selection.

$^d$ Choose 3 credits from the approved list of Social/Behavioral Sciences on page 61. Refer to major at four-year college or university for appropriate course selection.

$^e$ Choose 3 credits from the approved list of Humanities and Fine Arts section on page 61. Refer to major at four-year college or university for appropriate course selection.

Human Services

Award: Associate of Applied Science Degree
Major: Human Services

Possible occupations for graduates—mental health worker, training counselor, clubhouse advocate, human services care lead worker, community living specialist, detox technician.

The Human Services program prepares students for employment as paraprofessionals in a wide variety of service agencies. As “people workers,” graduates occupy helping roles in many fields, including mental health, mental retardation, substance abuse, rehabilitation, aging, children’s and family programs, and corrections. Many graduates use this curriculum as a first step toward a four-year degree in areas such as social work, counseling, and education. Full-time students may complete the degree in two years; part-time students determine their own pace. Students may be eligible to receive credit for some courses in this curriculum through the College’s advanced standing process.

Curriculum

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<th>Course No.</th>
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<td>Introduction to Drug Use and Abuse</td>
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<td>HMS 190</td>
<td>Coordinated Internship in Mental Health/Human Services</td>
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<td>MEN 101</td>
<td>Mental Health Skill Training I</td>
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<td>PSY 232</td>
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<td>HMS 298</td>
<td>Seminar and Project in Human Services</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>67-68</td>
</tr>
</tbody>
</table>
a ENG 137-138 may be substituted for ENG 111-112.
b HMS 100 is a prerequisite to all MEN courses and all other HMS courses.
c Please see back of this page for the list of Humanities/Fine Arts electives that are approved to fulfill this requirement.
d MTH 103 or MTH 141 are recommended Math courses for students who do not intend to transfer. Students who select science courses must document basic proficiency in arithmetic through college preparedness testing (placement at MTH 03 level or higher). Appropriate SAT/ACT scores may be submitted in lieu of preparedness testing.
e Students may not receive credit toward graduation requirements in this program of study for both BIO 102 and BIO 114, for ECO 120 and ECO 201, for both ECO 120 and ECO 202, for PHY 100 and PHY 201, for both PSY 200 and PSY 201, for both PSY 200 and PSY 202, nor both PSY 230 and PSY 231.

## Information Systems Technology

Students who wish to pursue an education in the area of Information Systems Technology have several options from which to choose.

The A.A.S. degree program with a major in Information Systems Technology is designed for people who seek employment or professional development as a generalist in the area of information systems technology, with specific knowledge in various areas such as microcomputer applications, programming, and networking support.

In addition, this degree may allow the student to continue on to Old Dominion University, or Radford University for completion of courses needed for various baccalaureate degrees.

The College also offers certificates in Information Systems Technology areas. The options include:

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.A.S. Degree in Information Systems Technology</td>
<td>67-68</td>
</tr>
<tr>
<td>A.A.S. Degree in Information Systems Technology</td>
<td></td>
</tr>
<tr>
<td>Information Technology for Business Specialization</td>
<td>65-66</td>
</tr>
<tr>
<td>Career Studies Certificate in Computer Applications for Professionals</td>
<td>9</td>
</tr>
<tr>
<td>Career Studies Certificate in Computer Help Desk</td>
<td>23</td>
</tr>
<tr>
<td>Career Studies Certificate in Computer Network Technologies</td>
<td>22</td>
</tr>
<tr>
<td>Career Studies Certificate in Computer Science</td>
<td>17</td>
</tr>
<tr>
<td>Career Studies Certificate in E-Commerce for Small Business</td>
<td>27</td>
</tr>
<tr>
<td>Career Studies Certificate in Information Technology</td>
<td>19</td>
</tr>
<tr>
<td>Career Studies Certificate in Multimedia Development and Integration</td>
<td>12</td>
</tr>
<tr>
<td>Career Studies Certificate in Web Design and Development</td>
<td>28-29</td>
</tr>
</tbody>
</table>

Full-time students may complete the following associate of applied science degree in two years; part-time students determine their own pace. Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process. Examples include credit by examination, credit by portfolio (experience), or by articulation agreement.

### Associate Degree Option(s)

#### Information Systems Technology

**Award:** Associate of Applied Science Degree  
**Major:** Information Systems Technology

Possible occupations for graduates are: computer operator, help desk support, computer programmer, programmer analyst, PC support technician, and network support technician.

The A.A.S. degree program with a major in Information Systems Technology is designed for people who wish to be an Information Systems generalist with knowledge in various areas such as microcomputer applications, programming, and networking support.

The Information Systems Technology program provides students with knowledge and skills needed to prepare for the Microsoft Office Specialist (MOS) Certification, CompTia A+ Certification, CompTia Network+ Certification, and CIW Foundations.
## Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I (^a)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENG 137</td>
<td>Communication Processes (^a)</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Applied Technical Math I (^b)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>a higher level math</td>
<td></td>
</tr>
<tr>
<td>ITN 106</td>
<td>Microcomputer Operating Systems(^c)</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts (^d)</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>ITN 208</td>
<td>Protocols and Communication (^e)</td>
<td>4</td>
</tr>
<tr>
<td>ITP 100</td>
<td>Software Design (^f)</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II (^a)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 115</td>
<td>Technical Writing (^a)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 138</td>
<td>Communication Processes II (^a)</td>
<td>3</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Career and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>IT</td>
<td>Programming Elective (^g)</td>
<td>4</td>
</tr>
<tr>
<td>IT</td>
<td>Elective (^h)</td>
<td>3</td>
</tr>
<tr>
<td>ITE 160</td>
<td>Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ITN 260</td>
<td>Network Security Basics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>ITP 296</td>
<td>On-Site Training in IT (^i)</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITP 298</td>
<td>Capstone Project in IT (^j)</td>
<td>(3)</td>
</tr>
<tr>
<td>ECO</td>
<td>Economics Elective</td>
<td>3</td>
</tr>
<tr>
<td>Social Science Elective (^j)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts Elective (^k)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td></td>
<td><strong>66-67</strong></td>
</tr>
</tbody>
</table>

\(^a\) Students intending to complete a four year degree in the future should select either ENG 111/112 or ENG 111/115.

Students who select ENG 111 must complete the English sequence with ENG 112 OR ENG 115.

\(^b\) Students should take the highest math for which they are prepared. Any student wishing to transfer should choose: MTH 151, MTH 157, MTH 165, MTH 175, or MTH 270

\(^c\) Cross-listed as ETR 164.

\(^d\) ITE 115 is a co-requisite or prerequisite to all other IT courses and should be taken in the first semester.

\(^e\) ITE 115 is a co-requisite or prerequisite to all other IT courses.

\(^f\) ITP 100 is a prerequisite to all other IT programming courses.

\(^g\) Students should select a programming course. Suitable courses include ITD 132, ITP 120, ITP 112, ITP 244 or a second level programming course. Some programming courses will be offered every other year. Prerequisite: Completion of ITE 115 and ITP 100 or permission of instructor.
Information Systems Technology, Information Technology for Business Specialization

Award: Associate of Applied Science Degree
Major: Information Systems Technology
Specialization: Information Technology for Business

Possible occupations for graduates are: Information Specialist, Supervisor, Executive Administrative Assistant, Computer Sales, Software Trainer, and related occupations.

The A.A.S. degree in Information Systems Technology with a specialization in Information Technology for Business focuses on the practical application of computing to solve business issues. It is designed to train specialists in how to use computer systems to organize, analyze, and maintain business information. It provides students with a blend of information systems technology and business courses.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AST 101</td>
<td>Keyboarding I</td>
<td>3</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENG 137 Communication Processes I</td>
<td>(3)</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Applied Technical Math I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>a higher level math</td>
<td>(3)</td>
</tr>
<tr>
<td>ITN 106</td>
<td>Microcomputer Operating Systems</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 118</td>
<td>Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ENG 138 Communication Processes II</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Career and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITE 182</td>
<td>User Support/Help Desk Principles</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Social/Behavioral Science Elective</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>ITE 120</td>
<td>Principles of Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>ITE 140</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>ITE 160</td>
<td>Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>IT/Business Elective</td>
<td></td>
<td>3-4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Fourth Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECO 120</td>
<td>Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>HLT/PED</td>
<td>Health or Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITP 296</td>
<td>On-Site Training in IT</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Capstone Project in IT</td>
<td>(3)</td>
</tr>
<tr>
<td>ITP 298</td>
<td>Humanities/Fine Arts Elective</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
</tbody>
</table>

Total credits required: 65-66
Students intending to complete a four year degree in the future should select either ENG 111/112 or ENG 111/115. Students who select ENG 111 must complete the English sequence with ENG 112 or ENG 115.

Students should take the highest math for which they are prepared. Any student wishing to transfer should choose: MTH 151, MTH 157, MTH 165, MTH 175, or MTH 270.

Cross-listed as ETR 164.

ITE 115 is a co-requisite or prerequisite to all other IT courses.

Please refer to the list of Social Science electives that are approved to fulfill this requirement.

IT electives include BUS 200, BUS 205, BUS 221, ETR 225, ITN 151, all 100-200 level ITD, ITE, ITN, and ITP courses not already required in the program, except for ITE 130, ITE 195, and ITE 298.

Please refer to the approved list of Humanities/Fine Arts electives on page 91 to fulfill this requirement.

### Career Studies Certificate Options

#### Computer Applications for Professionals

**Award: Career Studies Certificate**

Purpose: to provide faculty in local elementary, middle, and secondary schools with instructional technology applications skills. Standards of Learning (SOLs) established for schools are the basis for course content. The course content and career studies certificate are valuable for other professionals who need to use presentation, Internet and other software applications.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 193</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ITE 115 Introduction to Computer Applications and Concepts</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 130</td>
<td>Introduction to Internet Services</td>
<td>3</td>
</tr>
<tr>
<td>ITE 298</td>
<td>Seminar and Project</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

#### Computer Help Desk

**Award: Career Studies Certificate**

Purpose: to provide students with both the technical skills and the interpersonal skills needed to be successful in a help desk support position. The goal of the course content and the career studies certificate is to include up-to-date information and technology that is currently used by many help desk professionals in today's workforce.

Following the completion of the program, graduates will be prepared for an entry-level position in a help desk support role.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Career and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITE 182</td>
<td>User Support/Help Desk Principles</td>
<td>3</td>
</tr>
<tr>
<td>ITE 140</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>ITD 130 Database Fundamentals</td>
<td>(3)</td>
</tr>
<tr>
<td>ITN 106</td>
<td>Microcomputer Operating Systems a</td>
<td>3</td>
</tr>
<tr>
<td>ITN 103</td>
<td>Administration of Networked Servers</td>
<td>3</td>
</tr>
<tr>
<td>ITN 260</td>
<td>Networking Security Basics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

Cross-listed as ETR 164 Upgrading and Maintaining PC Hardware.

#### Computer Network Technologies

**Award: Career Studies Certificate**

Purpose: to provide students with fundamental knowledge and skills in data communications, computer systems, LAN (Local Area Network) architecture and administration. The program emphasizes the importance of certification and assists students to prepare for certification exams.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 182</td>
<td>User Support/Help Desk</td>
<td>3</td>
</tr>
<tr>
<td>ITN 106</td>
<td>Microcomputer Operating Systems a</td>
<td>3</td>
</tr>
<tr>
<td>ITN 208</td>
<td>Protocols and Communications b</td>
<td>4</td>
</tr>
</tbody>
</table>
Computer Science

**Award: Career Studies Certificate**

**Purpose:** to provide the student the opportunity to undertake a foundational curriculum in Computer Science. These courses form the requisite lower division requirements at most institutions in Computer Science. This certificate follows the guidelines outlined in Association for Computing Machinery Associate Degree in Computer Science (2003).

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITP 120</td>
<td>Java Programming I</td>
<td>4</td>
</tr>
<tr>
<td>ITP 220</td>
<td>Java Programming II</td>
<td>4</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Careers and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITP 200</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>ITP 258</td>
<td>System Development Project</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

E-Commerce for Small Business

**Award: Career Studies Certificate**

**Purpose:** The E-Commerce for Small Business Career Studies Certificate provides students with an opportunity to acquire the skills to implement and use computer application packages for business and managerial functions. Students may begin with the certificate and continue their studies to complete the A.A.S. degree in Information Systems Technology. Full-time students may complete the certificate in two semesters; part-time students determine their own pace.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ITP 115</td>
<td>Introduction to Computer Applications and Concepts (^a)</td>
<td>3</td>
</tr>
<tr>
<td>ITP 160</td>
<td>Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 115</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITD 210</td>
<td>Web Page Design II</td>
<td>3</td>
</tr>
<tr>
<td>ITD 196</td>
<td>Capstone Project in E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ITD 220</td>
<td>E-Commerce Administration</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

\(^a\) ITE 115 is a prerequisite to all other IST courses and should be taken in the first semester.

Information Technology

**Award: Career Studies Certificate**

**Purpose:** to provide the student with an opportunity to explore various technical areas within Information Technology. These courses will provide an overview of the discipline for those interested in expanding their knowledge but will also provide an appropriate background for continuing academic studies. This certificate follows the guidelines for transfer options in Information Systems prepared by the Association for Computing Machinery Two-Year College education committee.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITP 120</td>
<td>Java Programming I</td>
<td>4</td>
</tr>
<tr>
<td>ITN 208</td>
<td>Protocols and Communications</td>
<td>3</td>
</tr>
<tr>
<td>ITP</td>
<td>Programming elective (^a)</td>
<td>4</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Careers and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITP 258</td>
<td>System Development Project</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

\(^a\) Students should select from one of the following: ITP 112, ITP 220
Multimedia Development and Integration

Award: Career Studies Certificate

Purpose: to provide faculty in local elementary, middle, and secondary schools, as well as Technology Resource Teachers (TRTs), with advanced instructional technology applications skills. The career studies certificate will fulfill their technology requirements for recertification. The course content and career studies certificate provide valuable knowledge and skills for other professionals who also need to use multimedia and web development applications.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 170</td>
<td>Multimedia Software</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Design I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 270</td>
<td>Advanced Multimedia Development</td>
<td>3</td>
</tr>
<tr>
<td>ART 283</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>12</td>
</tr>
</tbody>
</table>

Web Design and Development

Award: Career Studies Certificate

Purpose: to train students to use standards-based web design fundamentals including code, graphic design, usability and accessibility. Students also have the opportunity to learn programming skills and apply them to database-driven web applications.

Following completion of the program, graduates will be prepared for entry-level positions in: web design, web development, and web page maintenance.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ITD 210</td>
<td>Web Page Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 283</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ITE 170</td>
<td>Multimedia Software</td>
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<tr>
<td>ITP 100</td>
<td>Software Design</td>
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<tr>
<td>ITP 120</td>
<td>Java Programming I</td>
<td>4</td>
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<tr>
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<tr>
<td>ITP 110</td>
<td>Visual Basic Programming</td>
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<tr>
<td>IT</td>
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<tr>
<td></td>
<td>Total credits required</td>
<td>28</td>
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</table>

* Choose from ITD 130, ITE 160, or ITP 220
Mechanical Engineering Technology

Students who wish to pursue an education in the area of Mechanical Engineering Technology have several options from which to choose. The curricula offerings enable students to begin with a career studies certificate and to continue their studies culminating in a certificate or associate degree.

The options include:

- A.A.S. Degree in Mechanical Design Technology (transferable) 68 or 69
- Career Studies Certificate in Computer-Aided Drafting 12
- Career Studies Certificate in Quality Control 14

Full-time students may complete the A.A.S. degree in two years; part-time students determine their own pace. Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process.

Associate Degree Option

Mechanical Design Technology

Award: Associate of Applied Science Degree
Major: Mechanical Design Technology

Possible occupations for graduates: engineering assistant, mechanical engineer technician, industrial engineer technician, quality control technician, material testing technician, and technical salesperson.

The A.A.S. degree program in Mechanical Design Technology is designed for people who seek employment or professional development in the area of mechanical engineering technology. Technical electives can be selected to suit the student’s specific career objectives.

Many graduates continue on to Old Dominion University (ODU) or other four-year colleges for their junior and senior level courses in pursuit of a Bachelor of Science degree in Engineering Technology. The ODU courses can be taken on campus at BRCC via satellite.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGR 115</td>
<td>Engineering Graphics</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD 140</td>
<td>Technical Drawing</td>
<td>(3)</td>
</tr>
<tr>
<td>or</td>
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<td></td>
</tr>
<tr>
<td>EGR 127</td>
<td>Introduction to Computer Programming</td>
<td>2</td>
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<tr>
<td>and</td>
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<td></td>
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<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>MEC 111</td>
<td>Materials for Industry</td>
<td>3</td>
</tr>
<tr>
<td>MTH 103</td>
<td>Applied Technical Mathematics I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MTH 163</td>
<td>Precalculus I a</td>
<td>(3)</td>
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<tr>
<td>SDV</td>
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Second Semester

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<th>Title</th>
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<tr>
<td>CAD 241</td>
<td>Parametric Solid Modeling I</td>
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<tr>
<td>ECO 120</td>
<td>Survey of Economics</td>
<td>3</td>
</tr>
<tr>
<td>MEC 112</td>
<td>Processes of Industry</td>
<td>3</td>
</tr>
<tr>
<td>MEC 225</td>
<td>Metallurgy</td>
<td>3</td>
</tr>
<tr>
<td>MTH 104</td>
<td>Applied Technical Mathematics II</td>
<td>3</td>
</tr>
<tr>
<td>MTH 164</td>
<td>Precalculus II a</td>
<td>(3)</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective b</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

a Required for the A.A.S. degree in Mechanical Design Technology.
b Students must complete a minimum of 40 credits toward the degree.

Blue Ridge Community College
Programs of Study
Third Semester

- CAD 225 Machine Drawing and Design 3
- CAD 242 Parametric Solid Modeling II 3
- EGR 130 Statics and Strengths of Materials for Engineering Technology 5
- PHY 201 General College Physics I 4
- Technical Elective c 2

18

Fourth Semester

- EGR 199 Supervised Study in Dynamics d 1
- EGR 245 Engineering Mechanics - Dynamics d 3
- EGR 247 Mechanics of Materials Laboratory 1
- HLT/PED Health or Physical Education 2
- MEC 211 Machine Design I 4
- PHY 202 General College Physics II 4
- or
- Technical Elective c 3
- Humanities/Fine Arts Elective b 3

18

Total credits required 68-69

a MTH 173 may be substituted. Students who wish to transfer should take MTH 163-164 or MTH 173.
b Please refer to page 91 for the list of Humanities/Fine Arts electives and Social/Behavioral Science electives that are approved to fulfill these requirements.
c Please refer the list below of Technical Electives for the Mechanical Design Technology degree that may fulfill this requirement.
d EGR 199 and EGR 245 should be taken concurrently.

Career Studies Certificate Options

Computer-Aided Drafting (CAD)

Award: Career Studies Certificate

Purpose: to train students in the fundamentals of design and drafting and the use of computer software applications in various drafting disciplines. This career studies certificate provides the minimum preparation for employment as a draftsman or CAD operator.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 140</td>
<td>Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CAD 241</td>
<td>Parametric Solid Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 242</td>
<td>Parametric Solid Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>ARC 121</td>
<td>Architectural Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 243</td>
<td>Parametric Solid Modeling III</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Total credits required 12

Quality Control

Award: Career Studies Certificate

Purpose: to give students training in quality control techniques. This career studies certificate prepares students for assembly line quality assurance jobs.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 161</td>
<td>Blueprint Reading I</td>
<td>2</td>
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<tr>
<td>IND 145</td>
<td>Introduction to Metrology</td>
<td>3</td>
</tr>
<tr>
<td>IND 146</td>
<td>Statistical Quality Control</td>
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<tr>
<td>MEC 111</td>
<td>Materials for Industry</td>
<td>3</td>
</tr>
<tr>
<td>MEC 112</td>
<td>Processes of Industry</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits required 14

Technical Electives: Mechanical Design Technology Degree

- ARC 121 Architectural Drafting I 3
- ARC 122 Architectural Drafting II 3
- CAD 243 Parametric Solid Modeling III 3
- MEC 255 Thermodynamics 3
- MTH 173 Calculus with Analytic Geometry I 5
Nursing

Award: Associate of Applied Science Degree in Health Technology
Major: Nursing

The Associate of Applied Science degree in Health Technology with a major in nursing is designed to prepare selected students to qualify as contributing members of the health team, rendering direct patient care as beginning practitioners of nursing in a variety of health service facilities. Classroom and clinical experiences will include lifespan from birth to death. Graduates will be eligible to take the National Council Licensure Examination leading to licensure as a Registered Nurse (RN). Licensure is required in order to be employed as a registered nurse. The nursing program is approved by the State Board of Nursing and accredited by the National League for Nursing Accrediting Commission (3343 Peachtree Road NE, Suite 500, Atlanta, Georgia 30326; telephone 404-975-5000).

The nursing law of Virginia addresses criteria for application for licensure. The Virginia State Board of Nursing has the power to deny opportunity to procure a license through testing if the applicant has willfully committed a felony/misdemeanor under laws of the Commonwealth of Virginia or of the United States. Students will be required to pay for a criminal background check and urine drug test when they apply for the clinical component of the program.

Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process.

General Education Courses

Students who have not been accepted into the clinical component of the program will be enrolled in the Health Sciences-Nursing (pre-nursing) curriculum. Pre-nursing students are encouraged to complete clinical component prerequisites (required in order to be eligible for admission) and as many of the general education courses as possible before beginning the clinical portion of the program. The general education courses required for graduation are: ENG 111-112, SOC 215, PSY 230, Humanities/Fine Arts (see footnote on page 86), ITE 115, and Student Development, in addition to BIO 141-142, which are clinical prerequisite courses. Please note that BIO 141-142 must be completed within 10 years of application to the clinical component of the program. BIO 141 must be completed with a grade of “C” or better prior to the application deadline, and the applicant must be enrolled in BIO 142. Candidates may be provisionally admitted pending successful completion of BIO 142 with a grade of “C” or better.

Pre-nursing students are encouraged to complete as many required general education courses as possible before applying for admission to the clinical component of the program. Students who did not complete high school biology, algebra and chemistry with a grade of “C” or higher are also strongly encouraged to complete MTH 03, BIO 101 and CHM 101 before enrolling in the BIO 141-142 sequence. In addition, students should not enroll in two science courses during the same semester, excluding summer.

Application and Admission to the Clinical Component

General Information

Admission to the clinical component of the nursing program is highly competitive. Students apply in a separate admissions process to the clinical component in the fall prior to the start of nursing classes the following year. LPNs begin in May. Traditional students begin in August. Clinical applications are available online on the Nursing Program website in late fall semester. Acceptance to the college does not guarantee admission to the clinical component. Students must satisfy the graduation requirements listed in the BRCC Catalog and Nursing Student Handbook in effect at the time they begin the clinical component of the program.

Students who are admitted to the clinical component of the program must complete each nursing course with a grade of 80% or greater in order to continue in the clinical nursing sequence. Students who fail to achieve a minimum grade of 80% may not continue in the program and must reapply and be accepted for readmission. Readmission is competitive and is not guaranteed.

Residence in Service Region

Since the number of applicants generally exceeds the space available in the clinical program, some applicants may not be accepted even if the minimum requirements for admission are met.
When enrollments must be limited for any curriculum, such as nursing, priority shall be given to all qualified applicants who are residents of the political subdivisions supporting the College and then to Virginia residents not having access to a given program at their local Virginia community college. Please be aware that the qualified Virginia resident applicant pool may more than fill the enrollment capacity for the nursing clinical component; therefore the College may not be able to honor all requests for admission into the nursing clinical component.

First priority is given to residents in the BRCC service area: Harrisonburg, Staunton, Waynesboro, Augusta County, Rockingham County, and Highland County.

In order to be considered a resident of the BRCC service region, applicants must have resided continuously in the service region for the 12 months prior to the clinical application deadline and must not be residents of the service region for the primary purpose of education. Service area criteria will be scrutinized very carefully. A student with out-of-state tuition status is not a resident of the BRCC service region.

Documentation may be required to establish residency in the BRCC service region. Listed below are documents that may be requested:

- the parents’ and student’s latest federal and Virginia tax returns
- physical residence in the student’s name that is not student housing
- full-time or equivalent employment documenting income of $10,500 or more
- car registration and VA driver’s license in the student’s name
- documents showing who pays insurances and college tuition and fees

Clinical Component Prerequisites

In order to be considered for admission to the clinical portion of the nursing program, applicants must have:

- earned a high school diploma or the equivalent
- applied to the College
- attained a 45% score on the math and reading comprehension portions of the nursing entrance examination required by the program. Additional information is available at http://community.brcc.edu/nursing/. In lieu of the designated nursing entrance examination, scores from ERI, NLN, HESI, and ATI may be accepted if approved by the Nursing Program Head. The nursing entrance examination must be taken within three years of application to the clinical component of the program.
- 1 unit of high school biology with laboratory, with a grade of “C” or higher (or BIO 101)
- 1 unit of high school chemistry with laboratory, with a grade of “C” or higher (or CHM 101 or CHM 111)
- College Preparedness Test score demonstrating competency in arithmetic (or MTH 02), or SAT math score of 520/ACT math score of 22, or completion of college-level math with a grade of “C” or higher
- 1 unit of high school algebra (with a “C” or better) or MTH 03, or SAT math score of 520/ACT math score of 22, or completion of college-level math class equivalent to MTH 151 or higher with a grade of “C” or higher
- a cumulative grade point average of 2.5 or higher in BRCC college course work
- successfully completed BIO 141 and 142 with a grade of “C” or higher. BIO 141 and 142 must have been successfully completed within 10 years of application to the clinical component of the program. Students who are registered for BIO 142 in the spring semester may be given conditional acceptance pending completion with a grade of “C” or higher.
- submitted a Nursing Clinical Component Application form by the stated deadline date.
- submitted official transcripts of all secondary and post-secondary schools attended (excluding VCCS colleges), including LPN transcripts and current LPN license for students who completed LPN training
- thoroughly reviewed all information presented in the current online Nursing Program Information session and completed the post-test with a score of 70 or higher. A copy of the post-test must be submitted with the application. These materials can be accessed at http://community.brcc.edu/nursing/.
Admission Preference
Preference for admission to the clinical component of the program is given to applicants who have:

- documented residence in the BRCC service region for 12 months continuously prior to the clinical application deadline, in accordance with the criteria described earlier in this narrative
- completed more of the general education courses required for graduation, compared to other applicants
- a higher grade point average in the general education courses required for graduation, compared to other applicants
- a higher grade point average for BIO 141-142, compared to other applicants
- previous paid work experience in a health care setting

Special Admission Criteria for Recent High School Graduates
A limited number of recent high school graduates (not to exceed 10% of successful applicants) may be admitted to the clinical component of the program. Since recent high school graduates have not had the opportunity to enroll in the required general education courses in the program, there are special admission criteria that are outlined below. Students should be aware that this option is a rigorous and academically challenging program that requires five semesters (including summer) of full-time attendance. The special admission criteria are:

- high school cumulative grade point average of 3.0 or higher
- applied to the College
- attained a 45% score on the math and reading comprehension portions of the nursing entrance examination required by the program.
- 1 unit of high school biology with laboratory, with a grade of “C” or higher (or BIO 101)
- 1 unit of high school chemistry with laboratory, with a grade of “C” or higher (or CHM 101 or CHM 111)
- Scholastic Aptitude Test (SAT) scores of 530 or higher /reading, 530 or higher/writing, 520 or higher/math, or BRCC College Preparedness Test (COMPASS) scores of 81+ for reading, 76+ for writing, 34+ for arithmetic, and 36+ for algebra. Students who score 34 or higher for arithmetic do not need to take MTH 02. Students who score 36 or lower for algebra must take MTH 03 unless they have achieved a grade of “C” or higher on a High School Algebra course.
- High School Transcript: current high school students must submit an official transcript. A final official transcript is required in June for high school candidates with tentative acceptance.
- Admission preference will be given to high school candidates who have successfully completed Advanced Placement (AP) courses, who have a higher high school grade point average than other high school applicants, or who have completed dual enrollment courses through the Tech-Prep Consortium.

Admission Criteria for Students Seeking Program Readmission
Any student who fails the clinical component or receives a final grade lower than 80% in any of the courses in the clinical nursing sequence may not continue in the major. The student must reapply to the program and, if accepted, repeat the course and earn a final grade of 80% or higher before taking the next course in the sequence. Readmission to the program is competitive and is not guaranteed. Students must apply for readmission to the clinical component and document completion of all regular admission criteria. Students will only be readmitted once to the clinical component of the nursing program. In order to graduate, students must maintain a cumulative grade point average of 2.0. Students who apply for readmission after two years from the time they left the program must start at the beginning of the nursing course sequence. Students seeking readmission to the program must:

- complete an exit interview with the Nursing program head prior to leaving the program.
- document completion of all regular admission criteria by stated deadlines.
- submit a written plan of action for completion of the required general education courses in the program.
- successfully complete a skills exam and written exam with a score of 80% or better.
Advanced Standing for LPN Students

LPN students must apply for admission to the clinical component of the program and document completion of all regular admission criteria (including submission of an official transcript from their LPN program and a copy of their current Virginia unrestricted LPN license). Once accepted, LPN students complete three semesters of study, beginning in the summer. LPNs who have graduated from nursing school within the last five years and have received a score of 50% or greater on the NLN medication administration test or received a score of 60% or greater on the ERI medication administration test are exempt from NUR 136. Similarly, LPNs who have graduated from nursing school within the last five years and have received a score of 50% or greater on the NLN maternity nursing test or received a score of 60% or greater on the ERI maternity nursing test are exempt from NUR 245. Other standardized exit tests for maternity nursing and medication administration may be accepted if approved by the Nursing Program Head.

Full-time Curriculum

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<thead>
<tr>
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<th>Title</th>
<th>Credits</th>
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<tr>
<td><strong>Fall Semester (1st semester)</strong></td>
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<td></td>
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<tr>
<td>ENG 111</td>
<td>College Composition I</td>
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<tr>
<td>BIO 141</td>
<td>Human Anatomy and Physiology I</td>
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</tr>
<tr>
<td>NUR 108</td>
<td>Nursing Principles and Concepts I</td>
<td>6</td>
</tr>
<tr>
<td>NUR 136</td>
<td>Principles of Pharmacology I</td>
<td>1</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
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<tr>
<td><strong>Spring Semester (2nd semester)</strong></td>
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</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
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</tr>
<tr>
<td>BIO 142</td>
<td>Human Anatomy and Physiology II</td>
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</tr>
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<td>NUR 109</td>
<td>Nursing Principles and Concepts II</td>
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<tr>
<td>NUR 137</td>
<td>Principles of Pharmacology II</td>
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<tr>
<td><strong>Summer Semester (3rd semester)</strong></td>
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<tr>
<td>NUR 226</td>
<td>Health Assessment</td>
<td>3</td>
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<tr>
<td>NUR 247</td>
<td>Psychiatric/Mental Health Nursing</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>PHI 225</td>
<td>Selected Problems in Applied Ethics</td>
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<td><strong>Fall Semester (4th semester)</strong></td>
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<tr>
<td>NUR 245</td>
<td>Maternal-Newborn Nursing</td>
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<td>NUR 213</td>
<td>Second Level Nursing III</td>
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<tr>
<td>PSY 230</td>
<td>Developmental Psychology</td>
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<tr>
<td><strong>Spring Semester (5th semester)</strong></td>
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<td></td>
</tr>
<tr>
<td>NUR 214</td>
<td>Second Level Nursing IV</td>
<td>7</td>
</tr>
<tr>
<td>NUR 254</td>
<td>Dimensions of Nursing</td>
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</tr>
<tr>
<td>SOC 215</td>
<td>Sociology of the Family</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td></td>
<td>66</td>
</tr>
</tbody>
</table>

a NAS 161-162 may also be taken.
b LPNs who qualify for this option do not take NUR 108 and NUR 109 but take NUR 115 and NUR 136 in the summer.
c Students may also choose from ART 101-102, ENG 241-242, ENG 243-244, ENG 251-252, HUM 100, HUM 201-202, MUS 121-122, PHI 101, PHI 220, PHI 225, PHI 227, REL 251-252, SPD 151-152, or foreign language (including ASL).
d PSY 238 or PSY 231/232 may be substituted.

Part-time Curriculum

This option is for those students who need some prerequisites and/or must work and wish to attend part-time. This option can take three years or longer because students may wish to take only one pre-clinical class per semester.

Pre-Clinical studies for Traditional Students

ENG 111 and 112: College Composition I-II.
BIO 141 and 142: Human Anatomy and Physiology I-II (NAS 161-162 may substitute)
SOC 215: Sociology of the Family
PHI 225: Selected Problems in Applied Ethics (see footnote “c” under full-time curriculum.
PSY 230: Developmental Psychology (PSY 238 or PSY 231/232 may be substituted)
ITE 115: Introduction to Computer Applications and Concepts
SDV: Student Development

Clinical Component: 5 semesters
Fall:  
NUR 108: Nursing I
NUR 136: Principles of Pharmacology I

Spring:  
NUR 109: Nursing II
NUR 137: Principles of Pharmacology II

Summer:  
NUR 226: Health Assessment
NUR 247: Psychiatric/Mental Health Nursing

Fall:  
NUR 245: Maternal/Newborn Nursing
NUR 213: Second Level Nursing III

Spring:  
NUR 214: Second Level Nursing IV
NUR 254: Nursing Dimensions

Part-Time LPN-RN Transition Curriculum

This option is for those students who are LPNs, need some prerequisites, and/or work and wish to attend part-time. This option can take two years or longer.

Pre-Clinical studies for LPN Students
ENG 111 and 112: College Composition I-II.
BIO 141 and 142: Human Anatomy and Physiology I-II (NAS 161-162 may substitute)
SOC 215: Sociology of the Family
PHI 225: Selected Problems in Applied Ethics (see footnote ‘c’ under full-time curriculum)
PSY 230: Developmental Psychology (PSY 238 or PSY 231/232 may be substituted)
ITE 115: Introduction to Computer Applications and Concepts
SDV: Student Development

Clinical Component: 3 semesters
Summer:  
NUR 115: LPN Transition
NUR 136: Principles of Pharmacology I
NUR 226: Health Assessment
NUR 247: Psychiatric/Mental Health Nursing

Fall:  
NUR 245: Maternal/Newborn Nursing
NUR 137: Principles of Pharmacology II
NUR 213: Second Level Nursing III

Spring:  
NUR 214: Second Level Nursing IV
NUR 254: Nursing Dimensions

All of these options are fully explained in the online Nursing Information Session at http://community.brcc.edu/nursing/.

a LPNs who have graduated from nursing school within the last five years and have received a score of 50% or greater on the NLN medication administration test or received a score of 60% or greater on the ERI medication administration test are exempt from NUR 136.

b LPNs who have graduated from nursing school within the last five years and have received a score of 50% or greater on the NLN Maternity test or received a score of 60% or greater on the ERI Maternity nursing test are exempt from NUR 245. Other standardized exit texts for maternity nursing and medication administration may be accepted, if approved by the Nursing Program Head.
Health Sciences

**Award: Certificate**

Purpose: to prepare students who wish to enter allied health, veterinary technology, funeral services, and respiratory therapy programs with competitive admissions procedures at Blue Ridge Community College or at other colleges. Students should consult the catalogs of the transfer institution they wish to attend for admission requirements for competitive health programs such as dental assisting, dental hygiene, physical therapy assisting, respiratory therapy, or other allied health programs.

Successful completion of the Health Sciences Certificate will strengthen the academic record of students applying for admission to Blue Ridge Community College’s Registered Nursing and Veterinary Technology programs, John Tyler Community College’s Funeral Services program, and J. Sargeant Reynolds Community College’s Respiratory Therapy and Opticianry programs. Please note, however, that not all courses listed will be required in every allied health program. Some allied health programs may require more prerequisite courses prior to admission. Students should carefully follow the admission procedures published for the particular health program of interest.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>Introduction to Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition</td>
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<tr>
<td>SDV</td>
<td>Student Development</td>
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</tr>
<tr>
<td>CHM</td>
<td>Chemistry Elective</td>
<td>3-4</td>
</tr>
<tr>
<td>SOC SCI</td>
<td>Social Science Elective</td>
<td>3</td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology Elective</td>
<td>3</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Career Field Electives</td>
<td>10-15</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>30-35</strong></td>
</tr>
</tbody>
</table>

* refer to table the page 91.

Opticianry

**Award: Associate of Applied Science Degree**

**Major: Opticianry**

(Partnership Program awarded at J. Sargeant Reynolds Community College)

Possible occupations for graduates: optician, ophthalmic dispenser, optical lab manager or technician, contact lens technician, ophthalmic sales representative, and ophthalmic research technician.

The Opticianry associate of applied science degree program is a partnership program with J. Sargeant Reynolds Community College. Students complete general education courses at Blue Ridge Community College and subsequently apply to J. Sargeant Reynolds Community College to complete the remaining program requirements. Students will gain the necessary knowledge and skills to manage all aspects of the making and fitting of eyeglasses and contact lenses.

For information about general education requirements at BRCC, go to http://www.brcc.edu/services/advising/partnerships or contact a BRCC academic advisor. For additional information about the Opticianry program, contact Ms. Kristina Green at J. Sargeant Reynolds Community College at 804-523-5415.
Respiratory Therapy

Award: Associate of Applied Science Degree
Major: Respiratory Therapy
(Partnership Program awarded at J. Sargeant Reynolds Community College)

Possible occupations for graduates: licensed respiratory therapist in hospitals, clinics, research facilities, home care agencies, and alternate care sites.

The Respiratory Therapy associate of applied science degree program is a partnership program with J. Sargeant Reynolds Community College. Students complete general education courses at Blue Ridge Community College and subsequently apply to J. Sargeant Reynolds Community College to complete the remaining program requirements. Students will gain the necessary knowledge and skills to treat, manage, and care for patients with breathing abnormalities, under the supervision of a physician.

For information about general education requirements at BRCC, go to http://www.brcc.edu/services/advising/partnerships or contact Ms. Beth Styers in the Counseling Center. For additional information about the Respiratory Therapy program, contact Ms. Sherry Compton at J. Sargeant Reynolds Community College at 804-523-5013.

Science

Award: Associate of Science Degree
Major: Science

The A.S. degree program in Science is designed to prepare students to transfer to four year institutions and pursue a Bachelor of Science degree in an area of the biological sciences, engineering, mathematics or physical sciences.

The degree is intended for students who wish to continue their studies in the following fields: Biology, Chemistry, Engineering, Mathematics, Physics, Pre-med, Pre-vet, and Pre-dentistry. The suggested curriculum and list of courses that follows includes the highest level college-transfer courses available at BRCC and is designed to allow students to transfer to their final institution with the highest standing possible in their intended major. Considering the number of institutions and majors that can be chosen, it is not feasible to offer a curriculum that satisfies the needs of all. For choice of electives, it is strongly recommended that all students begin with the following guidelines but that they also contact the institution(s) to which they wish to transfer and verify which courses will be best for their specific major and specialization.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td>MTH 173</td>
<td>Calculus with Analytic Geometry</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Science with Laboratory</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>History Elective b</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective c</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Mathematics Elective e</td>
<td>3-5</td>
</tr>
<tr>
<td></td>
<td>Science with Laboratory</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Health/Physical Education</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>14-16</td>
</tr>
<tr>
<td><strong>Third Semester</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics/Natural Science Electives e</td>
<td>9-10</td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Science Elective b</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Humanities/Fine Arts d</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15-16</td>
<td></td>
</tr>
</tbody>
</table>
Fourth Semester

Mathematics/Natural Science Electives  

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTH 173</td>
<td>Calculus with Analytic Geometry I</td>
<td>5</td>
</tr>
<tr>
<td>CHM 111</td>
<td>College Chemistry I</td>
<td>4</td>
</tr>
<tr>
<td>EGR 120</td>
<td>Introduction to Engineering</td>
<td>2</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
</tbody>
</table>
| History Elective  
| b        |                                     | 2       |
| Total credits required  
|          |                                     | 60-63   |

This list of majors is not exclusive. The A.S. degree in science can also be used for students who wish to transfer to other technology-related fields.

A list of approved History/Social & Behavioral Science electives can be found on page 62 of the BRCC catalog.

Students majoring in Engineering should take EGR 140; all other students should take a History or Social/Behavioral Science elective.

A list of approved Humanities & Fine Arts electives can be found on page 62 of the BRCC catalog.

The typical mathematics and science course sequences for certain majors follows: Biological sciences/pre-med/pre-vet/pre-dentistry: MTH 173/174 or MTH 173/157, BIO 101/102 or BIO 101/114, CHM 111/112 and CHM 241/243 & 242/244, PHY 201/202 or 241/242. Chemistry: MTH 173/174/277 and MTH 279 or MTH 291, CHM 111/112 and CHM 241/243 and 242/244, PHY 201/202 or 241/242. Mathematics MTH 173/174/277, MTH 177 or 285, MTH 279 or 291, MTH 286 or 287, CHM 111/112 or PHY 201/202 or 241/242 or BIO 101/102 or GOL 105. Physics: MTH 173/174/277/177 and MTH 279 or MTH 291, CHM 111/112, PHY 241/242, with the following options: BIO 101/114 for those interested in Biophysics, GOL 105 for those interested in Geophysics.

### Science

**Award:** Associate of Science Degree  
**Major:** Science  
**Specialization:** Engineering

The A.S. degree program in Science with a specialization in Engineering is designed to prepare students to transfer to four year institutions to pursue a Bachelor of Sciences degree in an area of Engineering. The degree is intended for students who wish to continue their studies in the following fields: Civil, General, Industrial or Mechanical Engineering. The suggested curriculum and list of courses that follows includes the highest level college-transfer courses available at BRCC and is designed to allow students to transfer to their final institution with the highest standing possible in their intended major. Considering the number of institutions and majors that can be chosen, it is not feasible to offer a curriculum that satisfies the needs of all. For choices of electives, it is strongly recommended that all students begin with the following guidelines but that they also contact the institution(s) to which they wish to transfer and verify which courses will be best for their specific major and specialization.

### Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
</table>
| First Semester  
| MTH 173    | Calculus with Analytic Geometry I   | 5       |
| CHM 111    | College Chemistry I                 | 4       |
| EGR 120    | Introduction to Engineering         | 2       |
| ENG 111    | College Composition I               | 3       |
| SDV        | Student Development                 | 1       |
| History Elective b |                         | 2       |
| Total 18   |                                     | 18      |

| Second Semester  
| MTH 174    | Calculus with Analytic Geometry II  | 5       |
| CHM 112    | College Chemistry II                | 4       |
| EGR 140    | Engineering Mechanics - Statics     | 3       |
| ENG 112    | College Composition II              | 3       |
| Social/Behavioral Science Elective b |                         | 2       |
| Total 18   |                                     | 18      |

| Third Semester  
| MTH 277    | Vector Calculus                     | 4       |
PHY 241  University Physics I  4  
Engineering Elective  c  3  
Health/Physical Education  1  
Humanities/Fine Arts Elective b  3  
Literature b  2  

Fourth Semester
MTH 291  Ordinary Differential Equations  3  
MTH 177  Linear Algebra  2  
PHY 242  University Physics II  4  
Engineering Elective  c  3  
Engineering Elective  c  3  
EGR 245  Engineering Mechanics - Dynamics  2  

Total credit required  72

a  This list of majors is not exclusive. The A.S. with a specialization in Engineering can be used for students who wish to transfer in other Engineering fields as well.

b  A list of approved electives can be found on pages 68-69 of the BRCC catalog.

c  The typical Engineering sequences for certain majors follows: JMU: EGR 115, EGR 206; UVA/VT: EGR 126 or CSC 201 plus two of either EGR 206 or EGR 246 or EGR 248.

Technical Studies

Award: Associate of Applied Science Degree  
Major: Technical Studies  
Specialization: Manufacturing Engineering Technology

Possible occupations for graduates in the Manufacturing Engineering Technology program include: manufacturing engineer, control and instrumentation technician, process controls engineer or electromechanical technician. This field of study also suggests career areas in management, supervision and Quality Assurance.

The Associate of Applied Science degree in Technical Studies with a specialization in Manufacturing Engineering Technology is designed to provide the technical skills and knowledge base required for those individuals who seek employment or professional development in the field of manufacturing automation. The knowledge and skills needed for success in this field or as a manager of an automated production process include a knowledge of CAD, material science, machine and process technology, basic electronics, digital and microprocessor electronics, instrumentation, PLC systems/programming as well as managerial courses in business, economics and Quality Assurance. The curriculum is structured not to require previous electrical or electronics experience, however these and other skills, will be reinforced through lab exercises as the student progresses through the curriculum.

Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Semester</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD 140</td>
<td>Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>(3)</td>
</tr>
<tr>
<td>ETR 113</td>
<td>DC and AC Fundamentals I</td>
<td>4</td>
</tr>
<tr>
<td>IND 165</td>
<td>Principles of Industrial Technology I</td>
<td>4</td>
</tr>
<tr>
<td>MTH 103/163</td>
<td>Applied Technical Math I/ Pre-calculus I a</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>
Second Semester
ETR 114  DC and AC Fundamentals II  
HLT/PED  Health and Physical Education  
IND 166  Principles of Industrial Technology II  
PHY 100  Elements of Physics  
SDV  Social Science Elective  

Third Semester
ETR 273  Computer Electronics I  
IND 250  Intro to Basic Computer-Integrated Manufacturing  
MEC 111  Materials for Industry  
HLT/PED  Health and Physical Education  
BUS 200  Principles of Management  

Fourth Semester
ETR 237  Industrial Electronics  
ETR 274  Computer Electronics II  
IND 251  Automated Manufacturing Systems  
MEC 112  Processes of Industry  
EGR 206  Engineering Economics  

Total credits required 67

a Based on math placement testing.
b Students who wish to transfer may elect to take PHY 201-202 in lieu of this course.
c Please refer to page 91 for the list of Humanities/Fine Arts and Social Science Electives that are approved to fulfill this requirement.

Career Studies Certificate Options
Automation in Manufacturing Engineering

Award: Career Studies Certificate

Purpose: to provide students with the fundamental knowledge and skills necessary for employment or professional development in an automated manufacturing environment with focus on computer integrated manufacturing and sensor input/output process control systems. This career studies certificate prepares students for manufacturing occupations such as control technician, instrumentation technician, manufacturing technologist, electromechanical technician, and industrial technician. Upon completion of the career studies certificate, credits may be applied toward the Associate of Applied Science Degree with a concentration in Manufacturing Engineering Technology.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 165</td>
<td>Principles of Industrial Technology I</td>
<td>4</td>
</tr>
<tr>
<td>IND 166</td>
<td>Principles of Industrial Technology II</td>
<td>4</td>
</tr>
<tr>
<td>CAD 140</td>
<td>Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>ETR 113</td>
<td>DC and AC Fundamentals I</td>
<td>4</td>
</tr>
<tr>
<td>IND 250</td>
<td>Introduction to Basic Computer</td>
<td>3</td>
</tr>
<tr>
<td>ETR 114</td>
<td>Integrated Manufacturing</td>
<td>4</td>
</tr>
<tr>
<td>ETR 237</td>
<td>DC and AC Fundamentals II</td>
<td>3</td>
</tr>
<tr>
<td>IND 251</td>
<td>Automation in Manufacturing Systems</td>
<td>4</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>29</td>
</tr>
</tbody>
</table>
Electrical Control Fundamentals

**Award: Career Studies Certificate**

*Purpose:* to provide students, who already possess an understanding of electrical fundamentals, further instruction into the areas of electrical control and programmable logic control. This career studies certificate prepares students for entry-level positions as controls or instrument technicians in manufacturing.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETR 112</td>
<td>Math Applications for ELE/ETR Analysis</td>
<td>2</td>
</tr>
<tr>
<td>INS 110</td>
<td>Principles of Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>ELE 156</td>
<td>Electrical Control Systems</td>
<td>3</td>
</tr>
<tr>
<td>ETR 237</td>
<td>Industrial Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>SAF 127</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Electrical Fundamentals

**Award: Career Studies Certificate**

*Purpose:* to provide students with a strong foundation in electrical principles, both A.C. & D.C., and to familiarize students with basic applications. This career studies certificate prepares students for entry-level technical positions in manufacturing that focus on electrical applications.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETR 112</td>
<td>Math Applications for ELE/ETR Analysis</td>
<td>2</td>
</tr>
<tr>
<td>ELE 113</td>
<td>Electricity I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 123</td>
<td>Electrical Applications I</td>
<td>2</td>
</tr>
<tr>
<td>ELE 114</td>
<td>Electricity II</td>
<td>3</td>
</tr>
<tr>
<td>ELE 124</td>
<td>Electrical Applications II</td>
<td>2</td>
</tr>
<tr>
<td>SAF 127</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

Manufacturing Management and Productivity

**Award: Career Studies Certificate**

*Purpose:* to provide a broad overview of the three major areas involved in the day-to-day operations of a manufacturing facility, including economics and financial management, and human resource utilization. The completed career studies certificate will provide a foundation for those students seeking further study in the area of manufacturing management.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>

Mechanical Maintenance Technology

**Award: Career Studies Certificate**

*Purpose:* to provide students with an understanding and training in mechanical systems found in a manufacturing environment, including: mechanical drives, hydraulics and pneumatics. This career studies certificate prepares students for positions in industrial maintenance.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 195</td>
<td>Math Applications for Mechanisms</td>
<td>2</td>
</tr>
<tr>
<td>CAD 161</td>
<td>Blueprint Reading I</td>
<td>2</td>
</tr>
<tr>
<td>MAC 156</td>
<td>Mechanisms I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 157</td>
<td>Mechanisms II</td>
<td>3</td>
</tr>
<tr>
<td>MEC 161</td>
<td>Basic Fluid Mechanics - Hydraulics/Pneumatics</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

*Students wishing to enter the Technical Studies, Manufacturing Engineering Technology Associate Degree program or the Automation in Manufacturing Engineering Career Studies Certificate may substitute CAD 161 and an approved one credit course for CAD 140.*
Process Technology

**Award: Career Studies Certificate**

Purpose: to provide students with an introduction to various systems found in a manufacturing environment and a fundamental understanding of the controls used. This career studies certificate prepares the student to advance to positions such as control room operator or production team leader.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 106</td>
<td>Industrial Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>CAD 161</td>
<td>Blueprint Reading I*</td>
<td>2</td>
</tr>
<tr>
<td>IND 165</td>
<td>Principles of Industrial Technology I</td>
<td>4</td>
</tr>
<tr>
<td>INS 110</td>
<td>Principles of Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>ETR 150</td>
<td>Machine Control Using Relay and Programmable Logic</td>
<td>3</td>
</tr>
<tr>
<td>IND 250</td>
<td>Introduction to Basic Computer Integrated Manufacturing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total credits required** 18

*Students wishing to enter the Technical Studies, Manufacturing Engineering Technology Associate Degree program or the Automation in Manufacturing Engineering Career Studies Certificate may substitute CAD 161 and an approved one credit course for CAD 140.*
Veterinary Technology

Students who wish to pursue an education in the area of veterinary science have two options from which to choose: a Career Studies Certificate in Veterinary Assisting or an Associate of Applied Science degree in Veterinary Technology. After completion of the career studies certificate, a student may choose to apply for admission into the Veterinary Technology Associate Degree program. If accepted into the program, one of the courses in the career studies certificate, VET 236, will count towards the Associate of Applied Science degree. Two programs of instruction are available for the Associate Degree program: the full-time day program at the Weyers Cave campus and, for students in the Virginia Beach, Hampton, Richmond, and Roanoke regions of Virginia, a part-time program through the Compressed Video Network transmitted to the Virginia Beach campus of Tidewater Community College, the Midlothian Campus of John Tyler Community College, Germanna Community College, and to Virginia Western Community College.

Veterinary Technology

Award: Associate of Applied Science Degree in Animal Science
Major: Veterinary Technology
Length: Five semesters including one summer (two-year) curriculum *

Possible occupations for graduates: veterinary technician for veterinary hospital, diagnostic/research laboratory, the pharmaceutical industry, zoos/wildlife centers, sales and livestock managers, or veterinary educators.

* For a full-time student; part-time enrollment is not recommended due to sequencing of the required classes.

The Associate of Applied Science degree in Veterinary Technology is designed for people who seek employment in the area of veterinary technology. The objectives of the program are to prepare graduates for employment in private veterinary hospitals and other related fields.

A coordinated externship, required during the summer between the first and second year, includes 400 hours of work in a veterinary hospital. The College staff will assist students in obtaining the externship placement.

Students must pass each VET-prefix course in the Veterinary Technology curriculum in order to continue in the program. A minimum GPA of 2.0 is required for graduation.

Admission Requirements

To be admitted to the Veterinary Technology program, applicants should:

1) be a high school graduate or equivalent;
2) have successfully completed algebra and biology with a laboratory;
3) complete an application for admission and submit official transcripts from high school and all colleges and universities attended;
4) observe in a veterinary hospital for 16 hours;
5) if requested, complete an interview with a member of the Veterinary Technology staff;
6) have good organizational and study skills;
7) have documentation of current CPR certification;
8) submit a letter of recommendation from a veterinarian or licensed veterinary technician.

Since admission to the Veterinary Technology program is competitive, applicants are encouraged to complete the admissions requirements by January 31 of the year in which they wish to enroll. Experience in the animal health field or working with animals is advantageous.

Graduates of the program are eligible to take the state licensing examination administered by the State Board of Veterinary Medicine.
Curriculum

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 111</td>
<td>College Composition I</td>
<td>(3)</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td>VET 100</td>
<td>Introduction to Animal Science</td>
<td>4</td>
</tr>
<tr>
<td>VET 105</td>
<td>Introduction to Veterinary Technology</td>
<td>3</td>
</tr>
<tr>
<td>VET 111</td>
<td>Anatomy and Physiology of Domestic Animals</td>
<td>4</td>
</tr>
<tr>
<td>VET 120</td>
<td>Veterinary Medical Terminology and Calculations</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 110</td>
</tr>
<tr>
<td>VET 115</td>
</tr>
<tr>
<td>VET 121</td>
</tr>
<tr>
<td>VET 216</td>
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<tr>
<td></td>
</tr>
<tr>
<td>VET 290</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>VET 236</td>
</tr>
<tr>
<td>HLT/PED</td>
</tr>
<tr>
<td>VET 215</td>
</tr>
<tr>
<td>VET 221</td>
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<tr>
<td>VET 205</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>HLT/PED</td>
</tr>
<tr>
<td>VET 210</td>
</tr>
<tr>
<td>VET 217</td>
</tr>
<tr>
<td>VET 222</td>
</tr>
<tr>
<td>VET 230</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

* Please refer to page 91 for the list of Humanities/Fine Arts and Social Science electives that are approved to fulfill this requirement.

b May be taken in either third or fourth semester.

Veterinary Technology Distance Education Program

Award: Associate of Applied Science Degree in Animal Science

Major: Veterinary Technology

Length: Eight semesters including two summers

This program is designed for those students who for personal or financial reasons cannot travel to Weyers Cave for the residential program. Courses are interactive, two-way audio and video, transmitted over the VCCS Compressed Video Network. Courses are transmitted to the Virginia Beach campus of Tidewater Community College, the Midlothian Campus of John Tyler Community College, Germanna Community College, and Virginia Western Community College. The following courses are transmitted: VET 100, VET 105, VET 111, VET 115, VET 121, VET 120, VET 216, VET 236, VET 210, VET 215, VET 221, VET 217, VET 222, VET 230, and VET 205. These courses must be completed elsewhere: ENG 137 or ENG 111, SDV 100, CHM 110, Humanities/Fine Arts, HLT/PED, and Social Science elective. The program begins at each site every three years.
Applicants must:

1. have completed or be in the process of completing the general education courses required for the Associate of Applied Science degree in Veterinary Technology;
2. work for at least 20 hours per week with a veterinarian willing to provide supervision and opportunities to practice the tasks taught in the various courses;
3. be committed to enrolling in all the courses for this program as they are offered.
4. have documentation of current CPR certification.
5. complete an application for admission and submit official transcripts from high school and all colleges and universities attended;
6. observe in a veterinary hospital for 16 hours;
7. if requested, complete an interview with a member of the Veterinary Technology staff;
8. submit a letter of recommendation from a veterinarian or licensed veterinary technician.

The distance learning program has limited space and students will be selected on a competitive basis. An interview is required.

Students must pass each VET-prefix course in the Veterinary Technology curriculum in order to continue in the program. A minimum GPA of 2.0 is required for graduation.

### Veterinary Assisting

**Award:** Career Studies Certificate

Purpose: to assist people presently employed in veterinary hospitals and who want professional development. Individuals with other pet-related interests, such as pet shop personnel, dog breeders, and pet owners, may also benefit from this set of courses. All courses except VET 236 may be taken in any order for completion of the certificate. VET 101 or VET 102 must be completed before VET 236.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VET 101</td>
<td>Introduction to Veterinary Assisting</td>
<td>3</td>
</tr>
<tr>
<td>VET 102</td>
<td>Care and Maintenance of Small Domestic Animals</td>
<td>3</td>
</tr>
<tr>
<td>VET 103</td>
<td>Veterinary Office Assisting</td>
<td>3</td>
</tr>
<tr>
<td>VET 236</td>
<td>Companion Animal Behavior</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td><strong>12</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Health Sciences

**Award:** Certificate

Purpose: to prepare students who wish to enter allied health, veterinary technology, funeral services, and respiratory therapy programs with competitive admissions procedures at Blue Ridge Community College or at other colleges. Students should consult the catalogs of the transfer institution they wish to attend for admission requirements for competitive health programs such as dental assisting, dental hygiene, physical therapy assisting, respiratory therapy, or other allied health programs.

Successful completion of the Health Sciences Certificate will strengthen the academic record of students applying for admission to Blue Ridge Community College’s Registered Nursing and Veterinary Technology programs, John Tyler Community College’s Funeral Services program, and J. Sargeant Reynolds Community College’s Respiratory Therapy program. Please note, however, that not all courses listed will be required in every allied health program. Some allied health programs may require more prerequisite courses prior to admission. Students should carefully follow the admission procedures published for the particular health program of interest.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 101</td>
<td>Introduction to Biology</td>
<td>4</td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition</td>
<td>3</td>
</tr>
<tr>
<td>SDV</td>
<td>Student Development</td>
<td>1</td>
</tr>
<tr>
<td>CHM</td>
<td>Chemistry Elective a</td>
<td>3-4</td>
</tr>
<tr>
<td>SOC SCI</td>
<td>Social Science Elective a</td>
<td>3</td>
</tr>
<tr>
<td>PSY</td>
<td>Psychology Elective a</td>
<td>3</td>
</tr>
<tr>
<td>HUM</td>
<td>Humanities Elective a</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Career Field Electives a</td>
<td>10-15</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td><strong>30-35</strong></td>
<td></td>
</tr>
</tbody>
</table>

*a* See page 91.
Approved Electives for Associate of Applied Science (A.A.S.) Degree Programs

Health/Physical Education
Any HLT or PED course

Humanities/Fine Arts
ART
ASL 101, 102, 201
CST 130, 131, 132, 136, 151, 152
ENG 241, 242, 243, 244, 251, 252, 271
HUM
MUS 137, 121, 122
PHI
REL
All foreign language courses

Social/Behavioral Sciences
ECO 120, 201, 202
GEO
HIS
PLS
PSY
SOC
SSC 107

Academic Advising Table for Specific Allied Health Programs

<table>
<thead>
<tr>
<th>Electives</th>
<th>Registered Nursing AAS Degree</th>
<th>Veterinary Technology AAS Degree</th>
<th>Funeral Services AAS Degree</th>
<th>Respiratory Therapy AAS Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemistry Elective</td>
<td>CHM 101: General Chemistry I &amp; Lab</td>
<td>any Chemistry Course</td>
<td>any Chemistry course</td>
<td>CHM 101: General Chemistry I &amp; Lab</td>
</tr>
<tr>
<td>Social Science Elective</td>
<td>SOC 215: Sociology of the Family</td>
<td>Choose any ECO, GEO, HIS, PLS, PSY, or SOC course</td>
<td>SOC 200: Principles of Sociology or 215: Sociology of the Family</td>
<td>Choose any ECO, GEO, HIS, PLS, PSY, or SOC course</td>
</tr>
<tr>
<td>Psychology Elective</td>
<td>PSY 230: Developmental Psychology</td>
<td>Choose any PSY course</td>
<td>PSY 116: Psychology of Death and Dying</td>
<td>Choose any PSY course</td>
</tr>
<tr>
<td>Humanities Elective</td>
<td>PHI 225: Ethics recommended. See p. 79 for other options</td>
<td>Choose any ART, HUM, PHI, REL, literature, or foreign language course</td>
<td>Choose any ART, HUM, PHI, REL, literature, or foreign language course</td>
<td>Choose any ART, HUM, PHI, REL, literature, or foreign language course</td>
</tr>
</tbody>
</table>

See also: Nursing Program Website, Veterinary Technology Website, JTCC Funeral Services Website, and the JSRCC Respiratory Therapy Website.
Career Studies Certificates

Many specialized certificates are available for students who wish to pursue a special interest course of study. Each Career Studies curriculum is usually equivalent to one semester of full-time community college work. However, completion time varies for each student and each certificate.

Admission Requirements: Career Studies students apply for admission to the College and register for the appropriate classes.

To be eligible for graduation, a student must:
1. fulfill all course and credit-hour requirements specified in the program option (approved courses may be substituted for minimum requirements);
2. earn a minimum of 25% of the credits required at Blue Ridge Community College;
3. earn a minimum grade point average of 2.0;
4. resolve all financial obligations to the College;
5. complete an Application for Graduation form in the Admissions and Records Office.

Students who complete requirements for Career Studies Certificates are not eligible for graduation honors. Appropriate courses taken in this program may be applicable toward other programs at the College.

Students may be eligible to receive credit for some courses in these curricula through the College’s advanced standing process.

Advanced Conversational Spanish

Purpose: to provide native English speakers with the opportunity to gain proficiency in conversational Spanish at the “intermediate high” or “advanced low” levels. Completion of the career studies certificate will benefit law enforcement officers, medical personnel, teachers, business employees, and other professionals.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>SOC 293</td>
<td>Immigration and Immigrants in American Society</td>
<td>3</td>
</tr>
<tr>
<td>SPA 202</td>
<td>Intermediate Spanish</td>
<td>4</td>
</tr>
<tr>
<td>SPA 211</td>
<td>Intermediate Spanish Conversation I</td>
<td>3</td>
</tr>
<tr>
<td>SPA 212</td>
<td>Intermediate Spanish Conversation II</td>
<td>3</td>
</tr>
<tr>
<td>SPA 241</td>
<td>Intermediate Spanish Composition</td>
<td>3</td>
</tr>
<tr>
<td>SPA 293</td>
<td>Spanish for Professionals a</td>
<td>3</td>
</tr>
<tr>
<td>SPA 295</td>
<td>Topics in Spanish Immersion b</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td><strong>26</strong></td>
<td></td>
</tr>
</tbody>
</table>

a  SPA 211, 212, 241, and SOC 255 must be taken prior to SPA 293.

b  SPA 202 must be taken prior to SPA 295.

American Sign Language

Purpose: to provide a basic knowledge of American Sign Language and deaf culture. The completed career studies certificate will provide a foundation for those students who wish to pursue more advanced preparation for ASL interpreter certification.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASL 101</td>
<td>American Sign Language I</td>
<td>3</td>
</tr>
<tr>
<td>ASL 102</td>
<td>American Sign Language II</td>
<td>3</td>
</tr>
<tr>
<td>ASL 201</td>
<td>American Sign Language III</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total credits required</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
</tbody>
</table>
Applications in Corrections

Purpose: to provide a flexible set of learning experiences that will enhance the education and professional development of both officers working in the corrections field as well as those who aspire to careers in corrections. Completion of this career studies certificate also will benefit people who are interested in learning how the criminal justice system works. This career studies certificate is for students who may want to earn the A.A.S. degree in Administration of Justice with a specialization in corrections.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 100</td>
<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 145</td>
<td>Corrections and the Community</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 147</td>
<td>Local Adult Detention Facilities</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 245</td>
<td>Management of Correctional Facilities</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 248</td>
<td>Probation, Parole and Treatment</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective (^a) 3</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits required: 21

\(^a\) SPA 150 may also be used.

Applications in Law Enforcement

Purpose: to provide a flexible set of learning experiences that will enhance the education and professional development of both in-service officers and those aspiring to criminal justice careers. Completion of this career studies certificate also will benefit people who are interested in learning how the criminal justice system works. This career studies certificate is for students who may want to earn the A.A.S. degree in Administration of Justice.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJ 100</td>
<td>Survey of Criminal Justice</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 110</td>
<td>Introduction to Law Enforcement</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 236</td>
<td>Principles of Criminal Investigation</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 211</td>
<td>Criminal Law Evidence and Procedure I</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 228</td>
<td>Narcotics and Dangerous Drugs</td>
<td>3</td>
</tr>
<tr>
<td>ADJ 232</td>
<td>Domestic Violence</td>
<td>3</td>
</tr>
<tr>
<td>ADJ</td>
<td>Elective (^a) 3</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits required: 24

\(^a\) SPA 150 may also be used.

Art: Introduction to Two-Dimensional Art

Purpose: to provide a foundation for individuals interested in two-dimensional art for personal enrichment and for those interested in a career in art. The courses generally transfer to a four-year college or university. This program balances basic skills and knowledge with expressive concerns in order to encourage individuals to find their artistic vision. Courses may be applied to the Fine Arts Certificate.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 101</td>
<td>History and Appreciation of Art I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 102</td>
<td>History and Appreciation of Art II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 121</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ART 122</td>
<td>Drawing II</td>
<td>3</td>
</tr>
<tr>
<td>Plus two electives from the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART 241</td>
<td>Painting I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 242</td>
<td>Painting II</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 243</td>
<td>Watercolor I</td>
<td>(3)</td>
</tr>
<tr>
<td>ART 244</td>
<td>Watercolor II</td>
<td>(3)</td>
</tr>
</tbody>
</table>

Total credits required: 15
Art: Introduction to Three-Dimensional Art

Purpose: to provide a foundation for individuals interested in the three-dimensional arts for personal enrichment and for those interested in a career in art. The courses generally transfer to a four-year college or university. This program balances basic skills and knowledge with expressive concerns in order to encourage individuals to find their artistic vision. Courses may be applied to the Fine Arts Certificate.

Course No. | Title                                      | Credits |
-----------|--------------------------------------------|---------|
ART 101    | History and Appreciation of Art I          | 3       |
ART 102    | History and Appreciation of Art II         | (3)     |
ART 121    | Drawing I                                  | 3       |
ART 132    | Fundamentals of Design II                  | 3       |
ART 153    | Ceramics I                                 | 3       |

Plus one elective from the following:

ART 154    | Ceramics II                                | (3)     |
ART 235    | Functional Ceramics                        | (3)     |
ART 236    | Sculptural Ceramics                        | (3)     |
Total credits required 15

Automation in Manufacturing Engineering

Purpose: to provide students with the fundamental knowledge and skills necessary for employment or professional development in an automated manufacturing environment with focus on computer integrated manufacturing and sensor input/output process control systems. This career studies certificate prepares students for manufacturing occupations such as control technician, instrumentation technician, manufacturing technologist, electromechanical technician, and industrial technician. Upon completion of the career studies certificate, credits may be applied toward the A.A.S. degree with a specialization in Technical Studies in Manufacturing Engineering Technology.

Course No. | Title                                          | Credits |
-----------|------------------------------------------------|---------|
IND 165    | Principles of Industrial Technology I          | 4       |
IND 166    | Principles of Industrial Technology II         | 4       |
CAD 140    | Technical Drawing                             | 3       |
ETR 113    | DC and AC Fundamentals I                       | 4       |
IND 250    | Introduction to Basic Computer                 | 3       |
ETR 114    | Integrated Manufacturing                       | 4       |
ETR 237    | DC and AC Fundamentals II                      | 3       |
IND 251    | Automation in Manufacturing Systems            | 4       |
Total credits required 29

Basic Office Skills

Purpose: to provide students with an opportunity to acquire basic skills for entry-level positions in the 21st century office environment. Studies will include foundational computer hardware and software knowledge, keyboarding, word-processing and document production, spreadsheets and fundamental accounting procedures, and essential office procedures. Once completed, courses in this career studies certificate may be applied toward other programs offered by the College, such as the A.A.S. degree in Management, with an Administrative Assistant and Business Information Specialist specialization.

Course No. | Title                                           | Credits |
-----------|------------------------------------------------|---------|
ACC 211    | Principles of Accounting I                      | 3       |
or
ACC 115    | Applied Accounting                              | (3)     |
AST 102    | Keyboarding II                                  | 3       |
AST 243    | Office Administration I                         | 3       |
BUS 100    | Introduction to Business                        | 3       |
ENG 111    | College Composition I                           | 3       |
or
ENG 137    | Communication Processes I                       | (3)     |
ITE 115    | Introduction to Computer Applications and Concepts | 3       |
Total credits required 18
Commercial Driving

Purpose: to provide students with the knowledge and skills necessary for employment as licensed Class A commercial tractor trailer drivers.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRK 101</td>
<td>DOT Safety Rules and Regulations</td>
<td>2</td>
</tr>
<tr>
<td>TRK 102</td>
<td>Preventive Maintenance for Truck Drivers</td>
<td>1</td>
</tr>
<tr>
<td>TRK 103</td>
<td>Tractor Trailer Driving</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>12</td>
</tr>
</tbody>
</table>

Computer-Aided Drafting

Purpose: to train students in the fundamentals of design and drafting and the use of computer software applications in various drafting disciplines. This career studies certificate provides the minimum preparation for employment as a draftsperson or CAD operator.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 140</td>
<td>Technical Drawing</td>
<td>3</td>
</tr>
<tr>
<td>CAD 241</td>
<td>Parametric Solid Modeling I</td>
<td>3</td>
</tr>
<tr>
<td>CAD 242</td>
<td>Parametric Solid Modeling II</td>
<td>3</td>
</tr>
<tr>
<td>ARC 121</td>
<td>Architectural Drafting I</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAD 243</td>
<td>Parametric Solid Modeling III</td>
<td>(3)</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>12</td>
</tr>
</tbody>
</table>

Computer Applications for Professionals

Purpose: to provide faculty in local elementary, middle, and secondary schools with instructional technology applications skills. Standards of Learning (SOLs) established for schools are the basis for course content. The course content and career studies certificate are valuable for other professionals who need to use presentation, Internet and other software applications.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 193</td>
<td>Introduction to Microcomputer Software</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>(3)</td>
</tr>
<tr>
<td>ITE 130</td>
<td>Introduction to Internet Services</td>
<td>3</td>
</tr>
<tr>
<td>ITE 298</td>
<td>Seminar and Project</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>9</td>
</tr>
</tbody>
</table>

Computer Help Desk

Purpose: to provide students with both the technical skills and the interpersonal skills needed to be successful in a help desk support position. The goal of the course content and the career studies certificate is to include up-to-date information and technology that is currently used by many help desk professionals in today's workforce. Following the completion of the program, graduates will be prepared for an entry-level position in a help desk support role.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Career and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITE 182</td>
<td>User Support/Help Desk Principles</td>
<td>3</td>
</tr>
<tr>
<td>ITE 140</td>
<td>Spreadsheet Software</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td>Database Fundamentals</td>
<td>(3)</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td></td>
</tr>
<tr>
<td>ITN 106</td>
<td>Microcomputer Operating Systems a</td>
<td>3</td>
</tr>
<tr>
<td>ITN 103</td>
<td>Administration of Networked Servers</td>
<td>3</td>
</tr>
<tr>
<td>ITN 260</td>
<td>Networking Security Basics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total credits required</td>
<td>20</td>
</tr>
</tbody>
</table>

a Cross-listed as ETR 164 Upgrading and Maintaining PC Hardware.
Computer Network Technologies

Purpose: to provide students with fundamental knowledge and skills in data communications, computer systems, LAN (Local Area Network) architecture and administration. The program emphasizes the importance of certification and assists students to prepare for certification exams.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 182</td>
<td>User Support/Help Desk</td>
<td>3</td>
</tr>
<tr>
<td>ITN 106</td>
<td>Microcomputer Operating Systems^a</td>
<td>3</td>
</tr>
<tr>
<td>ITN 208</td>
<td>Protocols and Communications^b</td>
<td>4</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITN 103</td>
<td>Administration of Networked Servers</td>
<td>3</td>
</tr>
<tr>
<td>ITN 151</td>
<td>Introductory Routing and Switching</td>
<td>3</td>
</tr>
<tr>
<td>ITN 260</td>
<td>Network Security Basics</td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>22</td>
</tr>
</tbody>
</table>

^a Cross-listed as ETR 164.
^b Cross-listed as ETR 225.

Computer Science

Purpose: to provide the student the opportunity to undertake a foundational curriculum in Computer Science. These courses form the requisite lower division requirements at most institutions in Computer Science. This certificate follows the guidelines outlined in Association for Computing Machinery Associate Degree in Computer Science (2003).

<table>
<thead>
<tr>
<th>Course No</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 105</td>
<td>Career and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITP 120</td>
<td>Java Programming I</td>
<td>4</td>
</tr>
<tr>
<td>ITP 220</td>
<td>Java Programming II</td>
<td>4</td>
</tr>
<tr>
<td>ITP 200</td>
<td>Data Structures</td>
<td>4</td>
</tr>
<tr>
<td>ITP 258</td>
<td>System Development Project</td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

E-Commerce for Small Business

Purpose: The E-Commerce for Small Business Career Studies Certificate provides students with an opportunity to acquire the skills to implement and use computer application packages for business and managerial functions. Students may begin with the certificate and continue their studies to complete the A.A.S. degree in Information Systems Technology.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts^a</td>
<td>3</td>
</tr>
<tr>
<td>ITE 160</td>
<td>Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ACC 115</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITD 210</td>
<td>Web Page Design II</td>
<td>3</td>
</tr>
<tr>
<td>ITD 196</td>
<td>Capstone Project in E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>ITD 220</td>
<td>E-Commerce Administration</td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

^a ITE 115 is a prerequisite to all other IST courses and should be taken in the first semester.

Electrical Control Fundamentals

Purpose: to provide students, who already possess an understanding of electrical fundamentals, further instruction into the areas of electrical control and programmable logic control. This career studies certificate prepares students for entry-level positions as controls or instrument technicians in manufacturing.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETR 112</td>
<td>Math Applications for ELE/ETR Analysis</td>
<td>2</td>
</tr>
<tr>
<td>INS 110</td>
<td>Principles of Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>ELE 156</td>
<td>Electrical Controls Systems</td>
<td>3</td>
</tr>
<tr>
<td>ETR 237</td>
<td>Industrial Electronics I</td>
<td>3</td>
</tr>
<tr>
<td>SAF 127</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>
**Electrical Fundamentals**

Purpose: to provide students with a strong foundation in electrical principles, both A.C. & D.C., and to familiarize students with basic applications. This career studies certificate prepares students for entry-level technical positions in manufacturing that focus on electrical applications.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETR 112</td>
<td>Math Applications for ELE/ETR Analysis</td>
<td>2</td>
</tr>
<tr>
<td>ELE 113</td>
<td>Electricity I</td>
<td>3</td>
</tr>
<tr>
<td>ELE 123</td>
<td>Electrical Applications I</td>
<td>2</td>
</tr>
<tr>
<td>ELE 114</td>
<td>Electricity II</td>
<td>3</td>
</tr>
<tr>
<td>ELE 124</td>
<td>Electrical Applications II</td>
<td>2</td>
</tr>
<tr>
<td>SAF 127</td>
<td>Industrial Safety</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>14</strong></td>
</tr>
</tbody>
</table>

**Entrepreneurship**

Purpose: to provide students with the opportunity to acquire the knowledge and skills needed to become an entrepreneur, rather than employee or manager. Students will learn how to plan, implement, and monitor a new business, understand market and capital economies, and will fully explore the role of globalization in the marketplace.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 115</td>
<td>Applied Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS 165</td>
<td>Small Business Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 241</td>
<td>Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BUS 226</td>
<td>Computer Business Applications</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>FIN 215</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>ITE 160</td>
<td>Introduction to E-Commerce</td>
<td>3</td>
</tr>
<tr>
<td>MKT 100</td>
<td>Principles of Marketing</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**Gerontology**

Purpose: to promote an understanding of the aging process, discuss disease processes unique to this age group, and to provide resources for caregivers that will improve the care for the elder members of society. Participation in this program will provide opportunities for continuing education credits for healthcare providers. Completion of this certificate program will result in graduates who make a difference in the community, augment skills and/or provide skills necessary for entry level healthcare jobs.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HMS 236</td>
<td>Gerontology</td>
<td>3</td>
</tr>
<tr>
<td>HLT 230</td>
<td>Principles of Nutrition and Human Development</td>
<td>3</td>
</tr>
<tr>
<td>HLT 272</td>
<td>Medical Management of the Older Adult</td>
<td>3</td>
</tr>
<tr>
<td>HMS 238</td>
<td>Selected Topics in Aging</td>
<td>3</td>
</tr>
<tr>
<td>HLT 271</td>
<td>Physical Care Management of the Older Adult</td>
<td>3</td>
</tr>
<tr>
<td>HMS 106</td>
<td>Working with Death and Dying</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

**Graphic Design**

Purpose: to provide the educational background and skills in graphic design for entry level positions in graphic communications and graphic design. These courses generally transfer to a four-year college or university.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 121</td>
<td>Drawing I</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ART 131</td>
<td>Fundamentals of Design I</td>
<td>3</td>
</tr>
<tr>
<td>PHT 264</td>
<td>Digital Photography</td>
<td>3</td>
</tr>
<tr>
<td>ART 283</td>
<td>Computer Graphics I</td>
<td>3</td>
</tr>
<tr>
<td>ART 284</td>
<td>Computer Graphic II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total credits required</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>
Greenhouse Management

Purpose: to provide students with the basic knowledge and skills of greenhouse production and management. Following program completion, graduates will be prepared for entry level jobs in greenhouse horticulture.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT 127</td>
<td>Horticultural Botany a</td>
<td>3</td>
</tr>
<tr>
<td>HRT 207</td>
<td>Plant Pest Management a</td>
<td>3</td>
</tr>
<tr>
<td>HRT 121</td>
<td>Greenhouse Corp Production</td>
<td>3</td>
</tr>
<tr>
<td>HRT 226</td>
<td>Greenhouse Management</td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>12</td>
</tr>
</tbody>
</table>

a Students who wish to transfer to Virginia Tech’s Horticulture program should complete HRT 100, HRT 127, and HRT 226.

Horticulture

Purpose: to provide the knowledge and skills needed for entry-level positions in horticulture. This program is also appropriate for individuals who desire personal enrichment.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRT 115</td>
<td>Plant Propagation</td>
<td>3</td>
</tr>
<tr>
<td>HRT 116</td>
<td>Home Horticulture</td>
<td>3</td>
</tr>
<tr>
<td>HRT 126</td>
<td>Home Landscaping</td>
<td>3</td>
</tr>
<tr>
<td>HRT 201</td>
<td>Landscape Plant Materials I</td>
<td>3</td>
</tr>
<tr>
<td>HRT 246</td>
<td>Herbaceous Plants</td>
<td>2</td>
</tr>
<tr>
<td>HRT Elective</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>17</td>
</tr>
</tbody>
</table>

Information Technology

Purpose: to provide the student an opportunity to explore various technical areas within Information Technology. These courses will provide an overview of the discipline for those interested in expanding their knowledge but will also provide an appropriate background for continuing academic studies. This certificate follows the guidelines for transfer options in Information Systems prepared by the Association for Computing Machinery Two-Year College education committee.

<table>
<thead>
<tr>
<th>Course No</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITP 120</td>
<td>Java Programming I</td>
<td>4</td>
</tr>
<tr>
<td>ITN 208</td>
<td>Protocols and Communications</td>
<td>3</td>
</tr>
<tr>
<td>ITP</td>
<td>Programming elective a</td>
<td>4</td>
</tr>
<tr>
<td>ITD 130</td>
<td>Database Fundamentals</td>
<td>3</td>
</tr>
<tr>
<td>ITE 105</td>
<td>Careers and Cyber Ethics</td>
<td>2</td>
</tr>
<tr>
<td>ITP 258</td>
<td>System Development Project</td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>19</td>
</tr>
</tbody>
</table>

a Students should select from one of the following: ITP 112 or ITP 220

Leadership and Supervision

Purpose: to provide students with an opportunity to acquire basic skills and knowledge in the areas of Leadership and Supervision. Studies will include topics in leadership skills, problem solving, decision making, effective communications, dealing with conflict and employee relations, delegation, motivation, time management, team building, process improvement and others. Once completed, courses in this career studies certificate may be applied toward the A.A.S. degree in Business Management.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 118</td>
<td>Concepts of Supervision</td>
<td>3</td>
</tr>
<tr>
<td>BUS 100</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>ENG 137</td>
<td>Communication Processes I</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 111</td>
<td>College Composition I</td>
<td>3</td>
</tr>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ECO 120</td>
<td>Survey of Economics a</td>
<td>3</td>
</tr>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>ENG 138</td>
<td>Communication Processes II</td>
<td>3</td>
</tr>
<tr>
<td>or ENG 112</td>
<td>College Composition II</td>
<td>3</td>
</tr>
<tr>
<td>Total credits required</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

a Students may not receive credit towards graduation requirements for both ECO 120 and ECO 201 or ECO 202.
Light Sport Aircraft Mechanic

Purpose: to provide students with the content and skills needed to operate and maintain light sport aircraft. Full-time students may complete the program in two semesters; part-time students determine their own pace.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMT 171</td>
<td>Light Sport Aircraft Regulations</td>
<td>1</td>
</tr>
<tr>
<td>AMT 173</td>
<td>Light Sport Aircraft General Airframe</td>
<td>1</td>
</tr>
<tr>
<td>AMT 175</td>
<td>Light Sport Aircraft Engines and Propellers</td>
<td>1</td>
</tr>
<tr>
<td>AMT 177</td>
<td>Light Sport Aircraft Class</td>
<td>1</td>
</tr>
<tr>
<td>AMT 178</td>
<td>Light Sport Aircraft Maintenance and Training</td>
<td>1</td>
</tr>
<tr>
<td>ARO 120</td>
<td>Light Sport Aircraft Ground School</td>
<td>3</td>
</tr>
<tr>
<td>ARO 295</td>
<td>Aviation Internship</td>
<td>1</td>
</tr>
</tbody>
</table>

Total credits required 9

Manufacturing Management and Productivity

Purpose: to provide a broad overview of the three major areas involved in the day-to-day operations of a manufacturing facility, including economics and financial management, and human resource utilization. The completed career studies certificate will provide a foundation for those students seeking further study in the area of manufacturing management.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics in the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>EGR 206</td>
<td>Engineering Economics</td>
<td>3</td>
</tr>
</tbody>
</table>

Total credits required 9

Mechanical Maintenance Technology

Purpose: to provide students with an understanding and training in mechanical systems found in a manufacturing environment, including: mechanical drives, hydraulics and pneumatics. This career studies certificate prepares students for positions in industrial maintenance.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAC 195</td>
<td>Math Applications for Mechanisms</td>
<td>2</td>
</tr>
<tr>
<td>CAD 161</td>
<td>Blueprint Reading I*</td>
<td>2</td>
</tr>
<tr>
<td>MAC 156</td>
<td>Mechanisms I</td>
<td>3</td>
</tr>
<tr>
<td>MAC 157</td>
<td>Mechanisms II</td>
<td>3</td>
</tr>
<tr>
<td>MEC 161</td>
<td>Basic Fluid Mechanics - Hydraulics/Pneumatics</td>
<td>4</td>
</tr>
</tbody>
</table>

Total credits required 14

* Students wishing to enter the Technical Studies, Manufacturing Engineering Technology Associate Degree program or the Automation in Manufacturing Engineering Career Studies Certificate may substitute CAD 161 and an approved one credit course for CAD 140.

Medical Coding—Hospital

Purpose: to provide students with fundamental knowledge and skills in health records, medical coding, and reimbursement processes. The program’s primary focus is on ICD-9 coding for hospital applications and preparation for the Certified Coding Associate and/or Certified Coding Specialist exams.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLT 143</td>
<td>Medical Terminology I</td>
<td>3</td>
</tr>
<tr>
<td>BIO 141</td>
<td>Anatomy and Physiology I</td>
<td>4</td>
</tr>
<tr>
<td>HIM 253</td>
<td>Coding for Health Records (Emphasizes ICD-9)</td>
<td>4</td>
</tr>
<tr>
<td>HLT 144</td>
<td>Medical Terminology II</td>
<td>3</td>
</tr>
<tr>
<td>BIO 142</td>
<td>Anatomy and Physiology II</td>
<td>4</td>
</tr>
<tr>
<td>HIM 254</td>
<td>Advanced Coding and Reimbursement (Emphasizes CPT)</td>
<td>4</td>
</tr>
<tr>
<td>HIM 190</td>
<td>Coordinated Internship</td>
<td>2</td>
</tr>
</tbody>
</table>

Total credits required 24

Multimedia Development and Integration

Purpose: to provide faculty in local elementary, middle, and secondary schools, as well as Technology Resource Teachers (TRTs) with advanced instructional technology applications skills. The career studies certificate will fulfill their technology requirements for recertification. The course content and career studies certificate provide valuable knowledge and skills for other professionals who also need to use multimedia and web development applications.
### Process Technology

**Purpose:** To provide students with an introduction to various systems found in a manufacturing environment and a fundamental understanding of the controls used. This career studies certificate prepares the student to advance to positions such as control room operator or production team leader.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IND 106</td>
<td>Industrial Engineering Technology</td>
<td>3</td>
</tr>
<tr>
<td>CAD 161</td>
<td>Blueprint Reading I</td>
<td>2</td>
</tr>
<tr>
<td>IND 165</td>
<td>Principles of Industrial Technology I</td>
<td>4</td>
</tr>
<tr>
<td>INS 110</td>
<td>Principles of Instrumentation</td>
<td>3</td>
</tr>
<tr>
<td>ETR 150</td>
<td>Machine Control Using Relay and Programmable Logic</td>
<td>3</td>
</tr>
<tr>
<td>IND 250</td>
<td>Introduction to Basic Computer Integrated Manufacturing</td>
<td></td>
</tr>
</tbody>
</table>

**Total credits required** 18

*Students wishing to enter the Technical Studies, Manufacturing Engineering Technology Associate Degree program or the Automation in Manufacturing Engineering Career Studies Certificate may substitute CAD 161 and an approved one credit course for CAD 140.*

### Quality Control

**Purpose:** To give students training in quality control techniques. This career studies certificate prepares students for assembly line quality assurance jobs.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAD 161</td>
<td>Blueprint Reading I</td>
<td>2</td>
</tr>
<tr>
<td>IND 145</td>
<td>Introduction to Metrology</td>
<td>3</td>
</tr>
<tr>
<td>IND 146</td>
<td>Statistical Quality Control</td>
<td>3</td>
</tr>
<tr>
<td>MEC 111</td>
<td>Materials for Industry</td>
<td>3</td>
</tr>
<tr>
<td>MEC 112</td>
<td>Processes of Industry</td>
<td></td>
</tr>
</tbody>
</table>

**Total credits required** 14

### Quality Improvement

**Purpose:** To give students a basic understanding in the area of Quality Improvement. Special emphasis is placed on problem solving, teamwork, and developing an understanding of variation, statistical process control (SPC), processes, and systems. Once the career studies certificate is completed, it may be applied toward the A.A.S. degree with a major in Business Management.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 200</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS 270</td>
<td>Interpersonal Dynamics In the Business Organization</td>
<td>3</td>
</tr>
<tr>
<td>BUS 221</td>
<td>Business Statistics</td>
<td></td>
</tr>
</tbody>
</table>

**Total credits required** 9

### Veterinary Assisting

**Purpose:** To assist people presently employed in veterinary hospitals who want professional development. Individuals with other pet-related interests, such as pet shop personnel, dog breeders, and pet owners, may also benefit from this set of courses. All courses except VET 236 may be taken in any order for completion of the career studies certificate. VET 101 or VET 102 must be completed prior to VET 236.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VET 101</td>
<td>Introduction to Veterinary Assisting</td>
<td>3</td>
</tr>
<tr>
<td>VET 102</td>
<td>Care and Maintenance of Small Domestic Animals</td>
<td>3</td>
</tr>
<tr>
<td>VET 103</td>
<td>Veterinary Office Assisting</td>
<td>3</td>
</tr>
<tr>
<td>VET 236</td>
<td>Companion Animal Behavior</td>
<td></td>
</tr>
</tbody>
</table>

**Total credits required** 12
Web Design and Development

Purpose: to train students to use standards-based web design fundamentals including code, graphic design, usability and accessibility. Students also have the opportunity to learn programming skills and apply them to database-driven web applications.

Following completion of the program, graduates will be prepared for entry-level positions in: Web design, web development, and web page maintenance.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITE 115</td>
<td>Introduction to Computer Applications and Concepts</td>
<td>3</td>
</tr>
<tr>
<td>ITD 110</td>
<td>Web Page Design I</td>
<td>3</td>
</tr>
<tr>
<td>ITD 210</td>
<td>Web Page Design II</td>
<td>3</td>
</tr>
<tr>
<td>ART 283</td>
<td>Computer Graphics</td>
<td>3</td>
</tr>
<tr>
<td>ITE 170</td>
<td>Multimedia Essentials</td>
<td>3</td>
</tr>
<tr>
<td>ITP 100</td>
<td>Software Design</td>
<td>3</td>
</tr>
<tr>
<td>ITP 120</td>
<td>Java Programming I</td>
<td>4</td>
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<td>or</td>
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<tr>
<td>ITP 110</td>
<td>Visual Basic Programming</td>
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<tr>
<td>IT</td>
<td>Elective (^a)</td>
<td>6</td>
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<tr>
<td><em>Total credits required</em></td>
<td></td>
<td>28</td>
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\(^a\) Choose from ITD 130, ITE 160, or ITP 220
Course Descriptions

Course Numbers

Courses numbered 01-09 are courses for developmental studies. The credits earned in these courses are not used in computing grade point average and do not apply toward graduation or transfer. However, such courses carry credit for the purpose of tuition payment. Students may re-register, with instructor’s permission, for these courses in subsequent semesters.

Courses numbered 10-99 are basic occupational courses for diploma and certificate programs. The credits earned in these courses are applicable toward diploma and certificate programs but are not applicable toward an associate degree.

Courses numbered 100-199 are freshman courses applicable toward an associate degree and/or certificate and diploma programs.

Courses numbered 200-299 are sophomore courses applicable toward an associate degree and/or certificate and diploma programs.

Course Offerings

All courses are not offered each semester and some are offered only every other year. Students are advised to refer to the current Schedule of Classes.

Course Hours

The educational programs combine the teaching of theoretical concepts in “lecture” with an appropriate amount of application of principles and practical training in “laboratory” under faculty supervision. The teaching of theoretical concepts in lectures, seminars, discussions, and other similar classes is identified as “lecture” and the teaching of the application of principles and practical training in laboratories, seminars, shop, clinical training, supervised work experiences, and other similar classes is identified as “laboratory.”

The number of lecture hours in class each week (including lecture, seminar and discussion hours) and/or the number of laboratory hours in class each week (including laboratory, shop, supervised practice, and cooperative work experiences) are indicated for each course in the course description. The total number of lecture and laboratory hours in class each week is also called “contact” hours because it is time spent under the direct supervision of a faculty member. In addition to attending the required lecture and laboratory hours as listed in the course descriptions, students also must spend time on out-of-class assignments. Each credit hour usually requires two hours of out-of-class study per week. Credits are indicated in the course description section.

Course Prerequisites

If any prerequisites are required to enroll in a course, these prerequisites will be identified in the course description in the College Catalog and Student Handbook. The Catalog also indicates which courses must be taken in sequence (i.e. CHM 111-112). When co-requisites are required for a course, usually the co-requisites must be taken at the same time. The prerequisites or their equivalent must be completed satisfactorily before enrolling in a course unless special permission is obtained from the instructor.

Students must ensure that any required prerequisite (including college preparedness testing) is documented in their student record prior to registration. The College reserves the right to administratively withdraw students from courses for which they have not met the prerequisites.

Accounting

ACC 115 (3-4 CR)
Applied Accounting
Presents practical accounting procedures for retail stores, professional individuals in firms, and personal service occupations. Covers the accounting cycle, journals, ledgers, preparation of financial statements and payrolls, and checking account management. Students may not receive credit toward graduation requirements for both ACC 115 and ACC 211 nor for both ACC 115 and ACC 212. Lecture 3-4 hours per week.
ACC 124 (3 CR)  
Payroll Accounting  
Presents accounting systems and methods used in computing and recording payroll to include payroll tasks and compliance with federal and state legislation. Lecture 3 hours per week.

ACC 211 (3 CR)  
Principles of Accounting I  
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. Students may not receive credit toward graduation requirements for both ACC 115 and ACC 211. Lecture 3 hours per week.

ACC 212 (3 CR)  
Principles of Accounting II  
Prerequisite: ACC 211.  
Continues Accounting Principles 211 with emphasis on the application to partnerships, corporations and the study of financial analysis. Includes an introduction to cost and managerial accounting. Students may not receive credit toward graduation requirements for both ACC 115 and ACC 212. Lecture 3 hours per week.

ACC 215 (3-4 CR)  
Computerized Accounting  
Prerequisite: ACC 211 or equivalent.  
Introduces the computer in solving accounting problems. Focuses on operation of computers. Presents the accounting cycle and financial statement preparation in a computerized system and other applications for financial and managerial accounting. Lecture 3-4 hours per week.

ACC 221 (3 CR)  
Intermediate Accounting I  
Prerequisite: ACC 212 or equivalent.  
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. Lecture 3 hours per week.

ACC 222 (3 CR)  
Intermediate Accounting II  
Prerequisite: ACC 221 or equivalent.  
Continues accounting principles and theory with emphasis on accounting for fixed assets, intangibles, corporate capital structure, long-term liabilities, and investments. Lecture 3 hours per week.

ACC 231 (3 CR)  
Cost Accounting I  
Prerequisite: ACC 212 or equivalent.  
Studies cost accounting methods and reporting as applied to job order, process, and standard cost accounting systems. Includes cost control and other topics. Lecture 3 hours per week.

ACC 261 (3 CR)  
Principles of Federal Taxation  
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 275 (3 CR)  
Capstone Seminar in Accounting  
Prerequisite: ACC 211, ACC 212, ACC 221. Prerequisite or Co-requisite: ACC 222.  
Integrates knowledge in financial accounting, managerial/cost accounting, computer techniques, business ethics, general ledger, and communication skills in preparing a professional student portfolio. Provides a learning experience that allows the student to apply broad knowledge of the accounting profession through discipline and specific projects; involves the integration of individual and team activities to simulate workplace situations. Lecture 3 hours per week.
Administration of Justice

ADJ 100  (3 CR)
Survey of Criminal Justice
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 105  (3 CR)
The Juvenile Justice System
Presents the evolution, philosophy, structures and processes of the American juvenile delinquency system; surveys the right of juveniles, dispositional alternatives, rehabilitation methods and current trends. Lecture 3 hours per week.

ADJ 110  (3 CR)
Introduction to Law Enforcement
Studies the philosophy and history of law enforcement, presenting an overview of the crime problem and policy response issues. Surveys the jurisdictions and organizations of local, state, and federal law enforcement agencies. Examines the qualification requirements and career opportunities in the law enforcement profession. Lecture 3 hours per week.

ADJ 111-112  (3 CR) (3 CR)
Law Enforcement Organization and Administration I-II
Teaches the principles of organization and administration of law enforcement agencies. Studies the management of line operations, staff and auxiliary services, investigative and juvenile units. Introduces the concept of data processing; examines policies, procedures, rules, and regulations pertaining to crime prevention. Surveys concepts of protection of life and property, detection of offenses, and apprehension of offenders. Lecture 3 hours per week.

ADJ 120  (3 CR)
Introduction to Courts
Presents an overview of the American judiciary—the federal and 50 state judicial systems—with emphasis on criminal court structures, functions, and personnel; surveys the judicial system in Commonwealth of Virginia. Lecture 3 hours per week.

ADJ 128  (3 CR)
Patrol Administration and Operations
Studies the goals, methods and techniques of police patrol with focus on the norms which govern work behavior in a police career. Examines the responsibilities of administrators and field supervisors of patrol in the local and state law enforcement agencies. Lecture 3 hours per week.

ADJ 133  (3 CR)
Ethics and the Criminal Justice Professional
Examines ethical dilemmas pertaining to the criminal justice system, including those in policing, courts, and corrections. Focuses on some of the specific ethical choices that must be made by the criminal justice professional. Lecture 3 hours per week.

ADJ 140  (3 CR)
Introduction to Corrections
Focuses on societal responses to the offender. Traces the evolution of practices based on philosophies of retribution, deterrence, and rehabilitation. Reviews contemporary correctional activities and their relationships to other aspects of the criminal justice system. Lecture 3 hours per week.

ADJ 145  (3 CR)
Corrections and the Community
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 147  (3 CR)
Local Adult Detention Facilities
Studies security procedures in adult detention facilities, the criteria for effective supervision of inmates, the correctional aspects of inmate discipline, and the handling of “special inmates.” Presents concepts, programs, and planning considerations for jail management and the operations of adult detention facilities. Lecture 3 hours per week.
ADJ 157 (3 CR)
**Computer Security**
Examines security concerns with access controls, shutdown alternatives, hardware and software protection, and data encryption. Lecture 3 hours per week. Cross-listed as ITN 260.

ADJ 161 (3 CR)
**Introduction to Computer Crime**
Provides a basic introduction to the nature of computer crimes, computer criminals, relevant law, investigative techniques, and emerging trends. No prerequisites. Basic knowledge of computer use is recommended. Lecture 3 hours per week.

ADJ 162 (3 CR)
**Introduction to Sex Crimes**
Provides a basic introduction to sex crimes. Topics covered will include relevant law, investigative techniques, cybersex crimes and criminals, application of criminal investigative analysis, and future trends. Lecture 3 hours per week.

ADJ 164 (3 CR)
**Case Studies in Murder/Violent Crime**
Introduces the student to the investigation of murder and other violent crimes by means of classic case studies and, to the extent feasible, local case files. Topics covered will include methodology, strategy and tactics, analysis, relevant law, and future trends. While evidentiary techniques and technologies will be discussed, the primary focus will be on critical thinking applied to serious violent crime. Lecture 3 hours per week.

ADJ 170 (3 CR)
**Street Gangs and Law Enforcement**
Teaches the philosophy and history of gangs in America through the eyes of law enforcement, courts, corrections and the citizenry. Examines methods by which law enforcement defines the gang problem and intervenes in gang membership. Explores gang globalization; differentiates street gangs and terrorist cells. Lecture 3 hours per week.

ADJ 171 (3-4 CR)
**Forensic Science I**
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. Lecture 3-4 hours. Laboratory 0-3 hours. Total 3-6 hours per week.

ADJ 211-212 (3 CR) (3 CR)
**Criminal Law, Evidence and Procedures I-II**
Teaches the elements of proof for major and common crimes and the legal classification of offenses. Studies the kinds, degrees and admissibility of evidence and its presentation in criminal proceedings with emphasis on legal guidelines for methods and techniques of evidence acquisition. Surveys the procedural requirements from arrest to final disposition in the various American court systems with focus on the Virginia jurisdiction. Lecture 3 hours per week.

ADJ 215 (3 CR)
**Report Writing**
*B RCC prerequisite: ENG 111.*
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. Lecture 3 hours per week.

ADJ 216 (3 CR)
**Organized Crime and Corruption**
Addresses judicial efforts against and involvement in corruption, drug, vice, and white-collar crimes, both individual and organized. Lecture 3 hours per week.
ADJ 227  (3 CR)
**Constitutional Law for Justice Personnel**
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. Lecture 3 hours per week.

ADJ 228  (3 CR)
**Narcotics and Dangerous Drugs**
Surveys the historical and current usage of narcotics and dangerous drugs. Teaches the identification and classification of such drugs and emphasizes the symptoms and effects on their users. Examines investigative methods and procedures utilized in law enforcement efforts against illicit drug usage. Lecture 3 hours per week.

ADJ 229  (3 CR)
**Law Enforcement and the Community**
Considers current efforts by law enforcement personnel to achieve an effective working relationship with the community. Surveys and analyzes various interactive approaches of law enforcement agencies and the citizenry they serve. Lecture 3 hours per week.

ADJ 232  (3 CR)
**Domestic Violence**
Surveys historical issues that have affected family violence. Examines current trends in the context of the criminal justice system. Lecture 3 hours per week.

ADJ 234  (3 CR)
**Terrorism and Counter-Terrorism**
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. Lecture 3 hours per week.

ADJ 236  (3 CR)
**Principles of Criminal Investigation**
Surveys the fundamentals of criminal investigation procedures and techniques. Examines crime scene search, collecting, handling and preserving evidence. Lecture 3 hours per week.

ADJ 245  (3 CR)
**Management of Correctional Facilities**
Describes management options and operational implications for staffing, security, safety and treatment. Considers impact of changes in public policy on corrections. Lecture 3 hours per week.

ADJ 248  (3 CR)
**Probation, Parole, and Treatment**
Surveys the philosophy, history, organization, personnel and functioning of traditional and innovative probation and parole programs; considers major treatment models for clients. Lecture 3 hours per week.

### Administrative Support Technology

**AST 101  (3 CR)**
**Keyboarding I**
Teaches alpha/numeric keyboard with emphasis on correct techniques, speed, and accuracy. Teaches formatting of basic personal and business correspondence, reports, and tabulation. Lecture 3 hours per week.

**AST 102  (3 CR)**
**Keyboarding II**  
**Prerequisite: AST 101 or keyboarding competence.**
Develops keyboarding and document production skills with emphasis on preparation of specialized business documents. Continues skill-building for speed and accuracy. Lecture 3 hours per week.
AST 201
Keyboarding III
Prerequisite AST 102 or instructor approval.
Develops decision-making skills, speed, and accuracy in production keying. Applies word processing skills in creating specialized business documents. A laboratory co-requisite (AST 202) may be required. Lecture 2-4 hours per week. 2-4 Credits.

AST 243
Office Administration I
Prerequisite: AST 102 or instructor approval.
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. Lecture 3 hours per week.

AST 244
Office Administration II
Prerequisite: AST 243 or instructor approval.
Enhances skills necessary to provide organizational and technical support in a contemporary office setting. Emphasizes administrative and supervisory role of the office professional. Includes travel and meeting planning, office budgeting and financial procedures, international issues, and career development. Lecture 3 hours per week.

American Sign Language

ASL 101-102
American Sign Language I-II
Introduces the fundamentals of American Sign Language (ASL) used by the Deaf Community, including basic vocabulary, syntax, finger spelling, 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. Lecture 3-4 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ASL 201
American Sign Language III
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. Lecture 3-4 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

Architecture

ARC 121
Architectural Drafting I
Introduces techniques of architectural drafting, including lettering, dimensioning, and symbols. Requires production of plans, sections, and elevations of a simple building. Studies use of common reference material and the organization of architectural working drawings. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ARC 122
Architectural Drafting II
Prerequisite: ARC 121 or equivalent.
A continuation of Architectural Drafting I. Requires development of a limited set of working drawings, including a site plan and related details, and pictorial drawings. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

ARC 221
Architectural CAD Applications Software I
Prerequisite: ARC 122 or equivalent.
Teaches the principles and techniques of architectural drawing practices through the use of architecture specific CAD software. Utilizes the commands and features of the software to generate drawings that emphasize architectural design and structural systems. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.
ART 101-102  
**History and Appreciation of Art I-II**  
*(3 CR) (3 CR)*  
May be taken out of sequence.  
Protects 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) (3 CR)*  
Must be taken in sequence.  
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. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 131-132  
**Fundamentals of Design I-II**  
*(3 CR) (3 CR)*  
May be taken out of sequence.  
Explores the concepts of two- and three-dimensional design and color. May include field trips as required. Lecture 1 hour. Studio instruction 4 hours. Total 5 hours per week.

ART 153-154  
**Ceramics I-II**  
*(3-4 CR) (3-4 CR)*  
Presents problems in the design and production of functional and non-functional ceramic works. Includes handbuilding the potter's wheel and clays and glazes. Lecture 0-2 hours. Studio instruction 4-6 hours. Total 5-8 hours per week.

ART 235  
**Functional Ceramics**  
*(3-4 CR)*  
Prerequisite ART 154 or divisional approval.  
Explores the design and production of functional ceramics, including handbuilding and use of the wheel. Lecture 0-2 hours. Studio instruction 4-6 hours. Total 6-8 hours per week.

ART 236  
**Sculptural Ceramics**  
*(3-4 CR)*  
Prerequisite ART 154 or divisional approval.  
Explores the design and production of sculptural ceramics, including handbuilding and use of the wheel. Lecture 0-2 hours. Studio instruction 4-6 hours. Total 6-8 hours per week.

ART 241-242  
**Painting I-II**  
*(3 CR) (3 CR)*  
Prerequisite: ART 121 or divisional approval. Must be taken in sequence.  
Introduces abstract and representational painting in acrylic and/or oil with emphasis on color composition and value. Lecture 1-2 hours. Studio instruction 4 hours. Total 5-6 hours per week.

ART 243-244  
**Watercolor I-II**  
*(3 CR) (3 CR)*  
Prerequisite: ART 121 or divisional approval. Must be taken in sequence.  
Presents abstract and representational painting in watercolor with emphasis on design, color, composition, technique and value. Lecture 1-2 hour. Studio instruction 4 hours. Total 5-6 hours per week.

ART 283-284  
**Computer Graphics I-II**  
*(3-4 CR) (3-4 CR)*  
Must be taken in sequence.  
Utilizes microcomputers and software to produce computer graphics. Employs techniques learned to solve studio projects which reinforce instruction and are appropriate for portfolio use. Lecture 1-2 hours. Studio instruction 3-4 hours. Total 5-6 hours per week.
Astronomy

See Natural Science

Automotive

AUT 111 (4 CR)
Automotive Engines I
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 121-122 (4 CR) (4 CR)
Automotive Fuel Systems I-II
Must be taken in sequence.
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, superchargers, 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 136 (2 CR)
Automotive Vehicle Inspection
Presents information on methods for performing automotive vehicle safety inspection. Lecture 1 hour per week. Laboratory 2 hours. Total 3 hours per week.

AUT 141-142 (4 CR) (4 CR)
Auto Power Trains I-II
Must be taken in sequence.
Presents operation, design, construction and repair of power train components, standard and automatic transmission. Includes clutches, propeller shaft, universal joints, rear axle assemblies, fluid couplings, torque converters as well as 2, 3, and 4 speed standard, overdrive and automatic transmissions. Lecture 2 hours. Laboratory 6 hours. Total 8 hours per week.

AUT 197 (1-5 CR)
Cooperative Education in Automotive Analysis
Supervised on-the-job training for pay in approved business, industrial and service firms coordinated by the College. May be repeated for credit. Variable hours.

AUT 199 (1-5 CR)
Supervised Study in Automotive Analysis
Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Variable hours.

AUT 217 (3 CR)
Computerized Fuel Systems
BRCC prerequisite: AUT 241 or instructor approval.
Introduces devices which sense the engine condition and control fuel mixture to produce economical fuel consumption. Teaches theory of operation, testing, adjustment and repair or replacement of these devices. Variable lecture/laboratory hours per week. Lecture 1-2 hours. Laboratory 3-6 hours. Total 5-7 hours per week.

AUT 236 (4 CR)
Automotive Climate Control
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 241-242 (4 CR) (4 CR)
Automotive Electricity I-II
Must be taken in sequence.
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 (4 CR)  
Automotive Electronics  
**BRCC prerequisite:** AUT 241 or instructor approval.  
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. Laboratory 3 hours. Total 6 hours per week.

AUT 267 (4 CR)  
Automotive Suspension and Braking Systems  
Presents the operation, design, construction, repair and servicing of braking and suspension systems. Explains use of tools and test equipment, evaluation of test results, estimation and repair cost, front and rear suspension alignment, power and standard steering, and power, standard and disc brakes. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

AUT 273-274 (3 CR)  (3 CR)  
Automotive Driveability and Tune-Up I-II  
**Must be taken in sequence.**  
Presents diagnostic and service procedures for automatic electrical and mechanical systems. Teaches use of tools and test equipment, evaluation of test results, estimation of repair cost. Emphasizes performance of required service. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

AUT 275 (2 CR)  
Shop Management  
Studies shop layout, personnel management, cost analysis, record keeping and quality control. Discusses shop manager, service salesman, and service writer's roles in customer relations. Lecture 2 hours per week.

**Aviation**

ARO 120 (3 CR)  
Light Sport Airplane Ground School  
Presents the beginning study of flight, including aerodynamics, airframe, engine, systems, basic flight instruments, Federal Aviation regulations, airplane and pilot performance, flight operations, and weather as it pertains to light sport aircraft. Prepares students for the FAA examination for Light Sport Pilot-Airplane rating. Lecture 3 hours per week.

ARO 290 (1-5 CR)  
Coordinated Internship in Aviation  
**Prerequisite:** Instructor approval.  
Supervised on-the-job training in selected business, industrial or service firms coordinated by the college. Credit/practice ration not to exceed 1:5 hours. May be repeated for credit. Variable hours.

**Aviation Maintenance Technology**

AMT 103 (2 CR)  
Basic Electricity  
**Co-Requisite:** MTH 103.  
Introduces electrical theory and concepts for the aviation mechanic, including Ohm's law, electrical circuits, diagrams, and a variety of electrical components. Lecture 1 hour. Laboratory 4 hours. Total 5 hours per week.

AMT 105 (2 CR)  
Aviation Science for Mechanics  
Introduces students to the applications of mechanics, levers, sound, fluid and heat dynamics, basic aircraft structures, aerodynamics, fabrication and installation of rigid and flexible fluid lines and fittings, basic aircraft cleaning materials, methods, corrosion control, weighing procedures, weight, arms, moments, center of gravity computation, placarding, aircraft loading, required forms, weighing, starting, moving, servicing, securing and fueling aircraft. Lecture 2 hours per week.
AMT 106  (2 CR)
Aviation Science for Mechanics Lab
Prerequisite/Co-Requisite: AMT 105.
Introduces students to the applications of mechanics, levers, sound, fluid and heat dynamics, basic aircraft structures, aerodynamics, fabrication and installation of rigid and flexible fluid lines and fittings, basic aircraft cleaning materials, methods, corrosion control, weighing procedures, weight, arms, moments, center of gravity computation, placarding, aircraft loading, required forms, weighing, starting, moving, servicing, securing and fueling aircraft. Laboratory 6 hours per week.

AMT 107  (1 CR)
Aircraft Drawing
Studies basic drafting, drawings, symbols and schematic diagrams, sketches of repairs and alterations, blueprint information, and graphs and charts. Laboratory 3 hours per week.

AMT 109  (1 CR)
Materials and Processes
Studies basic shop practices, including selection, identification and installation of aircraft hardware and materials, precision measuring tools and operations, basic heat treating processes, and forms of nondestructive inspections. Lecture 1 hour per week.

AMT 110  (1 CR)
Materials and Processes Lab
Studies basic shop practices, including selection, identification and installation of aircraft hardware and materials, precision measuring tools and operations, basic heat treating processes, and forms of nondestructive inspections. Laboratory 4 hours per week.

AMT 111  (1 CR)
Federal Aviation Regulations
Reviews Federal Aviation Regulations for maintenance of aircraft, including maintenance forms and records, publications, privileges and limitations of aircraft mechanics. Laboratory 3 hours per week.

AMT 171  (1 CR)
Light Sport Aircraft Regulations
Theory component overview of the following regulations: light-sport rule, and 14 CFR parts 21, 39, 43, 45, 65, and 91, industry-developed consensus standards, including continued airworthiness requirements and inspection practices/techniques, use of hand tools, torque wrench, safe typing practices, and identification of aviation hardware, manufacturer’s safety directives, FAA airworthiness directives, the use of manufacturer’s manuals and maintenance recordkeeping, and personal safety. Lecture 1 hour per week.

AMT 173  (1 CR)
Light Sport Aircraft General Airframe
Theory component of weight and balance, ballistic parachutes, theory, installation, operation, and inspection, fuel systems, operations, and inspection, landing gear and brakes, performing minor repairs and minor alterations, inspection of composite structures and minor repairs, electric system, theory, inspection, and troubleshooting, flight and engine instrumentation, inspection and repair to wood, tubing, and sheet-metal structures, inspection and installation of floats/repositioning landing gear, corrosion, cause and prevention, and the use of manufacturer’s manuals and technical data. Lecture 1 hour per week.

AMT 175  (1 CR)
Light Sport Aircraft Engines and Propellers
Theory component for 2- and 4-cycle engine operation (fuel and lubrication), inspection, maintenance of engines and propellers, use of manufacturer’s manuals and technical data, troubleshooting of 2-and 4-cycle engines, proper engine run-up techniques, service, inspection, and maintenance of feathering or folding propellers used on gliders. Lecture 1 hour per week.

AMT 177  (1 CR)
Light Sport Aircraft Airplane Class
Theory component of flight control operation, aircraft rigging including flight controls, landing wires, flying wires, removal and installation of fabric covering on wings and tail surfaces, disassembly and assembly of wings, flight controls, accessories, removal and installation of the engine, including fuel system, instrumentation, and accessories, use of manufacturer’s manuals and technical data, identification and inspection of critical areas. Lecture 1 hour per week.
AMT 178  
Light Sport Aircraft Airplane Maintenance Training  
Prerequisites: AMT 171, AMT 173, AMT 175, and AMT 177.
Practical applications of Light Sport Aircraft Regulations, general airframe, engines, and propellers, and airplane class. Laboratory 3 hours per week.

AMT 221  
Non-Metallic Structures  
Studies the inspection, service and repair of wood structures, preliminary and secondary repair of interior and service of plastic, honeycomb, bonded, and composite and laminated structures, including the selection, application, inspection and testing of fabric and fiberglass coverings and methods of repair; and selection of aircraft finishing materials; and the application of paints, dopes, primers and trim. Lecture 2 hours per week.

AMT 222  
Non-Metallic Structures and Covering Lab  
Co-Requisite: AMT 221.  
Studies the inspection, service and repair of wood structures, preliminary and secondary repair of interior and service of plastic, honeycomb, bonded, and composite and laminated structures, including the selection, application, inspection and testing of fabric and fiberglass coverings and methods of repair; and identification and selection of aircraft finishing materials; and the application of paints, dopes, primers and trim. Laboratory 8 hours per week.

AMT 223  
Metallic Structures  
Introduces aircraft sheet metal fabrication, inspection and repair including rivets and fasteners; contemporary welding methods on aircraft structures; oxyacetylene, arc, inert gas and brazing techniques; inspection of welded structure and safety procedures. Lecture 2 hours per week.

AMT 224  
Metallic Structures and Finishes Lab  
Co-Requisite: AMT 223.  
Introduces aircraft sheet metal fabrication, inspection and repair including rivets and fasteners; contemporary welding methods on aircraft structures; oxyacetylene, arc, inert gas and brazing techniques; inspection of welded structure and safety procedures. Laboratory 8 hours per week.

AMT 225  
Assembly and Rigging  
Introduces aerodynamic theory and function of aircraft control surfaces, including the fabrication and installation of control devices for fixed and rotary wing aircraft; jacking and control surface balance. Lecture 1 hour per week.

AMT 226  
Assembly and Rigging Lab  
Co-Requisite: AMT 225.  
Introduces aerodynamic theory and function of aircraft control surfaces, including the fabrication and installation of control devices for fixed and rotary wing aircraft; jacking and control surface balance. Laboratory 3 hours per week.

AMT 227  
Airframe Inspections  
Introduces the inspection and return of aircraft to service, including the procedural and legal aspects of 100 hour, annual and periodic inspections. Lecture 1 hour per week.

AMT 228  
Airframe Inspections Lab  
Co-Requisite: AMT 227.  
Introduces the inspection and return of aircraft to service, including the procedural and legal aspects of 100 hour, annual and periodic inspections. Laboratory 3 hours per week.
AMT 231  
**Airframe Landing Gear Systems**  
Introduces simple and complex systems, including the operation, service and repair of mechanical and hydraulic retraction mechanisms; wheel, tire and brake service; aircraft speed and configuration warning systems, electric brake controls, anti-skid systems, and position and warning systems; operation of systems and uses in aircraft; identification of hydraulic fluids, seals, hydraulic and pneumatic control devices. Lecture 2 hours per week.

AMT 232  
**Airframe Landing Gear Systems Lab**  
*Co-Requisite: AMT 231.*  
Introduces simple and complex systems, including the operation, service and repair of mechanical and hydraulic retraction mechanisms; wheel, tire and brake service; aircraft speed and configuration warning systems, electric brake controls, anti-skid systems, and position and warning systems; operation of systems and uses in aircraft; identification of hydraulic fluids, seals, hydraulic and pneumatic control devices. Laboratory 5 hours per week.

AMT 233  
**Communication/Navigation and Control Systems**  
Studies the operation of aircraft avionics, autopilots and antennas, including inspection and installation; aircraft pressurization, air conditioning, heating and oxygen systems, the operation, inspection, troubleshooting, service and repair; and inspection and servicing, and troubleshooting; and inspection, operation and troubleshooting of de-ice and anti-ice systems. Lecture 2 hours per week.

AMT 234  
**Communication/Navigation and Control Systems Lab**  
*Co-Requisite: AMT 233.*  
Studies the operation of aircraft avionics, autopilots and antennas, including inspection and installation; aircraft pressurization, air conditioning, heating and oxygen systems, the operation, inspection, troubleshooting, service and repair; and inspection and servicing, and troubleshooting; and inspection, operation and troubleshooting of de-ice and anti-ice systems. Laboratory 5 hours per week.

AMT 241  
**Reciprocating Engines**  
Studies the history and development of the aircraft reciprocating engine including the repair, overhaul and inspection of various types of engines, the operation and troubleshooting of engines. Lecture 2 hours per week.

AMT 242  
**Reciprocating Engines Lab**  
*Co-Requisite: AMT 241.*  
Studies the history and development of the aircraft reciprocating engine including the repair, overhaul and inspection of various types of engines, the operation and troubleshooting of engines. Laboratory 7 hours per week.

AMT 243  
**Turbine Engines**  
Studies the development, theory and operation of turbine engines, including engine design, performance, accessories, subsystems, engine maintenance, and overhaul. Lecture 2 hours per week.

AMT 244  
**Turbine Engines Lab**  
*Co-Requisite: AMT 243.*  
Studies the development, theory and operation of turbine engines, including engine design, performance, accessories, subsystems, engine maintenance, and overhaul. Laboratory 7 hours per week.

AMT 245  
**Powerplant Inspections**  
Introduces the inspection and return of powerplants to service, including the methodology and record-keeping for inspection of aircraft reciprocating and gas turbine engines and propellers. Lecture 1 hour per week.
AMT 246  (1 CR)
Powerplant Inspections Lab
Co-requisite: AMT 245.
Introduces the inspection and return of powerplants to service, including the methodology and record-keeping for inspection of aircraft reciprocating and gas turbine engines and propellers. Laboratory 3 hours per week.

AMT 251  (1 CR)
Lubrication Systems and Propellers
Studies the identification and selection of lubricants for aircraft powerplants; inspection, service, troubleshooting and repair of the lubrication systems and components; identification and nomenclature of aircraft propellers; and operation, control and repair of both reciprocating and turbine engine propeller installations. Lecture 1 hour per week.

AMT 252  (2 CR)
Lubrication Systems and Propellers Lab
Co-requisite: AMT 251.
Studies the identification and selection of lubricants for aircraft powerplants; inspection, service, troubleshooting and repair of the lubrication systems and components; identification and nomenclature of aircraft propellers; and operation, control and repair of both reciprocating and turbine propeller installations. Laboratory 6 hours per week.

AMT 253  (1 CR)
Ignition and Starting Systems
Introduces the overhaul, inspection and troubleshooting of reciprocating and gas turbine ignition and starting systems, including the repair and bench testing of components. Lecture 1 hour per week.

AMT 254  (1 CR)
Ignition and Starting Systems Lab
Co-requisite: AMT 253.
Introduces the overhaul, inspection and troubleshooting of reciprocating and gas turbine ignition and starting systems, including the repair and bench testing of components. Laboratory 4 hours per week.

AMT 255  (1 CR)
Fuel Metering Systems
Studies the fundamental operation of fuel metering systems in aircraft powerplants; technical data to repair and overhaul carburetors and components; inspecting, troubleshooting and adjusting turbine engine fuel metering systems and electronic fuel controls; operation and service of aircraft induction, preheat, anti-ice and supercharger systems; inspection, service and repair of engine cooling systems -- both air and liquid cooled installations; inspection, service and repair of engine exhaust systems, including the operations or turbo compounded engines, thrust reversers, and noise suppressors. Lecture 1 hour per week.

AMT 256  (2 CR)
Fuel Metering Systems Lab
Co-requisite: AMT 255.
Studies the fundamental operation of fuel metering systems in aircraft powerplants; technical data to repair and overhaul carburetors and components; inspecting, troubleshooting and adjusting turbine engine fuel metering systems and electronic fuel controls; operation and service of aircraft induction, preheat, anti-ice and supercharger systems; inspection, service and repair of engine cooling systems -- both air and liquid cooled installations; inspection, service and repair of engine exhaust systems, including the operations or turbo compounded engines, thrust reversers, and noise suppressors. Laboratory 7 hours per week.

AMT 261  (1 CR)
Aircraft Electrical Systems
Prerequisite: AMT 103.
Introduces wiring, control, indication and protection devices for AC and DC systems; inspection, troubleshooting service and repair of these systems; installation, inspection, testing, servicing engine electrical system wiring, controls, indicator and protective devices; aircraft batteries, and the repair and service of electrical generating systems. Lecture 1 hour per week.
AMT 262  (2 CR)
Aircraft Electrical Systems Lab
Prerequisite: AMT 261.
Introduces wiring, control, indication and protection devices for AC and DC systems; inspection, troubleshooting service and repair of these systems; installation, inspection, testing, servicing engine electrical system wiring, controls, indicator and protective devices; aircraft batteries, and the repair and service of electrical generating systems. Laboratory 8 hours per week.

AMT 263  (1 CR)
Aircraft Fuel, Fire, and Instrument Systems
Introduces the inspection, servicing, troubleshooting and repair of aircraft and the engine fuel systems and components; inspection, servicing, troubleshooting and repair of aircraft and engine fire detection and extinguishing systems; inspection, troubleshooting, removal and replacement of aircraft and engine instruments and indicating systems. Lecture 1 hour per week.

AMT 264  (2 CR)
Aircraft Fuel, Fire, and Instrument Systems Lab
Co-requisite: AMT 263.
Introduces the inspection, servicing, troubleshooting and repair of aircraft and the engine fuel systems and components; inspection, servicing, troubleshooting and repair of aircraft and engine fire detection and extinguishing systems; inspection, troubleshooting, removal and replacement of aircraft and engine instruments and indicating systems. Laboratory 6 hours per week.

Biology

BIO 101-102  (4 CR) (4 CR)
General Biology I-II
Must be taken in sequence.
Completion of high school chemistry or CHM 101 is strongly encouraged.
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.

BIO 114  (4 CR)
Organisms
Prerequisite: BIO 101 and instructor approval.
An exploration of how diverse life forms carry out fundamental processes that sustain life, including acquiring and using essential molecules, growing and reproducing, responding to environmental stimuli, and maintaining a stable internal environment. Labs will introduce students to the scientific method in a series of investigative lab and field experiences. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

BIO 141-142  (4 CR) (4 CR)
Human Anatomy and Physiology I-II
Must be taken in sequence.
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 145  (4-5 CR)
Human Anatomy and Physiology for the Health Sciences
Introduces human anatomy and physiology primarily to those planning to pursue an AAS degree in nursing. Covers basic chemical concepts, cellular physiology, as well as the anatomy and physiology of human organ systems. Lecture 3-4 hours. Laboratory 3 hours. Total 6-7 hours per week.
BIO 205  (4 CR)
General Microbiology
*Prerequisites: One year of college biology and one year of college chemistry or divisional approval.*
Examines morphology, genetics, physiology, ecology, and control of microorganisms. Emphasizes application of microbiological techniques to selected fields. Lecture 3 hours. Recitation and laboratory 3 hours. Total 6 hours per week.

**Business Management and Administration**

**BUS 100**  (3 CR)
Introduction to Business
Presents a broad introduction to the functioning of business enterprise within the U.S. economic framework. Introduces economic systems, essential elements of business organization, production, human resource management, marketing, finance and risk management. Develops business vocabulary. Lecture 3 hours per week.

**BUS 118**  (3 CR)
Concepts of Supervision
Teaches the five functions of management: planning, organizing, staffing, directing and controlling. Includes instruction in leadership skills, problem-solving and decision-making, effective communications, dealing with conflict and employee relations, time management, delegation, and motivation. Lecture 3 hours per week.

**BUS 165**  (3 CR)
Small Business Management
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 200**  (3 CR)
Principles of Management
Teaches management and the management functions of planning, organizing, leading, and controlling. Focuses on application of management principles to realistic situations managers encounter as they attempt to achieve organizational objectives. Lecture 3 hours per week.

**BUS 202**  (3 CR)
Applied Management Principles
*Prerequisite: BUS 200 or divisional approval.*
Focuses on management practices and issues. May use case studies and/or management decision models to analyze and develop solutions to management problems. Lecture 3 hours per week.

**BUS 205**  (3 CR)
Human Resource Management
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 221**  (3 CR)
Business Statistics I
*Prerequisite: MTH 163 or divisional approval.*
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 hypotheses for means and proportions. (This course may not substitute for any math prefix course at Blue Ridge Community College. Students may not receive credit toward graduation in any program of study for both BUS 221 and MTH 157). Lecture 3 hours per week.
BUS 226
Computer Business Applications

Prerequisite: Keyboarding competence and ITE 115 or equivalent.
Provides a practical application of software packages including spreadsheets, word processing, database management, and presentation graphics. Includes the use of programs in accounting techniques, word processing, and management science application. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

BUS 227
Quantitative Methods

BRCC Prerequisites: BUS 221 or MTH 157 AND MTH 173 or MTH 270
Includes 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. May include computer applications. Lecture 3 hours per week.

BUS 241
Business Law I

Develops a basic understanding of the US business legal environment. Introduces property and contract law, agency and partnership liability, and government regulatory law. Students will be able to apply these legal principles to landlord/tenant disputes, consumer rights issues, employment relationships, and other business transactions. Lecture 3 hours per week.

BUS 242
Business Law II

Focuses on business organization and dissolution, bankruptcy and Uniform Commercial Code. Introduces international law and the emerging fields of E-Commerce and Internet Law. Lecture 3 hours per week.

BUS 270
Interpersonal Dynamics in the Business Organization

BRCC prerequisite: ENG 111 or ENG 137 or ENG 138 and ITE 115 or ITE 120 or CSC 200.
Focuses on intra-and interpersonal effectiveness in the business organization. Includes topics such as planning and running effective meetings, networking and politicking, coaching and mentoring, making effective and ethical decisions, developing interpersonal skills that are essential to effective managers, and to improve skills in verbal, non-verbal, and written communication. Lecture 3 hours. Total 3 hours per week.

BUS 296
On-Site Training in Business

Offers opportunities for career orientation and training without pay in selected business and industry. Supervised and coordinated by the College. Credit/work ratio not to exceed 1-5 hours. Variable hours per week.

Chemistry

CHM 101-102
General Chemistry I-II

BRCC prerequisite: Proficiency in algebra.
Must be taken in sequence.
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 110
Survey of Chemistry

Introduces the basic concepts of general, organic, and biochemistry with emphasis on their applications to other disciplines. No previous chemistry background required. Lecture 3 hours per week.
CHM 111-112  (4 CR) (4 CR)
College Chemistry I-II
Must be taken in sequence.  BRCC prerequisite: Two units of high school algebra or equivalent (with a minimum grade of C).
Explores the fundamental laws, theories, and mathematical concepts of chemistry. Designed primarily for science and engineering majors. Requires a strong background in mathematics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

CHM 241-242  (3 CR) (3 CR)
Organic Chemistry I-II
Prerequisite: CHM 111-112. Co-requisite: CHM 243-244 or permission of instructor.
Introduces fundamental chemistry of carbon compounds, including structures, physical properties, syntheses, and typical reactions. Emphasizes reaction mechanisms. Corequisite CHM 243-244. Lecture 3 hours per week.

CHM 243-244  (1 CR) (1 CR)
Organic Chemistry Laboratory I-II
Prerequisite: CHM 111-112. Co-requisite: CHM 241-242 or permission of instructor.
Is taken concurrently with CHM 241 and CHM 242. Laboratory 3 hours per week.

Communication Studies and Theatre

CST 110  (3 CR)
Introduction to Speech Communication
Examines the elements affecting speech communication at the individual, small group, and public communication levels with emphasis on practice of communication at each level. Lecture 3 hours per week.

CST 130  (3 CR)
Introduction to the Theatre
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.

CST 131-132  (3 CR) (3 CR)
Acting I-II
BRCC prerequisite: CST 130 or CST 131 or divisional approval
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 hour. Total 5 hours per week.

CST 136  (3 CR)
Theatre Workshop
Enables students to work on various activities of play production. The student participates in play production, set design, stage carpentry, sound, costuming, light, stage managing, props, promotion, or stage crew. May be repeated for credit. Lecture 3 hours per week.

CST 137  (3 CR)
Oral Interpretation
Studies the theory and practice of performing various types of literature: prose, poetry, and drama. Emphasizes the relationship among the oral interpreter, the literary work, and the audience. Lecture 3 hours per week.

CST 151-152  (3 CR) (3 CR)
Film Appreciation I-II
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.

CST 233-234  (1-4 CR) (1-4 CR)
Rehearsal and Performance I-II
Explores various aspects of the theatre through involvement in college theatre production. Variable hours per week.
Computer Aided Drafting

**CAD 140 (formerly DRF 111)**
*3 CR*

**Technical Drawing**
Enhances the principles learned that are related directly to the field of drafting and design. Gives a more in-depth exposure to detail and working drawings, dimensioning, tolerancing and conventional drafting practices. Teaches CAD modeling, may include parametric modeling. (Credit will not be awarded for both CAD 140 and DRF 111.) Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**CAD 161 (formerly DRF 161)**
*1-2 CR*

**Blueprint Reading I**
Teaches the application of basic principles, visualization, orthographic projection, detail of drafting shop processes and terminology, assembly drawings and exploded views. Considers dimensioning, changes and corrections, classes of fits, tolerances and allowances, sections and convention in blueprint reading. (Credit will not be awarded for both CAD 161 and DRF 161.) Lecture 0-1 hours. Laboratory 3 hours. Total 3-4 hours per week.

**CAD 225 (formerly DRF 225)**
*3 CR*

**Machine Drawing and Design**
BRCC Prerequisites: **CAD 140 or EGR 115 and CAD 241.**
Teaches design of basic machine elements and the analysis of linear and geometric tolerancing including the preparation of complete design and production drawings. (Credit will not be awarded for both CAD 225 and DRF 225.) Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

**CAD 231 (formerly DRF 231)**
*2-3 CR*

**Computer Aided Drafting I**
BRCC Prerequisite: **CAD 140.**
Teaches computer aided drafting concepts and equipment designed to develop a general understanding of components and operate a typical CAD system. (Credit will not be awarded for both CAD 231 and DRF 231.) Lecture 1-2 hours. Laboratory 2-3 hours. Total 3-5 hours per week.

**CAD 241 (formerly DRF 112)**
*3-4 CR*

**Parametric Solid Modeling I**
BRCC Prerequisite: **CAD 140.**
Focuses on teaching students the design of parts by parametric solid modeling. Topics covered will include, but not be limited to, sketch profiles, geometric and dimensional constraints, 3-D features, model generation by extrusion, revolution and sweep, and the creation of 2-D drawing views that include sections, details and auxiliary. Part I of II. (Credit will not be awarded for both CAD 241 and DRF 112.) Lecture 2-3 hours. Laboratory 2-3 hours. Total 4-6 hours per week.

**CAD 242 (formerly DRF 232)**
*3-4 CR*

**Parametric Solid Modeling II**
BRCC Prerequisites: **CAD 140 and CAD 241.**
Focuses on teaching students the design of parts by parametric solid modeling. Topics covered will include, but not be limited to, sketch profiles, geometric and dimensional constraints, 3-D features, model generation by extrusion, revolution and sweep, and the creation of 2-D drawing views that include sections, details and auxiliary. Part II of II. (Credit will not be awarded for both CAD 242 and DRF 232.) Lecture 2-3 hours. Laboratory 2-3 hours. Total 4-6 hours per week.

**CAD 243 (formerly DRF 233)**
*3 CR*

**Parametric Solid Modeling III**
BRCC Prerequisites: **CAD 140, CAD 241 and CAD 242.**
Focuses on teaching students the software for the design of parts and assemblies by means of advanced parametric solid modeling to include advanced mechanical drafting techniques and building mechanical assemblies. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.
Computer Science

CSC 200
Introduction to Computer Science
BRCC prerequisite: Successful completion of algebra I and II in high school or MTH 03-04 or MTH 103-104 and keyboarding skills.
Provides broad introduction to computer science. Discusses architecture and function of computer hardware, including networks and operating systems, data and instruction representation and data organization. Covers software, algorithms, programming languages and software engineering. Discusses artificial intelligence and theory of computation. Includes a hands-on component. Lecture 3-4 hours per week.

CSC 201
Computer Science I
BRCC prerequisite: CSC 200 or ITP 100 or instructor permission. Co-requisite: CSC 100 or equivalent and MTH 173 or equivalent or divisional approval.
Introduces algorithm and problem solving methods. Emphasizes structured programming concepts, elementary data structures and the study and use of a high level programming language. Students may not receive credit toward graduation requirements for both CSC 201 and ITP 120. Lecture 4 hours per week.

CSC 202
Computer Science II
BRCC prerequisite: CSC 201 or instructor permission. BRCC co-requisite: MTH 174 or divisional approval.
Examines data structures and algorithm analysis. Covers data structures (including sets, strings, stacks, queues, arrays, records, files, linked lists, and trees), abstract data types, algorithm analysis (including searching and sorting methods), and file structures. Students may not receive credit toward graduation requirements for both CSC 202 and ITP 220. Lecture 4 hours per week.

CSC 205
Computer Organization
Prerequisites: CSC 201 and MTH 173.
Examines the hierarchical structure of computer architecture. Focuses on multi-level machine organization. Uses a simple assembler language to complete programming projects. Includes processors, instruction, execution, addressing techniques, data representation and digital logic. Lecture 3-4 hours per week.

Drafting

Classes are now listed under Computer Aided Drafting.

Economics

ECO 120
Survey of Economics
(3 CR)
Introduces terms, definitions, policies, and philosophies of market economics. Provides some comparison with other economic systems. Includes some degree of exposure of microeconomic and macroeconomic concepts. Students may not receive credit towards graduation for both ECO 120 and ECO 201 nor both ECO 120 and ECO 202. Lecture 3 hours per week.

ECO 201
Principles of Economics I—Macroeconomics
(3 CR)
May be taken out of sequence.
Introduces macroeconomics including the study of Keynesian, classical, monetarist principles and theories, the study of national economic growth, inflation, recession, unemployment, financial markets, money and banking, the role of government spending and taxation, along with international trade and investments. Lecture 3 hours per week.
ECO 202
Principles of Economics II—Microeconomics
*May be taken out of sequence.*
Introduces the basic concepts of microeconomics. Explores the free market concepts with coverage of economic models and graphs, scarcity and choices, supply and demand, elasticities, marginal benefits and costs, profits, and production and distribution. Lecture 3 hours per week.

Education

EDU 114 (3 CR)
Driver Task Analysis
*Prerequisite: Must be eligible for ENG 03 and 05 or ESL 13.*
Introduces the “driver task” as related to the highway transportation system and factors that influence performance ability. Prepares students so they may be eligible to take certification exams for driving school instructors in both public and private schools. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EDU 214 (3 CR)
Instructional Principles of Driver Education
*Prerequisite: EDU 114.*
Analyzes rules and regulations that govern the conduct of Driver Education programs with special emphasis on organization and administration. Includes use in the classroom, driving range and on the street. Prepares students so they may be eligible to take the state certification exam in driver education. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

EDU 200 (3 CR)
Introduction to Teaching as a Profession
*Prerequisites: Successful completion of 24 credits of transfer courses, including ENG 111-112.*
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. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

Electrical Technology

ELE 113 (3 CR)
Electricity I
Teaches principles of electricity covering fundamentals, devices and components in both D.C. and A.C. circuits. Part I of II. Lecture 3 hours per week.

ELE 114 (3 CR)
Electricity II
Teaches principles of electricity covering fundamentals, devices and components in both D.C. and A.C. circuits. Part II of II. Lecture 3 hours per week.

ELE 123 (1-2 CR)
Electrical Applications I
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. Part I of II. Lecture 0-1 hours. Laboratory 2-4 hours. Total 2-4 hours per week.

ELE 124 (1-2 CR)
Electrical Applications II
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. Part II of II. Lecture 0-1 hours. Laboratory 2-4 hours. Total 2-4 hours per week.
ELE 156  (3 CR)
Electrical Control Systems
Includes troubleshooting and servicing electrical controls, electric motors, motor controls, motor
starters, relays, overloads, instruments and control circuits. Lecture 2 hours. Laboratory 2 hours. Total
4 hours per week.

Electronics Technology

ETR 106  (2 CR)
Programming Methods for Electrical/Electronic Calculations
Studies all purpose symbolic instruction code (BASIC). Focuses on applications of BASIC to electrical
Lecture 1 hour. Laboratory 3 hours. Total 4 hours per week.

ETR 112  (2 CR)
Math Applications for ELE/ETR Analysis
Presents mathematical applications for ELE/ETR students. Includes mathematical concepts and
problems in algebra and trigonometry, and direct application to electronic analysis. Includes a survey
of advanced mathematics to develop and reinforce electronic concepts. Lecture 1 hour. Laboratory 2
hours. Total 3 hours per week.

ETR 113-114  (4 CR) (3 CR)
D.C. and A.C. Fundamentals I-II
Must be taken in sequence. Prerequisite for ETR 114: ETR 113. BRCC co-requisite
for ETR 113: MTH 163 or MTH 103.
Studies D.C. and A.C. circuits, basic electrical components, instruments, network theorems, and
techniques used to predict, analyze and measure electrical quantities. Lecture 2-3 hours. Laboratory
2-3 hours. Total 4-6 hours per week.

ETR 123  (2 CR) (2 CR)
Electronic Applications I
BRCC co-requisite for ETR 123: ETR 113.
Provides laboratory and shop assignment/jobs as applied to basic electronic devices, circuits and
systems with emphasis on practical measurements. May require preparation of a report as an out-of-
class activity. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

ETR 143  (4 CR)
Devices and Applications I
BRCC prerequisites: ETR 113 and ETR 114.
Teaches theory of active devices and circuits such as diodes, power supplies, transistors (BJTs),
amplifiers and their parameters, FETs, and operational amplifiers. May include UJTs, oscillators, RF
amplifiers, thermionic devices, and others. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per
week.

ETR 150  (3 CR)
Machine Control Using Relay and Programmable Logic
Provides an introduction to hardwired relay logic and the programmable logic controller (PLC) as
utilized in a variety of different control tasks. Covers different types of inputs and outputs in control
systems. Teaches practical troubleshooting strategies. Lecture 2 hours. Laboratory 2 hours. Total 4 hours
per week.

ETR 164  (3 CR)
Upgrading and Maintaining PC Hardware
Teaches upgrading of the system CPU, memory, drives, multimedia components, modem, and video
card in a microcomputer. Covers hardware as well as software related maintenance issues. Lecture
2 hours. Cross-listed as ITN 106. Laboratory 2-3 hours. Total 4-5 hours per week.

ETR 225  (4-5 CR)
Data Communications
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.
Cross listed as ITN 208. Lecture 3-4 hours. Laboratory 0-6 hours. Total 4-9 hours per week.
ETR 237-238  (3 CR) (3 CR)
Industrial Electronics I-II
*Must be taken in sequence.*
**BRCC prerequisite: ETR 113.**
Studies linear integrated circuits for industrial applications, motors, industrial control devices, power control circuits, transducers, industrial process control, and sequential process control. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

ETR 241  (4 CR)
Electronic Communications I
**BRCC prerequisites: ETR 143 and ETR 114.**
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. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 273-274  (4 CR) (4 CR)
Computer Electronics I-II
*Must be taken in sequence.* **BRCC prerequisite: ETR 106.**
Applies principles of digital electronics and microprocessors to familiarize the student with typical circuits used to interface computer and/or controllers with various I/O devices. May include exposure to high level programming as well as assembly language routines. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

ETR 296  (2 CR)
On-Site Training in Electronics
**BRCC prerequisite: Instructor approval.**
Offers opportunities for career orientation and training in electronics without pay in selected businesses and industry. Supervised and coordinated by the college. Variable hours per week.

ETR 298  (1-5 CR)
Seminar and Project in Computer and Electronics
**BRCC prerequisites: ETR 114, ETR 143, and instructor approval.**
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.

**Engineering**

EGR 115  (3 CR)
Engineering Graphics
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. (Credit will not be awarded for both EGR 115 and EGR 110.) Lecture 1-2 hours. Laboratory 3 hours. Total 4-5 hours per week.

EGR 120  (2 CR)
Introduction to Engineering
Introduces the engineering profession, professional concepts, ethics, and responsibility. Reviews hand calculators, number systems, and unit conversions. Introduces the personal computer, operating systems and processing; engineering problem solving; and graphic techniques. Lecture 2 hours per week.

EGR 125  (3 CR)
Introduction to Engineering Methods
**BRCC prerequisite: MTH 173 or equivalent.**
Applies problem-solving techniques to engineering problems utilizing computer programming and algorithms in a higher level computer language such as FORTRAN, PASCAL, or C++. Includes advanced graphics techniques. Lecture 3 hours per week.
EGR 127  (2 CR)
Introduction to Computer Programming
Introduces programming in a higher level language such as FORTRAN, BASIC, PASCAL, or C++, on the microcomputer. Uses the operating system, packaged software and peripheral devices. Emphasizes engineering program problem solving. Lecture 1 hour. Laboratory 2 hours. Total 3 hours per week.

EGR 130  (5 CR)
Statics and Strength of Materials for Engineering Technology
BRCC prerequisites: MTH 103-104 or MTH 163-164 or equivalent.
Presents principles and applications of free-body diagrams of force systems in equilibrium. Analyzes frames and trusses. Presents principles and applications to problems in friction, centroids and moments of inertia. Includes properties of materials, stress, strain, elasticity, design of connections, shear and bending in statically determinate beams, and axially loaded columns. Lecture 4 hours. Laboratory 2 hours. Total 6 hours per week.

EGR 140  (3 CR)
Engineering Mechanics - Statics
BRCC prerequisite: MTH 173.
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. Lecture 3 hours per week.

EGR 199  (1-5 CR)
Supervised Study in Dynamics
Concurrent enrollment in EGR 245 required.
BRCC prerequisite: EGR 130.
Assigns problems for independent study incorporating previous instruction and supervised by the instructor. May be repeated for credit. Variable hours.

ETR 206  (2-3 CR)
Engineering Economics
Presents economic analysis of engineering alternatives. Studies economic and cost concepts, calculation of economic equivalence, comparison of alternatives, replacement economy, economic optimization in design and operation, depreciation and after tax analysis. Lecture 2-3 hours per week.

EGR 245  (3 CR)
Engineering Mechanics - Dynamics
Concurrent enrollment in EGR 199 required.
BRCC prerequisite: EGR 130.
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 247  (1 CR)
Mechanics of Materials Laboratory
BRCC prerequisite: EGR 130.
Examines mechanical behavior of bars, rods, shafts, tubes and beams subjected to various types of loading. Introduces experimental stress analysis techniques, such as the use of strain gages and data reduction. Laboratory 2 hours per week.

EGR 248  (3 CR)
Thermodynamics for Engineering
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.
English

ENG 01  (1-6 CR)
Preparing for College Writing I
Helps students discover and develop writing processes needed to bring their proficiency to the level necessary for entrance to their respective curricula. Guides students through the processes of starting, composing, revising, and editing. Variable hours per week.

ENG 03  (1-6 CR)
Preparing for College Writing II
Prerequisite: a placement recommendation for ENG 03.
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 04  (1-6 CR)
Reading Improvement I
Prerequisite: a placement recommendation for ENG 04. Placement into ENG 04 limits enrollment in most college courses until ENG 04 is successfully completed.
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 05  (1-6 CR)
Reading Improvement II
Prerequisite: a placement recommendation for ENG 05.
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.

ENG 111  (3 CR)
College Composition I
Introduces students to critical thinking and the fundamentals of academic writing. Through the writing process, students refine topics; develop and support ideas; investigate, evaluate, and incorporate appropriate resources; edit for effective style and usage; and determine appropriate approaches for a variety of contexts, audiences, and purposes. Writing activities will include exposition and argumentation with at least one researched essay. Lecture 3 hours per week.

ENG 112  (3 CR)
College Composition II
Continues to develop college writing with increased emphasis on critical essays, argumentation, and research, developing these competencies through the examination of a range of texts about the human experience. Requires students to locate, evaluate, integrate, and document sources and effectively edit for style and usage. Lecture 3 hours per week.

ENG 137-138  (3 CR) (3 CR)
Communication Processes I-II
May be taken out of sequence.
Covers content, form and procedures for research writings, which may include reports, articles, summaries, essays and correspondence. Stresses editing, proofreading skills, sentence structure, and paragraph development. Offers instruction and practice in oral communications skills. May use reading selection for discussion and writing assignment. Lecture 3 hours per week.

ENG 241-242  (3 CR) (3 CR)
Survey of American Literature I-II
Prerequisite: ENG 112 or divisional approval.
May be taken out of sequence.
Examines American literary works from colonial times to the present, emphasizing the ideas and characteristics of our national literature. Involves critical reading and writing. Lecture 3 hours per week.
ENG 243-244 (3 CR) (3 CR)
Survey of English Literature I-II
Prerequisite: ENG 112 or divisional approval.
May be taken out of sequence.
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. Lecture 3 hours per week.

ENG 251-252 (3 CR) (3 CR)
Survey of World Literature I-II
Prerequisite: ENG 112 or divisional approval.
May be taken out of sequence.
Examines major works of world literature. Involves critical reading and writing. Lecture 3 hours per week.

Financial Services

FIN 215 (3 CR)
Financial Management
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 vs. buy analysis, and Cost of Capital computations. Uses problems and cases to enhance skills in financial planning and decision making. Lecture 3 hours per week.

FIN 107 (3 CR)
Personal Finance
Presents a framework of personal money management concepts, including establishing values and goals, determining sources of income, managing income, preparing a budget, developing consumer buying ability, using credit, understanding savings and insurance, providing for adequate retirement, and estate planning. Lecture 3 hours per week.

Geographical Information Systems

GIS 200 (4 CR)
Geographical Information Systems I
Prerequisite: ITE 115 or instructor permission.
Provides hands-on introduction to a dynamic desktop GIS (Geographic Information System). Introduces the components of a desktop GIS and their functionality. Emphasizes manipulation of data for the purpose of analysis, presentation, and decision-making. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

GIS 201 (4 CR)
Geographical Information Systems II
Prerequisite: GIS 200.
Provides a continuation of GIS 200, with emphasis on advanced topics in problem solving, decision-making, modeling, programming, and data management. Covers map projections and data formats, and methods for solving the problems they create. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

Geography

GEO 210 (3 CR)
People and the Land: An Introduction to Cultural Geography
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 (3 CR)
World Regional Geography
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.
GEO 221 (3 CR)
Regions of the World I
Presents an overview of physical and cultural characteristics of selected geographical regions of the world. Focuses upon significant problems within each of the regions. Studies the European cultural sphere including Europe, Soviet Union, the Americas and Australia and the emerging nations in Africa, Southwest Asia and the Orient. Introduces the student to types and uses of maps. Part I of II. Lecture 3 hours per week.

Geology

GOL 105 (4 CR)
Physical Geology
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 110 (4 CR)
Earth Science
BRCC prerequisite: GOL 105 or instructor permission
Examines the dynamics of the earth and its relation to the solar system. Applies the principles of geology, oceanography, meteorology, and astronomy in a multi-disciplinary science environment. Stresses the effects of geologic processes on the environment. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

Health

HLT 100 (2 CR)
First Aid and Cardiopulmonary Resuscitation
Focuses on the principles and techniques of safety, first aid, and cardiopulmonary resuscitation. Lecture 2 hours per week.

HLT 110 (3 CR)
Concepts of Personal and Community Health
Studies the concepts related to the maintenance of health, safety, and the prevention of illness at the personal and community level. Lecture 3 hours per week.

HLT 116 (3 CR)
Introduction to Personal Wellness Concepts
Introduces students to the dimensions of wellness including the physical, emotional, environmental, spiritual, occupational, and social components. Lecture 2 hours per week.

HLT 121 (3 CR)
Introduction to Drug Use and Abuse
Explores the use and abuse of drugs in contemporary society with emphasis upon sociological, physiological, and psychological effects of drugs. Lecture 3 hours per week.

HLT 122 (1 CR)
Introduction to Alcohol Abuse and Control
Explores the physiological, psychological, sociological effects of alcohol. Studies why people drink, disease concepts, alcohol tolerance curves, and alcohol’s effect on the operation of a motor vehicle. Lecture 1 hour per week.

HLT 135 (3 CR)
Child Health and Nutrition
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 143-144 (3 CR) (3 CR)
Medical Terminology I-II
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 215  
**Personal Stress and Stress Management**  
(2-3 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 2-3 hours per week.

HLT 230  
**Principles of Nutrition and Human Development**  
(3 CR)  
Teaches the relationship between nutrition and human development. Emphasizes nutrients, balanced weight, weight control, and the nutritional needs of an individual. Lecture 3 hours per week.

HLT 250  
**General Pharmacology**  
(2-3 CR)  
Emphasizes general pharmacology for the health related professions covering general principles of drug actions/reactions, major drug classes, specific agent within each class, and routine mathematical calculations needed to determine desired dosages. Lecture 2-3 hours per week.

HLT 271  
**Physical Care Management of the Older Adult**  
(3 CR)  
Introduces the physiology of aging; integrates caretaker guidelines; demonstrates skills to care for aging at a variety of functional levels. Lecture 3 hours per week.

HLT 272  
**Medical Management of the Older Adult**  
(3 CR)  
Introduces common medical problems associated with the aging; examines preventive and restorative care associated with common illnesses. Focuses on assessments, evaluation, and safe administration of medications. Includes emergency care and CPR. Lecture 3 hours per week. Health Information Management

HIM 150  
**Health Records Management**  
(3 CR)  
Presents documentation format and content of the medical record relevant to the coding function. Introduces application of standard techniques for filing, maintenance, and acquisition of health information. Examines the processes of collecting, computing, analyzing, interpreting, and presenting data related to health care services. Includes legal and regulatory guidelines for the control and use of health information data. Lecture 3 hours per week.

HIM 190  
**Coordinated Internship in Medical Coding**  
(2 CR)  
Supervised on-the-job training in selected business, industrial or service firms coordinated by the College. Credit/practice ratio not to exceed 1:5 hours. Variable hours per week.

HIM 249  
**Supervision and Management Practices**  
(3 CR)  
Introduces supervision and management principles with emphasis on the application of these principles in the health information setting. Lecture 3 hours per week.

HIM 250  
**Health Data Classification Systems I: ICD-9-CM**  
(4 CR)  
Prerequisite(s): HIM 110 and HIM 111 or instructor permission.  
Focuses on diagnosis and procedure classification using ICD-9-CM. This system is currently utilized for collecting health data for the purposes of statistical research and financial reporting. Lecture 4 hours per week.

HIM 253  
**Health Records Coding**  
(4-5 CR)  
Examines the development of coding classification systems. Introduces ICD-9-CM coding classification system, its format and conventions. Stresses basic coding steps and guidelines according to body systems. Provides actual coding exercises in relation to each system covered. Lecture 3-4 hours. Laboratory 0-3 hours. Total 3-7 hours per week.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CRs</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIM 254</td>
<td>Advanced Coding and Reimbursement</td>
<td>3-4</td>
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<td></td>
<td><strong>BRCC prerequisite: HIM 253.</strong></td>
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<tr>
<td></td>
<td>Stresses advanced coding skills through practical exercises using actual medical records. Introduces CPT-4 coding system and guidelines for out-patient/ambulatory surgery coding. Introduces prospective payment system and its integration with ICD-9-CM coding. Lecture 3-4 hours. Laboratory 0-3 hours. Total 3-6 hours per week.</td>
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<tr>
<td>HIM 255</td>
<td>Health Data Classification Systems II: CPT</td>
<td>2</td>
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<tr>
<td></td>
<td><strong>Prerequisite(s): HIM 110 and HIM 111 or instructor permission.</strong></td>
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<tr>
<td></td>
<td>Focuses on procedure classification using CPT. This system is currently utilized for collecting health data for the purposes of statistical research and financial reporting. Lecture 2 hours per week.</td>
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**History**

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<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>CRs</th>
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<tbody>
<tr>
<td>HIS 101-102</td>
<td>History of Western Civilization I-II</td>
<td>3 CR</td>
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<td><strong>May be taken out of sequence.</strong></td>
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<tr>
<td></td>
<td>Examines the development of western civilization from ancient times to the present. The first semester ends with the 17th century; the second semester continues through modern times. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 111-112</td>
<td>History of World Civilization I-II</td>
<td>3 CR</td>
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<td><strong>May be taken out of sequence.</strong></td>
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<tr>
<td></td>
<td>Surveys Asian, African, Latin American, and European civilizations from the ancient period to the present. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 121-122</td>
<td>United States History I-II</td>
<td>3 CR</td>
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<td><strong>May be taken out of sequence.</strong></td>
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<tr>
<td></td>
<td>Surveys United States history from its beginning to the present. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 181</td>
<td>History and Theory of Historic Preservation</td>
<td>3</td>
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<td></td>
<td>Provides a foundation and introduction to historic preservation practices and issues in Virginia and the United States. Emphasizes legislation, policies, and methodologies that form our present national, state, and local preservation systems. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 211-212</td>
<td>History of England I-II</td>
<td>3 CR</td>
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<td><strong>May be taken out of sequence.</strong></td>
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<td></td>
<td>Surveys the history of the British Isles from pre-Celtic times to the present. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 267</td>
<td>The Second World War</td>
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<td>Examines causes and consequences of the Second World War. Includes the rise of totalitarianism, American neutrality, military developments, the home fronts, diplomacy, and the decision to use the atomic bomb. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 269</td>
<td>Civil War and Reconstruction</td>
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<tr>
<td></td>
<td>Studies factors that led to the division between the States. Examines the war, the home fronts and the era of Reconstruction. Lecture 3 hours per week.</td>
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<tr>
<td>HIS 276</td>
<td>United States History Since World War II</td>
<td>3</td>
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<tr>
<td></td>
<td>Investigates United States history from 1946 to the present, studying both domestic developments and American involvement in international affairs. Lecture 3 hours per week.</td>
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<tr>
<td>Course Code</td>
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<tr>
<td>HIS 277</td>
<td>The American Experience in Vietnam</td>
<td>(3 CR)</td>
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<tr>
<td>HIS 279</td>
<td>Age of the American Revolution</td>
<td>(3 CR)</td>
</tr>
<tr>
<td>HRT 100</td>
<td>Introduction to Horticulture</td>
<td>(3 CR)</td>
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<tr>
<td>HRT 115</td>
<td>Plant Propagation</td>
<td>(3 CR)</td>
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<tr>
<td>HRT 116</td>
<td>Home Horticulture</td>
<td>(3 CR)</td>
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<tr>
<td>HRT 121</td>
<td>Greenhouse Crop Production</td>
<td>(3 CR)</td>
</tr>
<tr>
<td>HRT 126</td>
<td>Home Landscaping</td>
<td>(3 CR)</td>
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<tr>
<td>HRT 127</td>
<td>Horticultural Botany</td>
<td>(3 CR)</td>
</tr>
<tr>
<td>HRT 201-202</td>
<td>Landscape Plant Materials I-II</td>
<td>(3-4 CR)</td>
</tr>
<tr>
<td>HRT 207</td>
<td>Plant Pest Management</td>
<td>(3 CR)</td>
</tr>
<tr>
<td>HRT 226</td>
<td>Greenhouse Management</td>
<td>(3 CR)</td>
</tr>
</tbody>
</table>
HRT 246  (2-3 CR)
Herbaceous Plants
Studies identification, culture and uses of herbaceous plants in landscaping. Includes perennials, biennials, common bulbs and annuals. Teaches scientific and common names of plants. Lecture 1-2 hours. Laboratory 2 hours. Total 3-4 hours per week.

HRT 247  (2 CR)
Indoor Plants
Studies identification, culture, and uses of indoor plants in interior landscaping. Includes tropical, subtropical and non-hardy temperate plants. Teaches scientific and common names of plants. Lecture 1-2 hours per week. Laboratory 2 hours. Total 3-4 hours per week.

HRT 249  (2-3 CR)
Perennial Plants
Considers the perennial plants used in the landscape. Includes site selection and evaluation for perennial culture, perennial plant selection, perennial culture under various environmental conditions, taxonomic identification, and control of insects and diseases. Lecture 1-2 hours. Laboratory 2 hours. Total 3-4 hours per week.

HRT 259  (3 CR)
Arboriculture
Studies the techniques of tree care. Covers surgery, pruning, insect and disease recognition and control, fertilization, cabling, and lightning rod installation. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

HRT 260  (3 CR)
Introduction to Floral Design
Serves as a practical introduction to floral designs. Teaches basic methods of design and floral arrangement. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

Human Services

HMS 100  (3 CR)
Introduction to Human Services
Introduces human service agencies, roles and careers. Presents a historical perspective of the field as it relates to human services today. Additional topics include values clarification and needs of target populations. Lecture 3 hours per week.

HMS 106  (3 CR)
Working With Death and Dying
Studies the hospice concept emphasizing the management of providing services associated with terminal illness, while providing human services for the family as well as the patient. Explores the unique role of each member of the hospice care team as to how each assists the patient and family in coping with the effects of the illness. Emphasizes understanding grief and loss. Focuses on the dying person and emphasizes the social and moral aspects of death and dying. Lecture 3 hours per week.

HMS 141  (3 CR)
Group Dynamics I
BRCC prerequisites: HMS 100, MEN 101, HMS 190, PSY 231, PSY 232, and one concurrent enrollment in HMS 290 or completion of one semester of HMS 290.
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 190  (1-5 CR)
Coordinated Internship in Mental Health/Human Services
BRCC prerequisites: HMS 100 and MEN 101.
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.
HMS 236  (3 CR)
Gerontology
Examines the process of aging; its implications in relation to health, recreation, education, transportation, meaningful work or activity, and community resources. Emphasizes experiencing the aging process, facilitating retirement, and application of the helping relationship to work with older adults. Lecture 3 hours per week.

HMS 238  (3 CR)
Selected Topics in Aging
Provides students with an opportunity to explore a variety of major current issues in aging. Topics may include care giving and the elderly, elderly drug use and misuse, protective services, crisis interventions, homecare, elder-abuse, and other current topics. Lecture 3 hours per week.

HMS 290  (1-5 CR)
Coordinated Internship in Mental Health/Human Services
BRCC prerequisites: HMS 190, PSY 215, PSY 231 or 230, PSY 232, SOC 215.
Includes supervised practice in selected business, industrial or service firms coordinated by the College. Credit/practice ratio maximum 1/5 hours. Variable hours.

HMS 298  (3 CR)
Seminar and Project in Mental Health/Human Services
BRCC prerequisites: HMS 100, MEN 101, HMS 190, PSY 215, PSY 231, PSY 232, SOC 215 and concurrent enrollment or completion of one semester of HMS 290.
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. Lecture 3 hours per week.

Humanities

HUM 195  (1 CR)
Honors Seminar
An in-depth project providing additional, extensive study or research of a selected topic coordinated by the respective instructor and the coordinator of the Honors Program. Lecture 1 hour per week.

HUM 201-202  (3 CR)  (3 CR)
Survey of Western Culture I-II
*May be taken out of sequence.*
Studies thought, values and arts of Western culture, integrating major developments in art, architecture, literature, music, and philosophy. Covers the following periods: ancient and classical, early Christian and Byzantine, Medieval, and Early Renaissance. Lecture 3 hours per week.

HUM 260  (3 CR)
Survey of Twentieth-Century Culture
Explores literature, visual arts, philosophy, music, and history of our time from an interdisciplinary perspective. Lecture 3 hours per week.

Industrial Engineering Technology

IND 106  (3 CR)
Industrial Engineering Technology
Introduces basic skills required for a career in industrial engineering technology. Includes basic statistics for engineering technicians, the SI system, graphic analysis, and careers as an industrial engineering technician. Lecture 3 hours per week.

IND 116  (3 CR)
Applied Technology
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 145  (3 CR)
Introduction to Metrology
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 146  (3 CR)
Statistical Quality Control
Studies essentials and application of statistics in quality control function. May include definitions and uses of averages, standard deviations, ranges, and sampling plans. May discuss dependent and independent variables, and distribution probabilities. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

IND 165  (4 CR)
Principles of Industrial Technology I
Introduces principal concepts of technology involving mechanical, fluid, electrical, and thermal power as they relate to force, work, and rate. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

IND 166  (4 CR)
Principles of Industrial Technology II
Prerequisite: IND 165
Introduces principal concepts of technology involving mechanical, fluid, electrical, and thermal power as they relate to resistance, energy, power, and force transformers. Places an emphasis on mechanical and advantage systems. Lecture 3 hours. Laboratory 2 hours. Total 5 hours per week.

IND 250  (2-3 CR)
Introduction to Basic Computer Integrated Manufacturing
Presents basic principles used in the design and implementation in a computer integrated manufacturing system. Emphasizes team concept and all aspects of a computer integrated manufacturing system to include the following: Robotics, Conveyor Control, Machining Center Integration Quality Control, Statistical Quality Control, and Computer Integrated Manufacturing (CIM) software. Lecture 0-2 hours. Laboratory 3-9 hours. Total 4-9 hours per week.

IND 251  (4 CR)
Automated Manufacturing Systems I
Prerequisite: IND 165
Presents basic principles used in the design and implementation in manufacturing work cells. Includes selection of the robot system, worksite, application cell sensors, development of cycle times, and economic analysis. Lecture 2-4 hours. Laboratory 0-4 hours. Total 3-6 hours per week.

Information Technology Database

ITD 110  (3-4 CR)
Web Page Design I
Prerequisite: ITE 115.
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. Lecture 2 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 129.

ITD 130  (3-4 CR)
Database Fundamentals
Prerequisite: ITE 115.
Introduces the student to Relational Database and Relational Database theory. Course content includes planning, defining, and using a database; table design, linking, and normalization; types of databases, database description and definition. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 133.

ITD 196  (1-5 CR)
On-Site Training in E-Commerce
Offers opportunities for career orientation and training without pay in selected businesses and industry. Supervised and coordinated by the college. Credit/work ratio not to exceed 1:5 hours. Variable hours per week.
ITD 210  
Web Page Design II  
**Prerequisite: ITD 110.**  
Incorporates advanced techniques in web site planning, design, usability, accessibility, advanced site management, and maintenance utilizing web editor software(s). Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 226.

ITD 212  
Interactive Web Design  
Provides techniques in interactive design concepts to create cross-platform, low-bandwidth animations utilizing a vector based application. Emphasizes the importance of usability, accessibility, optimization and performance. Lecture 3-4 hours per week.

ITD 220  
E-Commerce Administration  
**Recommended prerequisite is ITD 110.**  
Emphasizes techniques to plan and to design a platform independent commerce Web site. Course content focuses on web business strategies, and the hardware and software tools necessary for Internet commerce, including comparison and selection of commerce architecture, installation and configuration, security considerations, and planning of a complete business-to-consumer and a business-to-business site. Lecture 3 hours. Laboratory 0-2. Total 3-5 hours per week.

ITD 298  
Seminar and Project  
**Prerequisite: instructor approval.**  
This course requires completion and presentation of a project related to the student’s occupational objective. Formerly IST 298.

**Information Technology Essentials**

ITE 105  
Careers and Cyber Ethics  
Career paths in Information Technology will be explored to help the student determine the appropriate degree plan. Career paths will include but not be limited to software development, computer science, database, networking, system administration and operations, end user support, web design, and management. The student will learn ethical concerns in business and information technology, including the ACM Code of Ethics. Lecture 2 hours per week.

ITE 115  
Introduction to Computer Applications and Concepts  
**Prerequisite: keyboarding skills.**  
Covers computer concepts and internet skills and use of a software suite which includes word processing, spreadsheet, database, and presentation software to demonstrate skills required for computer literacy. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 114.

ITE 120  
Principles of Information Systems  
Provides an overview of the fundamentals of computer information systems. Focuses on the role of computers in business today including hardware, software, analysis, design and implementation of information systems. Includes an introduction to computer ethics, and business and personal security. Exposes students to techniques used in programming and system development. A hands-on component utilizing spreadsheets, databases, and web design applications is integrated into this course. Lecture 3-4 hours per week.

ITE 130  
Introduction to Internet Services  
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. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 128.
ITE 140  
**Spreadsheet Software**  
Covers the use of 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, styles, insert headers and footers, and filter data. This course covers MOS Excel objectives. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ITE 160  
**Introduction to E-Commerce**  
Studies the culture and demographics of the Internet, 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 over the Internet, and the execution of marketing strategy in computer-mediated environments. Presents case histories of successful Web applications. Lecture 3-4 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ITE 170  
**Multimedia Software**  
Explores technical fundamentals of creating multimedia projects with related hardware and software. Students will learn to manage resources required for multimedia production and evaluation and techniques for selection of graphics and multimedia software. Lecture 3 hours. Total 3 hours per week.

ITE 182  
**User Support/Help Desk Principles**  
*BRCC Prerequisite: ITE 115.*  
Introduces a variety of tools and techniques that are used to provide user support in help desk operations. Includes help desk concepts, customer service skills, troubleshooting problems, writing for end users, help desk operations, and software, needs analysis, facilities management, and other related topics related to end user support. Lecture 3-4 hours per week.

ITE 200  
**Technology for Teachers (TSIP)**  
Provides K-12 classroom teachers with the knowledge and skills needed to fulfill the Commonwealth of Virginia's Technology Standards for Instructional Personnel. Students will finish the course with a solid understanding of educational technology, including how to use computers, how to access information on the World Wide Web, and how to integrate computers and educational technology into the classroom curriculum. Students will learn how to base technology integration decisions on contemporary learning theories. Lecture 3-4 hours per week.

ITE 270  
**Advanced Multimedia Development**  
*Prerequisite: ITE 170.*  
Refines multimedia skills, focusing on project development using digital media; video clips, still images, and audio (sounds, music, and narration). Lecture 3 hours per week.

ITE 298  
**Seminar and Project**  
*Prerequisite: instructor approval.*  
This course requires completion and presentation of a project related to the student's occupational objective. Variable hours per week. Formerly IST 298.

**Information Technology Networking**

ITN 103  
**Administration of Networked Servers**  
Instruction focuses on the installation, configuration, and management of local area networked servers. Topics covered include support for local area networked devices, system services, and deployment of networked operating systems. This course can include any version of Windows or Linux Server Platforms. Lecture 2-3 hours. Laboratory 2 hours. Total 4-5 hours per week.
ITN 106 (3-4 CR)
Microcomputer Operating Systems
Teaches use of operating system utilities and multiple-level directory structures, creation of batch files, and configuration of microcomputer environments. May include a study of graphical user interfaces. Cross listed as ETR 164. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ITN 115 (3-4 CR)
Windows 2003 Server
BRCC Prerequisite: ITN 106.
Teaches students how to manage and maintain a Microsoft Windows Server 2003 environment. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ITN 151 (3-4 CR)
Introductory Routing and Switching—Cisco
Encompasses instruction in the advantages of LAN segmentation using bridges, routers, and switches. Includes Spanning Tree Protocol and Virtual LANs as well as multiprotocol support and traffic filtering. Includes network design issues and differences between the following WAN services: LAPB, Frame Relay, ISDN, HDLC and PPP. Lecture 2-3 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ITN 208 (3-4 CR)
Protocols and Communications
Centers on providing an understanding of the TCP/IP suite and the details of its implementation. The details of implementation are treated by discussing IP addressing, the structure of frames and protocol headers that enable communication between two computers. Discusses IP routing, tunneling, SNMP, and security. Cross listed as ETR 225. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 202.

ITN 260 (3-4 CR)
Network Security Basics
BRCC Prerequisite: ITE 115.
Provides instruction in the basics of network security in depth. Course content includes security objectives, security architecture, security models and security layers. Course content also includes risk management, network security policy, and security training. Course content includes the security keys, confidentiality, integrity, availability, accountability, and audit ability. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

Information Technology Programming

ITP 100 (3-4 CR)
Software Design
Introduces principles and practices of software development. Includes instruction in critical thinking, problem-solving skills, and essential programming logic in structured and object-oriented design using contemporary tools. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 153.

ITP 110 (3-4 CR)
Visual Basic Programming
Involves instruction in fundamentals of even-driven programming using Visual Basic. Emphasizes program construction, algorithm development, coding, debugging, and documentation of graphical user interface applications. Lecture 3-4 hours per week.

ITP 120 (3-4 CR)
Java Programming I
BRCC prerequisite CSC 200 or ITP 100 or instructor permission.
Entails instruction in fundamentals of object-oriented programming using Java. Emphasizes program construction, algorithm development, coding, debugging, and documentation of console and graphical user interface applications. Students may not receive credit toward graduation requirements for both ITP 120 and CSC 201. Lecture 3-4 hours per week.
ITP 200
Data Structures and Algorithms
**BRCC Prerequisite: CSC 201 or ITP 120 or ITP 132 or divisional approval.**
Introduces searching and sorting algorithms and basic data structures. Students will examine data structures and algorithms in a given computer language including sets, strings, stacks, queries, arrays, linked lists, and trees. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week.

ITP 220
Java Programming II
**BRCC prerequisite ITP 120 or instructor permission.**
Imparts instruction in application of advanced object-oriented techniques to application development using Java. Emphasizes database connectivity, inner classes, collection classes, networking, and threads. Students may not receive credit toward graduation requirements for both ITP 220 and CSC 202. Lecture 3-4 hours per week.

ITP 225
Web Scripting Languages
**Prerequisites: ITD 110, ITP 100.**
Introduces students to the principles, systems, and tools used to implement Web applications. Provides students with a comprehensive introduction to the programming tools and skills required to build and maintain interactive Web sites. Students will develop Web applications utilizing client-side and server-side scripting languages along with auxiliary tools needed for complete applications. Lecture 3-4 hours per week.

ITP 258
System Development Project
**BRCC Prerequisite ITP 112, ITP 120, or ITP 132.**
Focuses on application of information technologies (IT) to system life cycle methodology, systems analysis, systems design, and system implementation practices. Methodologies related to identification of information requirements, feasibility in the areas of economic, technical and social requirements, and related issues are included in course content. Software applications may be used to enhance student skills. Lecture 3 hours. Laboratory 0-2 hours. Total 3-5 hours per week. Formerly IST 251.

ITP 296
On-Site Training in Information Systems
**Prerequisite: Instructor approval.**
Offers opportunities for career orientation and training without pay in selected business and industry. Supervised and coordinated by the College. Credit/work ratio not to exceed 1-5 hours. Variable hours per week. This is a second-year course, subject to instructor approval.

ITP 298
Seminar and Project
**Prerequisite: Instructor approval.**
This course requires completion and presentation of a project related to the student’s occupational objective. Subject to instructor approval.

Instrumentation

INS 110
Principles of Instrumentation
Introduces various types of instruments and gauges used in the manufacturing processes. Examines basic principles of pneumatic, hydraulic, electronic and mechanically operated devices. Requires a report as an out-of-class activity. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

Machine Technology

MAC 156-157
Mechanisms I-II
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. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.
Marketing

MKT 100  (3 CR)
Principles of Marketing
Presents principles, methods and problems involved in the 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, ethical, and international considerations in marketing. Lecture 3 hours per week.

Mathematics

MTH 02  (1-5 CR)
Basic Arithmetic
Prerequisite: a placement recommendation for MTH 02.
Covers arithmetic principles and computations. Develops the mathematical proficiency necessary for selected curriculum entrance. Credits not applicable toward graduation. Variable hours per week.

MTH 03  (1-5 CR)
Basic Algebra I
Prerequisites: a placement recommendation for MTH 03 and Arithmetic or equivalent.
Develops mathematical proficiency necessary for selected curriculum entrance. Credits not applicable toward graduation. Variable hours per week.

MTH 04  (1-5 CR)
Basic Algebra II
Prerequisites: a placement recommendation for MTH 04 and Algebra I or equivalent.
Develops the mathematical proficiency in intermediate algebra necessary for selected curriculum entrance. Credits not applicable toward graduation. Variable hours per week.

MTH 09  (1-5 CR)
Pre-Algebra
Prerequisites: a placement recommendation for MTH 09 and Arithmetic or equivalent.
Provides a transition between arithmetic and algebra. Includes arithmetic, order of operations, rational numbers, simple equation applications. Develops the mathematical proficiency necessary for curriculum entrance. Credits not applicable toward graduation. Variable hours per week.

MTH 103-104  (3 CR) (3 CR)
Applied Technical Mathematics I-II
Must be taken in sequence.
Prerequisites: a placement recommendation for MTH 103 and one unit of high school mathematics or equivalent.
Presents a review of arithmetic, elements of algebra, geometry, and trigonometry. Directs applications to specialty areas. Lecture 3 hours per week.

MTH 141-142  (3 CR) (3 CR)
Business Mathematics I-II
Must be taken in sequence. Prerequisites: a placement recommendation for MTH 141 and one unit of high school mathematics or equivalent.
Provides instruction, review, and drill in percentage, cash and trade discounts, mark-up, payroll, sales, property and other taxes, simple and compound interest, bank discounts, loans, investments, and annuities. Lecture 3 hours per week.

MTH 151  (3 CR)
Mathematics for the Liberal Arts I
Prerequisites: a placement recommendation for MTH 151 and algebra I, algebra II and geometry or equivalent.
Presents topics in sets, logic, numeration systems, geometric systems, and elementary computer concepts. Lecture 3 hours per week.
MTH 157  (3 CR)
Elementary Statistics
Prerequisites: a placement recommendation for MTH 157 and algebra I, algebra II and geometry.
Presents elementary statistical methods and concepts including descriptive statistics, estimation, hypothesis testing, linear regression, and categorical data analysis. (Students may not receive credit toward graduation in any program of study for both MTH 157 and BUS 221). Lecture 3 hours per week.

MTH 163  (3 CR)
Precalculus I
Prerequisites: a placement recommendation for MTH 163 and algebra I, algebra II, and geometry or equivalent.
Presents college algebra, matrices, and algebraic, exponential, and logarithmic functions. (Credit will not be awarded for both MTH 163 and MTH 166). Lecture 3 hours per week.

MTH 164  (3 CR)
Precalculus II
Prerequisite: MTH 163 or equivalent.
Presents trigonometry, analytic geometry, and sequences and series. (Credit will not be awarded for both MTH 164 and MTH 168). Lecture 3 hours per week.

MTH 166 (4-5 CR)
Precalculus with Trigonometry
Prerequisite: a placement recommendation for MTH 166.
Presents college algebra, analytic geometry, trigonometry, and algebraic exponential, and logarithmic functions. (Credit will not be awarded for both MTH 163 and MTH 166.) Lecture 4-5 hours per week.

MTH 173  (5 CR)
Calculus with Analytic Geometry I
Prerequisites: a placement recommendation for MTH 173 or completion of MTH 163-164, and four units of high school mathematics including algebra I, algebra II, geometry and trigonometry or equivalent.
Presents analytic geometry and the calculus of algebraic and 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. Lecture 5 hours per week.

MTH 174  (5 CR)
Calculus with Analytic Geometry II
Prerequisite: MTH 173 or equivalent.
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. Lecture 4-5 hours per week.

MTH 175  (3 CR)
Calculus of One Variable I
Prerequisites: a placement recommendation for MTH 175 and four units of high school mathematics including Algebra I, Algebra II, Geometry and Trigonometry or equivalent.
Presents differential calculus of one variable including the theory of limits, derivatives, differentials, anti-derivatives and applications to algebraic and transcendental functions. Designed for mathematical, physical, and engineering science programs. (Credit will not be awarded for more than one of MTH 173, MTH 175 or MTH 273.) Lecture 3 hours per week.

MTH 176  (3 CR)
Calculus of One Variable II
Prerequisite: MTH 175 or equivalent.
Continues the study of integral calculus of one variable including indefinite integral, definite integral and methods of integration with applications to algebraic and transcental functions. Designed for mathematical, physical, and engineering science programs. (Credit will not be awarded for more than one of MTH 174, MTH 176 or MTH 274. Lecture 3 hours per week.
MTH 200  (3 CR)  
Abstract Algebra 
*Prerequisite: MTH 174 or instructor permission.*
Covers groups, isomorphisms, fields, homomorphisms, rings, and integral domains. Fulfills the abstract algebra requirement for Virginia high school mathematics teaching endorsement. Lecture 3 hours per week.

MTH 250  (3 CR)  
College Geometry 
*Prerequisite: a placement recommendation for MTH 250 and MTH 174 or equivalent.*
Presents topics in Euclidean and non-Euclidean geometries chosen to prepare individuals for teaching geometry at the high school level. Studies Euclid's geometry and its limitations, axiomatic systems, techniques of proof, and Hilbert's geometry, including the parallel postulates for Euclidean, hyperbolic, and elliptic geometries. Lecture 3 hours per week.

MTH 270  (3 CR)  
Applied Calculus 
*Prerequisite: MTH 163 or MTH 166 or equivalent.*
Introduces limits, continuity, differentiation and integration of algebraic and transcendental functions, techniques of integration, and partial differentiation. (Credit will not be awarded for both MTH 270 and MTH 271). Lecture 3 hours per week.

MTH 277 (4 CR)  
Vector Calculus 
*Prerequisite: MH 174 or equivalent.*
Presents vector valued functions, partial derivatives, multiple integrals, and topics from the calculus of vectors. Designed for mathematical, physical, and engineering science programs. Lecture 4 hours per week.

MTH 279 (4 CR)  
Ordinary Differential Equations 
*Prerequisite: MTH 174 or equivalent.*
Introduces ordinary differential equations. Includes first order of differential equations, second and higher order ordinary differential equations with application. Designed for mathematical, physical, and engineering science programs. Lecture 4 hours per week.

MTH 285 (3 CR)  
Linear Algebra 
*Prerequisite: MTH 174 or equivalent.*
Covers matrices, linear spaces, determinants, solutions of systems of linear equations, bases and dimensions, eigen values, and eigen vectors. Designed for mathematical, physical, and engineering science programs. Lecture 3 hours per week.

MTH 286 (4 CR)  
Discrete Mathematics 
*Prerequisite: MTH 174 or equivalent.*
Presents topics in discrete mathematical structures which are basic tools used in computer science. Covers sets, Boolean algebra, counting methods, generating functions and recurrence relations, graph theory, trees, and an introduction to finite state automata. Designed for mathematical, physical, and engineering science programs. Lecture 4 hours per week.

MTH 287 (3 CR)  
Mathematical Structures 
*Prerequisite: MTH 163-164, or MTH 166 or equivalent.*
Presents topics in mathematical structures of value to students majoring in Computer Science or other disciplines requiring programming skills. Covers logic, set theory, number theory, combinatorics, functions, relations, and graph theory. Lecture 3 hours per week.
Mechanical Engineering Technology

**MEC 111  (3 CR)**
Materials for Industry
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 112  (3 CR)**
Processes of Industry
Analyzes the processes of manufacturing products from materials for industry/engineering. Includes machining casting, forming molding, hot/cold working, chipless machining, and welding. Addresses quality assurance and inspection procedures. Lecture 3 hours per week.

**MEC 119  (2-3 CR)**
Introduction to Basic CNC and CAM
Teaches the basic concepts of Computer Numerical Control (CNC) programming of Numerical Control Machinery with emphasis on Computer Aided Manufacturing (CAM)/Computer Aided Drafting (CAD). Program writing procedures will be based on using the following: basic G-code programming language for CNC machinery, CAD/CAM programming systems to produce correct code for CNC Machinery, basic computer usage, CAD/CAM integration, and Code-to-machine transfer via Distributive Numeric Control (DNC). Lecture 1-2 hours. Laboratory 2-4 hours. Total 3-5 hours per week.

**MEC 161  (3-4 CR)**
Basic Fluid Mechanics - Hydraulics/Pneumatics
Introduces theory, operation and maintenance of hydraulic/pneumatics devices and systems. Emphasizes the properties of fluids, fluid flow, fluid statics, and the application of Bernoulli’s equation. Lecture 2-3 hours. Laboratory 2-3 hours. Total 4-6 hours per week.

**MEC 211-212  (4 CR) (4 CR)**
Machine Design I-II
*Must be taken in sequence. BRCC prerequisite: EGR 130 or equivalent.*
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. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

**MEC 225  (3 CR)**
Metallurgy
Teaches fundamentals of metallurgy, grain size, effect on carbon content, and hardness testing devices. Tests different alloys to determine the effect of heat treatment. Requires preparation of weekly laboratory reports. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.

**MEC 255  (3 CR)**
Thermodynamics
Studies the properties of fluids and basic principles of work, energy, and heat. Includes the first and second laws of thermodynamics, processes, and cycles, thermal reversibilities and irreversibilities, internal combustion engines, and gas turbines. Lecture 3 hours per week.

Mental Health

**MEN 101  (3 CR)**
Mental Health Skill Training I
*BRCC prerequisite: HMS 100.*
Develops skills necessary to function as a mental health worker, with emphasis on guided practice in counseling skills as well as improved self-awareness. Includes training in problem-solving, goal-setting, and implementation of appropriate strategies and evaluation techniques relating to interaction involving a variety of client needs. Lecture 3 hours per week.
MEN 135  (3 CR)
Human Services and the Law
Examines current issues in mental health and impact of federal and state laws on delivery of
services. Considers issues of civil commitment of the mentally ill, confidentiality, and rights of
clients. Lecture 3 hours per week.

MEN 225  (3 CR)
Counseling Therapy
BRCC prerequisites: HMS 100, MEN 101, PSY 215, PSY 231, PSY 232, SOC 215 and
concurrent enrollment in or completion of one semester of HMS 190.
Studies various models of counseling theories and appropriate application of counseling techniques
in the helping profession. Lecture 3 hours per week.

Music

MUS 121-122  (3 CR) (3 CR)
Music Appreciation I-II
May be taken out of sequence.
Increase 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 137  (1-2 CR)
Chorus Ensemble
Ensemble consists of performance from the standard repertoires, including study of ensemble
techniques and interpretation. May be repeated for credit. Laboratory 3-6 hours per week.

Natural Science

NAS 130  (4 CR)
Elements of Astronomy
BRCC prerequisite: familiarity with basic algebra.
Covers history of astronomy and its recent developments. Stresses the use of astronomical
instruments and measuring techniques and includes the study and observation of the solar system,
stars, and galaxies. Lecture 3 hours per week. Recitation and laboratory 3 hours. Total 6 hours per
week.

Nursing

NUR 108  (6 CR)
Nursing Principles and Concepts I
Introduces principles of nursing, health, and wellness concepts, and the nursing process. Identifies
nursing strategies to meet the multidimensional needs of individuals. Includes math computational
skills, basic computer instruction related to the delivery of nursing care, introduction to the
profession of nursing, nursing process, documentation, basic needs related to integumentary system,
teaching/learning, stress, psychosocial, safety, nourishment, elimination, oxygenation, circulation,
rest, comfort, sensory, fluid and electrolyte and mobility needs in adult clients. Also, care of the
pre/post-operative client. Provides supervised learning experiences in college nursing labs and/or
cooperating agencies. Lecture 1-5 hours. Laboratory 2-15 hours. Total 7-16 hours per week.

NUR 109  (5-6 CR)
Nursing Principles and Concepts II
Focuses on nursing care of individuals and/or families experiencing alterations in health. Includes
math computational skills, basic computer instruction related to the delivery of nursing care,
Immunological, gastrointestinal, musculoskeletal, oncological and diabetic disorders and pre/post-
operative care in adult and pediatric clients. Provides supervised learning experiences in college
nursing laboratories and/or cooperating agencies. Lecture 1-5 hours. Laboratory 2-15 hours. Total
7-16 hours per week.
NUR 112 (7-8 CR)
Nursing II
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, sensor-neural, 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 115 (2-7 CR)
LPN Transition
Introduces the role of the registered nurse through concepts and skill development in the discipline of professional nursing. This course serves as a bridge course for licensed practical nurses and is based upon individualized articulation agreements, mobility exams, or other assessment criteria as they relate to local programs and service areas. Includes math computational skills and basic computer instruction related to the delivery of nursing care. Lecture 1-7 hours. Laboratory 0-18 hours. Total 2-19 hours per week.

NUR 136 (1-2 CR)
Principles of Pharmacology I
Focuses on principles of medication administration which include dosage calculations, major drug classifications, drug legislation, legal aspects of medication administration, drug action on specific body systems, and basic computer applications. Lecture 1-2 hours per week.

NUR 137 (1-2 CR)
Principles of Pharmacology II
Continues discussion on principles of medication administration which include dosage calculations, major drug classifications, drug legislation, legal aspects of medication administration, drug action on specific body systems, and basic computer applications. Lecture 1-2 hours per week.

NUR 202 (3-4 CR)
Medical/Surgical Nursing I
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 (5-6 CR)
Acute Medical-Surgical Nursing
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 213 (7-8 CR)
Second Level Nursing III
Emphasizes complex nursing care of individuals, families, and/or groups in various stages of development who are experiencing alterations related to their biopsychosocial needs. Uses all components of the nursing process with increasing degrees of skill. Includes math computation skills, basic computer instruction related to the delivery of nursing care; cardiovascular, respiratory, endocrine, neurological and renal disorders. Provides supervised learning experience in college nursing laboratories and/or cooperating agencies. Lecture 1-7 hours. Laboratory 3-21 hours. Total 9-22 hours per week.
NUR 214 (7 CR)
Second Level Nursing IV
Emphasizes complex nursing care of individuals, families, and/or groups in various stages of
development who are experiencing alterations related to their biopsychosocial needs. Uses all
components of the nursing process with increasing degrees of skill. Includes math computation
skills, basic computer instruction related to the delivery of nursing care related to chronic disorders
throughout the lifespan including immunological; hematological; infectious; burn; integumentary;
sensory, and neurological disorders. Provides supervised learning experience in college nursing
laboratories and/or cooperating agencies. Lecture 1-7 hours. Laboratory 3-21 hours. Total 9-22
hours per week.

NUR 226 (3 CR)
Health Assessment
Teaches the systematic approach to obtaining a health history and performing a physical assessment.
Lecture 0-2 hours per week. Laboratory 3-9 hours per week. Total 4-9 hours per week.

NUR 230 (3 CR)
Pharmacology
Teaches general principles of drug action, pharmacology of the major drug classes, and
specific agents within each class. Includes math calculations necessary to adapt dosages to the
multidimensional needs of individuals across the lifespan. Lecture 3 hours per week.

NUR 245 (3 CR)
Maternal/Newborn Nursing
Develops nursing skills in caring for families in the antepartum, intrapartum, and post-partum
periods. Lecture 3 hours per week.

NUR 246 (3-4 CR)
Parent/Child Nursing
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 (3-4 CR)
Psychiatric/Mental Health Nursing
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 2-9. Total 2-9 hours per week.

NUR 254 (2 CR)
Dimensions of Professional Nursing
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 2 hours per week.

Philosophy

PHI 101-102 (3 CR) (3 CR)
Introduction to Philosophy I-II
May be taken out of sequence.
Introduces a broad spectrum of philosophical problems and perspectives with an emphasis on the
systematic questioning of basic assumptions about meaning, knowledge, reality, and values. Lecture
3 hours per week.

PHI 115 (3 CR)
Practical Reasoning
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 211-212 (3 CR) (3 CR)
The History of Western Philosophy I-II
May be taken out of sequence.
Provides historical survey of representative philosophers from the pre-Socratics to the present.
Introduces the student to development of philosophical thought through selected readings of original
works and appropriate critical materials. Lecture 3 hours per week.
PHI 225
Selected Problems in Applied Ethics
(3 CR)
Analyzes and discusses significant contemporary ethical issues and problems existing throughout the various professions such as business, medicine, law, education, journalism, and public affairs. Lecture 3 hours per week.

Photography

PHT 264
Digital Photography
(3 CR)
Prerequisites: PHT 101 and ART 283, or PHT 135, or divisional approval.
Teaches theory and practice of digital photography. Emphasizes use of digital cameras in studio and on location. Teaches advanced techniques of image editing. Provides training in digital image transmission from remote locations. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

Polysomnography

PSG 101
Polysomnography I
(3 CR)
Surveys the dynamics of normal and abnormal human sleep and the practice of sleep diagnosis and treatment. Studies methods of acquisition, diagnosis, and treatment of sleep disorders. Includes the practice in the use of polysomnographic equipment. Familiarizes students with medical terminology, instrumentation setup and calibration, recording and monitoring techniques, documentation, professional issues, and patient-technologist interactions related to polysomnographic technology. Lecture 3 hours. Laboratory 0-3 hours. Total 3-6 hours per week.

Physical Education and Recreation

PED 103-104
Aerobic Fitness I-II
(1 CR) (1 CR)
Must be taken in sequence.
Develops cardiovascular fitness though activities designed to elevate and sustain heart rates appropriate to age and physical condition. Laboratory 2 hours. Total 2 hours per week.

PED 107-108
Slimnastics I-II
(1 CR) (1 CR)
Must be taken in sequence.
Provides the student with a full body workout through flexibility, strength, and cardiovascular endurance exercises. Includes fitness evaluation, nutrition analysis, and weight control. Laboratory 2 hours. Total 2 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 CR) (1 CR)
Must be taken in sequence.
Focuses on muscular strength and endurance training through individualized workout programs. Teaches appropriate use of weight training equipment. Laboratory 2 hours. Total 2 hours per week.

PED 113-114
Lifetime Activities I-II
(1-2 CR) (1-2 CR)
Must be taken in sequence.
Presents lifetime sports and activities. Teaches skills and methods of lifetime sports and activities appropriate to the local season and facilities available. Lecture 1-2 hours. Laboratory 0-2 hours. Total 1-3 hours per week.

PED 117
Fitness Walking
(1 CR)
Teaches content and skills needed to design, implement, and evaluate an individualized program of walking, based upon fitness level. Laboratory 2 hours. Total 2 hours per week.
PED 121-122
Racketball I-II

_Must be taken in sequence._
Teaches racketball skills and strategies for team and individual play. Includes terminology, scoring, etiquette, equipment selection, and safety. Laboratory 2 hours. Total 2 hours per week.

PED 123-124
Tennis I-II

_Must be taken in sequence._
Teaches tennis skills with emphasis on stroke development and strategies for individual and team play. Includes rules, scoring, terminology, and etiquette. Laboratory 2 hours. Total 2 hours per week.

PED 129
Self-Defense
Examines history, techniques, and movements associated with self-defense. Introduces the skills and methods of self-defense, emphasizing mental and physical discipline. Lecture 1-2 hours. Laboratory 0-2 hours. Total 1-3 hours per week.

PED 133-134
Golf I-II

_Must be taken in sequence._
Teaches basic skills of golf, rules, etiquette, scoring, terminology, equipment selection and use, and strategy. Laboratory 2 hours. Total 2 hours per week.

PED 135-136
Bowling I-II

_Must be taken in sequence._
Teaches basic bowling skills and techniques, scoring, rules, etiquette, and terminology. Laboratory 2 hours. Total 2 hours per week.

PED 137-138
Martial Arts I-II

_Must be taken in sequence._
Emphasizes forms, styles, and techniques of body control, physical and mental discipline, and physical fitness. Presents a brief history of development of martial arts theory and practice. Laboratory 2 hours. Total 2 hours per week.

PED 143
Lifeguard Training

**Prerequisites:** American Red Cross Certification in Advanced Lifesaving, CPR, and First Aid.
Teaches lifeguarding skills with emphasis on open water rescue, theory, personnel management and safety. Lecture 1-2 hours. Laboratory 1-2 hours. Total 2-3 hours per week.

PED 147
Hiking
Introduces physical and mental benefits of walking or hiking as a form of physical exercise. Skills developed include how to plan for a hike, what to take, and how to select a trail relative to individual abilities. Provides hiking opportunities to explore local regions. Develops awareness of safety, weather, and ecological considerations. Laboratory 2 hours. Total 2 hours per week.

PED 148
Snowboarding
Teaches basic skills of snowboarding, selection and use of equipment, terminology, and safety rules. Laboratory 2 hours. Total 2 hours per week.

PED 150
Soccer
Emphasizes soccer skills and techniques, strategies, rules, equipment, and physical conditioning. Laboratory 2 hours. Total 2 hours per week.
PED 156 (1 CR)
Softball
Emphasizes skills, techniques, strategies, rules. Laboratory 2 hours. Total 2 hours per week.

PED 163 (1 CR)
Jazz I
Introduces dance through contemporary jazz movements. Includes floor stretches, isolations, dance patterns and locomotor movements. Total 2 hours per week.

PED 166 (1 CR)
Ballet
Teaches ballet as a discipline with correct alignment and ballet form. Expresses movement through traditional dance form with choreographic emphasis. Total 2 hours per week.

PED 181-182 (1 CR) (1 CR)
Downhill Skiing I-II
*Must be taken in sequence.*
Teaches basic skills of downhill skiing; selection and use of equipment; terminology and safety rules. Includes field experience. Laboratory 2 hours. Total 2 hours per week.

Physics

PHY 100 (4 CR) (4CR)
Elements of Physics
Covers basic concepts of physics, including Newtonian mechanics, properties of matter, heat and sound, fundamental behavior of gases, ionizing radiation, and fundamentals of electricity. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PHY 201-202 (4 CR) (4 CR)
General College Physics I-II
*Must be taken in sequence. BRCC prerequisite: proficiency with algebra and familiarity with basic trigonometry and plane geometry.*
Teaches fundamental principles of physics. Covers mechanics, thermodynamics, wave phenomena, electricity and magnetism, and selected topics in modern physics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

PHY 241-242 (4 CR) (4 CR)
University Physics I-II
*Prerequisite: MTH 173 (PHY 241) and MTH 174 (PHY 242).*
Teaches principles of classical and modern physics. Includes mechanics, wave phenomena, heat, electricity, magnetism, relativity, and nuclear physics. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

Political Science

PLS 135 (3 CR)
American National Politics
Teaches political institutions and processes of the national government of the United States, focuses on the Congress, presidency, and the courts, and on their interrelationships. Gives attention to public opinion, suffrage, elections, political parties, interest groups, civil rights, domestic policy, and foreign relations. Lecture 3 hours per week.

PLS 211 (3 CR)
U. S. Government I
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. Part I of II. Lecture 3 hours per week.

PLS 241-242 (3 CR) (3 CR)
International Relations I-II
Teaches geographic, demographic, economic, ideological, and other factors conditioning the policies of countries and discusses conflicts and their adjustment. Lecture 3 hours per week.
Psychology

PSY 105 (3 CR)
Psychology of Personal Adjustment
Introduces psychological principles that contribute to a well-adjusted personality. Considers the effects of stress and coping with the problems of everyday life. Lecture 3 hours per week.

PSY 116 (3 CR)
Psychology of Death and Dying
Focuses on psychological aspects of death and dying. Teaches the meaning of death and ways of handling its personal and social implications. Includes psychological, sociological, cultural, and religious views of death. Lecture 3 hours per week.

PSY 165 (3 CR)
Psychology of Human Sexuality
Focuses on scientific investigation of human sexuality and psychological and social implications of such research. Considers socio-cultural influences, the physiology and psychology of sexual response patterns, sexual dysfunctions, and development of relationships. Lecture 3 hours per week.

PSY 200 (3 CR)
Principles of Psychology
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. Students may not receive credit toward graduation requirements for both PSY 200 and PSY 201 nor for both PSY 200 and PSY 202. Lecture 3 hours per week.

PSY 201-202 (3 CR) (3 CR)
Introduction to Psychology I-II
May be taken out of sequence.
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. Students may not receive credit toward graduation requirements for both PSY 200 and PSY 201 nor for both PSY 200 and PSY 202. Lecture 3 hours per week.

PSY 215 (3 CR)
Abnormal Psychology
**Prerequisite: PSY 200 or PSY 201 or divisional approval.**
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. Lecture 3 hours per week.

PSY 216 (3 CR)
Social Psychology
**Prerequisite: PSY 200, PSY 201, or PSY 202.**
Examines individuals in social contexts, their social roles, group processes and intergroup relations. Includes topics such as small group behavior, social behavior, social cognition, conformity, attitudes, and motivation. Lecture 3 hours per week.

PSY 220 (3 CR)
Introduction to Behavior Modification
Studies the history of behaviorism and the principles and applications of behavior modification. Emphasizes observation and application of behavior modification principles. Lecture 3 hours per week.

PSY 230 (3 CR)
Developmental Psychology
Studies the development of the individual from conception to death. Follows a lifespan perspective on the developmental tasks of the person's physical, cognitive and psychosocial growth. Lecture 3 hours per week.
PSY 231-232  (3 CR) (3 CR)
Life Span Human Development I-II
*May be taken out of sequence but students are encouraged to complete PSY 231 prior to PSY 232.*
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 236  (3 CR)
Adolescent Psychology
Studies development of the adult personality. Investigates physical, intellectual, social and emotional factors of the individual from late childhood to early adulthood. Lecture 3 hours per week.

Real Estate

REA 100  (4 CR)
Principles of Real Estate
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.

REA 215  (3 CR)
Real Estate Brokerage
Considers administrative principles and practices of real estate brokerage, financial control and marketing of real property. Lecture 3 hours per week.

Religion

REL 210  (3 CR)
Survey of the New Testament
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 231-232  (3 CR) (3 CR)
Religions of the World I-II
*May be taken out of sequence.*
Studies religions of the world with attention to origin, history, and doctrine. Lecture 3 hours per week.

Safety

SAF 127  (2 CR)
Industrial Safety
Provides basic understanding of safety and health in an industrial situation. Includes hazardous materials, substances, conditions, activities and habits as well as the prescribed methods and equipment needed for the apprentice to protect himself/herself and others. Lecture 2 hours per week.

Social Science

SSC 107  (3 CR)
Problems of People in the Modern World
Analyses contemporary social, psychological, political, and economic problems related to industrialization, urbanization, the role of government, and national and international tensions. Lecture 3 hours per week.

Sociology

SOC 200  (3 CR)
Principles of Sociology
Introduces fundamentals of social life. Presents significant research and theory in areas such as culture, social structure, socialization, deviance, social stratification, and social institutions. 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 life-styles. 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. 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. 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. Lecture 3 hours per week.

SOC 293
Immigration and Immigrants in American Society
(3 CR)
An introduction to contemporary immigration and immigrant issues in the United States, with a special focus on the college’s service area. Lecture 3 hours per week.

Spanish

SPA 101-102
Beginning Spanish I-II
(4 CR) (4 CR)
Must be taken in sequence.
Introduces understanding, speaking, reading, and writing skills and emphasizes basic Spanish sentence structure. Lecture 4 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 201-202
Intermediate Spanish I-II
(4 CR) (4 CR)
Prerequisite: SPA 102 or equivalent and permission of instructor. May be taken out of sequence with permission from instructor.
Continues to develop understanding, speaking, reading, and writing skills. Lecture 4 hours per week.

SPA 211-212
Intermediate Spanish Conversation I-II
(3 CR) (3 CR)
Prerequisite: SPA 202 or equivalent and permission of instructor. May be taken out of sequence.
Continues to develop fluency through emphasis on idioms and other complex sentence structures. Lecture 3 hours per week.

SPA 241
Intermediate Spanish Composition I
(3 CR)
Prerequisite: SPA 202 or equivalent.
Develops skills in written Spanish, emphasizing grammatical correctness. Lecture 3 hours per week.
### Student Development

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<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>SDV 100</td>
<td>College Success Skills</td>
<td>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. Strongly recommended for beginning students. Required for graduation. Lecture 1 hour per week.</td>
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<tr>
<td>SDV 101</td>
<td>Orientation to Health Sciences</td>
<td>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 hour per week.</td>
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<tr>
<td>SDV 107</td>
<td>Career Education</td>
<td>Surveys career options available to students. Stresses career development and assists in the understanding of self in the world of work. Assists students in applying decision-making to career choice. Lecture 1 hour per week.</td>
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</table>

### Truck Driving

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Description</th>
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<tbody>
<tr>
<td>TRK 101</td>
<td>DOT Safety Rules and Regulations</td>
<td>Co-requisite TRK 102 and 103</td>
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<td>Includes an intensive study of the Department of Transportation and state and local laws and regulations governing the motor carrier industry as applied to the professional operation of commercial vehicles. Lecture 2 hours per week.</td>
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<tr>
<td>TRK 102</td>
<td>Preventive Maintenance for Truck Drivers</td>
<td>Co-requisite TRK 101 and 103</td>
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<td></td>
<td>Focuses on the fundamentals of preventive maintenance and inspection procedures for gasoline and diesel powered tractor-trailers. Includes drivelines, brake systems, electrical system and accessories encountered by the professional truck driver. Lecture 1 hour per week.</td>
</tr>
<tr>
<td>TRK 103</td>
<td>Tractor Trailer Driving</td>
<td>Co-requisite TRK 101 and 102.</td>
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<td>Prepares the prospective driver to operate a motor vehicle in a safe and responsible manner. Provides practical training in over-the-road and city driving, including backing skills, and pre-trip inspection. Emphasizes defensive driving. Lecture 3 hours. Laboratory 12 hours. Total 15 hours per week.</td>
</tr>
</tbody>
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Veterinary Technology

VET 100
Introduction to Animal Science
Surveys the common breeds of small and large domestic animals, including identification, management, and restraint. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

VET 101
Introduction to Veterinary Assisting
Presents basic information about assisting the veterinarian. Includes information about companion animals, primarily dogs and cats. Lecture 3 hours per week.

VET 102
Care and Maintenance of Small Domestic Animals I
BRCC prerequisite: VET 101 or instructor permission (student must have small animal experience)
Provides information concerning animal hygiene, parasitology, first aid, disease detection, sanitation, principles of environmental control, and other topics related to the care and maintenance of small animals. Lecture 3 hours per week.

VET 103
Veterinary Office Assisting
Presents basic information about common business procedures used in veterinary practice. Includes client and staff relationships and veterinary regulations. Lecture 3 hours per week.

VET 105
Introduction to Veterinary Technology
Introduces the role of veterinary technicians in veterinary practice. Includes medical terminology, ethics, professionalism, and basic concepts of patient care. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

VET 111
Anatomy and Physiology of Domestic Animals
Introduces the structure and function of the animal and of all the organ systems of common domestic animals. Includes histology, embryology, and genetics. Includes laboratory dissection and demonstrations. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

VET 115
Laboratory Techniques I
Introduces techniques in hematology, urinalysis, and parasitology. Includes other laboratory tests performed in veterinary practice. Lecture 3 hours. Laboratory 6 hours. Total 6 hours per week.

VET 120
Veterinary Medical Terminology and Calculations
Presents medical terminology and medical calculations used in the practice of veterinary technology. Lecture 3 hours per week.

VET 121
Clinical Practices I
Presents advanced clinical techniques commonly performed in veterinary practice. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

VET 205
Applied Veterinary Surgical Nursing
Presents advanced topics in the management of the surgical patient. Also provides laboratory experience in management of anesthesia and surgical assistance in addition to preoperative and postoperative care of patients. Lecture 2 hours per week. Laboratory 3 hours per week. Total 5 hours per week.

VET 210
Animal Diseases and Microbiology
Surveys infectious and noninfectious diseases of domestic animals. Includes aspects of disease such as etiology, clinical signs, treatment, prevention, and pathology. Presents identification and drug sensitivity of common disease-causing organisms. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.
VET 215  (4 CR)  
Laboratory Techniques II  
**Prerequisite: VET 115.**  
Expands concepts introduced in VET 115 including clinical chemistry, cytology, and other laboratory tests performed in veterinary practice. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

VET 216  (3 CR)  
Animal Pharmacology  
Studies drugs and other medical substances of veterinary importance. Includes their characteristics, usage, measurement, dosage, administration, and also pharmacy management. Lecture 3 hours per week.

VET 217  (3 CR)  
Introduction to Laboratory, Zoo and Wildlife Medicine  
Focuses on the identification, captive management, restraint and diseases of fish, reptiles, birds, rodents, rabbits, ferrets, primates, wild carnivores, and wild herbivores. Presents the fields of laboratory research zoological medicine. Lecture 3 hours per week.

VET 221-222  (4 CR)  
Advanced Clinical Practices III-IV  
**Must be taken in sequence.**  
**Prerequisite: VET 121.**  
Presents advanced clinical techniques commonly performed in veterinary practice. Lecture 3 hours. Laboratory 6 hours. Total 6 hours per week.

VET 230  (3 CR)  
Veterinary Hospital Management  
Introduces common business procedures used in veterinary practice. Includes bill collection, appointment scheduling, telephone techniques, record keeping, merchandising, drug ordering and inventory control, and supervision of employees. Lecture 3 hours per week.

VET 236  (3 CR)  
Companion Animal Behavior  
**BRCC prerequisite: VET 101 or VET 102 or VET 105.**  
Teaches basic behavior concepts as they apply to dogs, cats, and horses. Stresses prevention and treatment of behavior problems. Lecture 3 hours per week.

VET 290  (4 CR)  
Coordinated Internship in Veterinary Technology  
Supervised on-the-job training in selected veterinary practices coordinated by the College. Variable hours.
Personnel

Local and State Boards

Blue Ridge Community College Board (2010-2011)
The BRCC College Board acts in an advisory capacity to the State Board for Community Colleges and is responsible for assuring that the community college is responsive to the needs within its service region.

Officers:
Ms. Denise Dawson, Chair, Harrisonburg
Dr. Bruce Bowman, Vice-Chair, Augusta County
Dr. John Downey, Secretary

Members:
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Ms. Sandra Curry, Waynesboro
Ms. Jean Gearing, Rockingham Co.
Ms. Pam Huggins, Staunton
Mr. J. Darwin King, Staunton

Mr. Bob May, Rockingham Co.
Mr. Carl Rosberg, Waynesboro
Ms. Carolyn Sponaugle, Highland County
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Virginia Community College System

State Board for Community Colleges
2009-2010
The State Board for Community Colleges is the state agency responsible for the establishment, control, administration, and supervision of all community colleges in the Commonwealth of Virginia. It is the governing board for the Virginia Community College System and Blue Ridge Community College.

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Gary C. Hancock, Chair
Nathaniel X. Marshall, Vice-Chair
Dr. Glenn DuBois, Secretary

Members:
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Mark R. Graham
Dorcas Helfant-Browning
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Ms. Adele C. Johnson

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Mr. Jeffrey K. Mitchell
Mr. R. Michael Mohler
Mr. Michael Petters
Robert W. Shinn
William H. Talley, III
Mr. Alan G. Toxopeus

Educational Foundation Board of Directors

The Blue Ridge Community College Educational Foundation, Inc., is a tax exempt (501 (c) (3)) non-profit organization designed to enhance the general welfare of Blue Ridge Community College. Toward this end, the BRCC Educational Foundation seeks contributions to provide:

1. scholarships or educational loans to students,
2. equipment for specialized training and education of students,
3. for the development and enhancement of physical facilities,
4. professional development opportunities for faculty and staff,
5. services to business, industry and the community.
The Blue Ridge Community College Educational Foundation, Inc., is managed by a twenty-five member board of directors.

**Members:**
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Mr. Travis Tysinger, Senior Development Officer, Woodberry Forest School
Ms. Lynn K. Suter, Partner, Lenhart Obenshain PC, Harrisonburg
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**Directors Emeriti**
The Directors Emeriti program was developed in 2003-04 as a way to recognize those members of the BRCC Educational Foundation Board of Directors who have demonstrated extraordinary service and generous philanthropic leadership to the College and the BRCC Educational Foundation. The honorees are:

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- Mr. Woodrow Carr
- Mr. Peter deVaux
- Mr. David Didawick
- Ms. Lynn Diveley
- Ms. Joan Eiland
- Mr. William Elliot
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- Ms. Sallie Funkhouser
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- Mr. Kevin Humphries
- Mr. Robert Knowles
- Mr. Martin Lightsey
- Mr. Richard Manor
- Mr. Richard Morin
- Mr. John Neff
- Mr. William Pfost Jr.
- Dr. Stuart Porter
- Mr. Carl Rosberg
- Mr. Art Schlappi
- Mr. Frank Summers Jr.
- Dr. Daniel Woodworth
- Mr. Edward (Chip) Yates
Curriculum Advisory Committees

Curriculum advisory committees are integrally involved with the development and improvement of occupational/technical and continuing education programs at Blue Ridge Community College. These volunteers from local and regional businesses, industries, educational institutions and government agencies provide valued expertise and advisement in curriculum development, curriculum assessment and modification, internship opportunities, marketing, and graduate placement.

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Sheriff Randall D. Fisher, Augusta County Sheriff’s Department, Staunton
Chief Donald Harper, Harrisonburg Police Department, Harrisonburg
Mr. Jack Lee, Middle River Regional Jail, Staunton
Sheriff Herb Lightner, Highland County Sheriff’s Department, Monterey
Ms. Amy Pultz, Valley Vocational-Technical Center, Fishersville
Mr. Jason R. Skeens, Shenandoah Valley Juvenile Center, Staunton
Chief James Williams, Staunton Police Department, Staunton

Agricultural and Life Sciences
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Ms. Shirley Kaufman, Buffalo Gap High School, Swoope
Ms. Terry Lam, Mt. Solon
Mr. John L. Miller, Bridgewater
Ms. Susie Shomo, Keezletown
Mr. John Welsh, Virginia Tech, Blacksburg
Ms. Elizabeth Williams, Fort Defiance High School, Fort Defiance

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Ms. Pat Cook, Waynesboro
Ms. Elizabeth Moss, Stuarts Draft
Ms. Cheryl O’Neil, Stuarts Draft
Ms. Judy Richardson, Harrisonburg
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Mr. Joe Bowman, Joe Bowman Chevrolet, Inc., Harrisonburg
Mr. William Elliott, Elliott Chevrolet, Inc., Staunton
Mr. Jack Harper, Jr., Coach Works, LLC, Singers Glen
Mr. Greg Obaugh, Obaugh Ford, Inc., Staunton
Mr. Bruce Wade, Valley Vocational Technical Center, Fishersville

Aviation Maintenance Technology
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Mr. Pat Colgan, Colgan Air, Manassas
Mr. Gerald Garber, Airport Commission Chairman, Weyers Cave
Mr. Richard Kiser, Classic Aviation, Weyers Cave
Mr. Aaron Lorson, Sr., Dynamic Aviation, Bridgewater
Mr. Ian McKlosky, Avotek, Weyers Cave
Business Technologies
Ms. Ann Conner-Westcott, United Bank, Bridgewater
Mr. Danny Conley, Pepsi Cola of Shenandoah Valley, Weyers Cave
Mr. Raymond Ergenbright, Staunton
Mr. Edward Pursley, Harrisonburg
Ms. Tina Sweet, NTELOS, Waynesboro
Mr. Bill Tate, Riddleberger Brothers, Inc., Mt. Crawford
Ms. Ann E. VanPelt, Bridgewater Retirement Community, Inc., Bridgewater
Mr. Jeffrey Ward, Franklin, Franklin, Denny & Ward, Waynesboro

Computer and Electronics
Mr. Donald Diehl, Power Monitors, Inc., Mt. Crawford
Mr. Barry Grant, COMSONICS, Inc., Harrisonburg
Ms. Nancy Gunden, CEMSI, Inc., Weyers Cave
Mr. Jeremy Harris, Augusta Medical Center, Fishersville
Mr. Jeff Long, Augusta Medical Center, Fishersville
Mr. Doug May, NTELOS, Waynesboro
Mr. John Morris, Waynesboro
Mr. Rick Mundy, Rockingham Memorial Hospital, Harrisonburg

Human Services
Ms. Robin Breeden, Broadway High School, Broadway
Ms. Dana Fitzgerald, New Hope Detox, Staunton
Mr. Tim Frank, Waynesboro
Ms. Cheryl Good, Harrisonburg-Rockingham Social Services, Harrisonburg
Ms. Ellen Harrison, Harrisonburg-Rockingham CSB, Harrisonburg
Mr. Howard McNeal, Western State Hospital, Staunton
Ms. Jill Siegel, Stuarts Draft
Ms. Peggy Secrist, Pleasant View, Inc., Harrisonburg
Ms. Dawn Trimble, Shenandoah Club, Staunton
Ms. Rita Wilson, Staunton City Hall, Staunton

Information Systems Technology
Ms. Robin Bryan, James Madison University, Harrisonburg
Mr. Brian Davis, NightLight Design, Harrisonburg
Mr. Jim Elmore, Rockingham Group, Harrisonburg
Mr. Benjamin Floyd, NTelos, Waynesboro
Ms. Sue Ganey, Fairfield Language Technologies, Harrisonburg
Mr. Wayne Hannah, Shenandoah Valley Electric Corporation, Mt. Crawford
Mr. Doug May, NTELOS, Waynesboro
Mr. Ron Perry, Grep Innovation LLC, Waynesboro
Mr. David Peters, Riddleberger Brothers, Inc., Mt. Crawford
Ms. Laurie Phillips, Rockingham Memorial Hospital, Harrisonburg
Dr. Jane Prey, University Relations Manager, Harrisonburg
Mr. Mark D. Shank, Jenzabar, Harrisonburg
Mr. Mark Zimmerman, County of Rockingham, Harrisonburg

Mechanical Design Technology
Mr. Jeff Arey, American Safety Razor, Verona
Ms. Samantha Armstrong, Shickel Corp., Bridgewater
Mr. Daniel Blosser, Riddleberger Brothers, Mt. Crawford
Mr. Scott Crickenberger, McQuay-Perfex, Inc., Staunton
Mr. Duane Painter, Kawneer, Harrisonburg
Mr. Daniel Michael, Valley Engineering Survey & Planning, Harrisonburg
Mr. Ross Moreland, Valley Engineering Survey & Planning, Harrisonburg
Mr. Winston Rhodes, Blauch Brothers, Inc., Harrisonburg
Mr. Craig Wine, KVK Precision Specialties, Shenandoah

Nursing
Dr. Lisa Cline, Augusta Health, Fishersville
Ms. Donna Hahn, Rockingham Memorial Hospital, Harrisonburg
Dr. Robert Jochen, Mt. Sidney
Dr. Merle Mast, James Madison University, Harrisonburg
Ms. Lauren Mullen, Massanutten Technical Center, Harrisonburg
Ms. Pearl Parks, Bridgewater Home, Inc., Bridgewater
Ms. Diane Pavalonus, Western State Hospital, Staunton
Ms Gayle Schultz, Valley Vocational-Technical Center, Fishersville
Ms. Jackie Sims, Augusta Health, Fishersville
Dr. Arlene Wiens, Eastern Mennonite University, Harrisonburg

Radiologic Technology
Mr. Russell Crank, Rockingham Memorial Hospital, Harrisonburg
Mr. Rader Dodd, Augusta Medical Center, Fishersville
Mr. Rick Grounds, Augusta Medical Center, Fishersville
Ms. Nancy Harold, Rockingham Memorial Hospital, Harrisonburg
Ms. Gwen Hinkle, Rockingham Memorial Hospital, Harrisonburg
Mr. Jon Lough, Rockingham Memorial Hospital, Harrisonburg
Mr. Tom Noser, Page Memorial Hospital, Luray
Dr. Dennis Rohrer, Rockingham Memorial Hospital, Harrisonburg
Ms. Sue Rose, Waynesboro
Ms. Melissa Shawger, Penn Laird
Ms. Carla Williams, Harrisonburg

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Ms. Erin Derrow, White Wave Foods, Mt. Crawford
Mr. Paul Everitt, MillerCoors Brewing Co., Elkton
Mr. Marshall Hammond, Merck & Co., Inc., Elkton
Mr. Al Katz, Augusta County Schools, Staunton
Ms. Rhonda Nicely, McKee Foods Corporation, Staunton
Mr. Jeff Fletcher, NIBCO of Virginia, Inc., Staunton
Ms. Lauren Putnockey, Specialty Blades, Staunton
Mr. Tim Simpson, Hollister Inc., Staunton
Mr. Steven Sisson, MillerCoors Brewing Co., Elkton
Mr. Jeff Stapel, Shickel Corporation, Bridgewater
Mr. Rich Sykes, Amtek Company, Arnold, Maryland
Mr. Dave Vandevander, Bridgewater College, Bridgewater
Mr. Dave Wolfe, Industrial Machine Works, Inc., Waynesboro

Veterinary Technology
Dr. Brian Arneson, Heartland Veterinary Clinic, Harrisonburg
Dr. Bruce Coston, Steven Bends Veterinary Hospital, Woodstock
Dr. Larry Evans, Augusta/Valley Animal Hospital, Staunton
Mr. Jeremy Gateman, LVT, Center for Comparative Medicine, Charlottesville
Dr. Steve Karras, Cave Spring Veterinary Hospital, Roanoke
Ms. Anne Lynch, LVT, Fishersville
Dr. Jennifer Miller, Port Republic
Dr. Bill Olkowski, Cedarcrest Animal Hospital, Fishersville
Ms. Karen Piercy, LVT, Blue Ridge Equine Clinic, Earlysville
Ms. Judy Race, Staunton
Dr. Sarah Salmon, Veterinary Emergency Treatment Service, Charlottesville
Ms. Ronnie Serrett, LVT, Palmyra
Ms. Margaret Shady, LVT, Massanutten Animal Clinic, Harrisonburg
Ms. Angela Shifflet, LVT, Animal Health Care Center, Waynesboro
Mr. Chris Stefanac, Richmond
Ms. Taryn Singleton, LVT, Sycamore Veterinary Hospital, Midlothian
Ms. Hilary Vanoy, LVT, Woodworth Animal Hospital, Waynesboro

Women’s Resource Center
Ms. Susan Bevins, Western State Hospital, Staunton
Ms. Joyce Colemon, Waynesboro
Ms. Rebecca Gorra, Staunton
Ms. Julie Alderfer Stauffer, RMH Women’s Health Focus, Harrisonburg
Ms. Sherry Talbott, Bridgewater College, Bridgewater
Ms. Gale Vest, Goodwill Industries of the Valley, Staunton
Administration, Faculty and Staff

President’s Full-Time Staff

Dr. John Downey, President.  B.A., LeMoyne College; M.A., Boston College; Ed.D., University of Virginia.

Dr. Robert S. Baldygo, Vice President of Finance and Administration.  A.A.S., Mohawk Valley Community College; B.S., Utica College of Syracuse University; M.B.A., Syracuse University; D.B.A., Nova Southeastern University.

Mr. Lloyd Meadows, Interim Vice President of Instruction and Student Services.  B.S., Radford University; M.B.A., James Madison University.


Ms. Kelly Snell, Administrative Assistant to the President

Full-Time Administrative Faculty


Dr. Hara Charlier, Dean, Life Sciences and Human Services. B.A., Cornell University; M.S., Miami University; Ed.D., Old Dominion University.

Mr. Robert Clemmer, Director of Student Financial Aid and Scholarships.. A.A.S., Dabney S. Lancaster Community College; B.B.A., James Madison University.

Dr. Susan Crosby, Coordinator of Institutional Research and Planning.  B.A., Frostburg State College; M.S. Ed., James Madison University; Ed.D., The George Washington University.

Mr. R. Michael Eller, Assistant Professor/Coordinator, Commercial Driving Program. B.A., St. Andrews Presbyterian College.

Ms. Franki Hampton, Instructor/Associate Vice President of Finance and Facilities.  B.S., Bluefield College.

Ms. Ann P. Leatherwood, Director of Community and Cultural Programs.  B.A., University of North Carolina; M.S.T.D., University of St. Francis.

Ms. Patty S. Lotts, Coordinator of Professional Development Programs and Small Business Outreach.  A.A.S., Blue Ridge Community College; B.A., Mary Baldwin College; M.B.A., Baker College.

Ms. Connie K. Medaris, Librarian.  B.S., Illinois State University; M.S., University of Illinois.

Mr. Francis J. Moran, Dean of Learning Resources.  B.A., University of Colorado; M.L.S., University of Oregon; M.A., Central Missouri State University.

Dr. B. Kevin Ratliff, Dean of Business, Humanities and Workforce Services and Continuing Education.  B.A., King College; M.S., East Tennessee State University; Ed.D., University of Virginia.

Ms. Mary Sullivan, Workforce Development Coordinator.  B.A., University of Virginia; M.S., Western Illinois University.

Ms. Annette Williams, Dean of Student Services.  B.A., Bridgewater College; M.Ed., Lynchburg College.

President Emeritus


Dean Emeritus

John S. Hudson, Dean of Instruction and Student Services.  A.B.  College of William and Mary; M.S., Ohio State University.

Administrator Emeritus

Mr. Malcolm Livick, Coordinator of Workforce Development & Coordinator of Off-Campus Facilities and Instruction.  B.S. University of Virginia; M.S.Ed., James Madison University.
Full-Time Faculty

Mr. John M. Bell, Professor, Art. B.A., Indiana University of Pennsylvania; M.F.A., James Madison University.

Ms. Julia W. Bland, Assistant Professor, English. B.A., Marshall University; M.A., West Virginia University.

Mr. Jonathan Brunfield, Assistant Professor, Mechanical Design and Drafting. A.A.S., Mechanical Design Technology, Blue Ridge Community College; B.S. Mechanical Engineering Technology, University of North Carolina-Charlotte; B.S., M.Ed., James Madison University.

Ms. Margaret S. Buse, Instructor, English. B.A., Adelphia University; M.S., C.W. Post University.

Mr. Kevin Caldwell, Instructor, History. B.S., M.A., James Madison University.

Mr. Michael Cast, Assistant Professor, Biology. B.S., M.S., University of Delaware.

Ms. Dorothy B. Connelly, Assistant Professor, Information Systems Technology. A.A., Ferrum College; B.S., James Madison University; M.Ed., George Mason University.

Mr. Gregory C. Cook, Instructional Technologist. B.A., Norfolk State University.

Mr. M. Lamine Diop, Assistant Professor, Information Systems Technology. B.A., University of Dakar; M.S., University of Toulouse.

Mr. Michael Doyle, Instructor, English. B.A., University of Wyoming; M.A., Purdue University.

Mr. Fred Dyen, Associate Professor, Aviation Maintenance Technology. B.A., Santa Clara University; M.S., University of Alaska-Juneau.

Ms. Linda W. Edwards, Associate Professor, Nursing. B.S.N., Eastern Mennonite University; M.S.N., Old Dominion University.


Mr. James E. Eiland, Assistant Professor, Electronics Technology. B.S.E.E., University of Texas, El Paso.

Ms. Rebecca W. Eller, Associate Professor, Mathematics. B.A., St. Andrews Presbyterian College; M.A.T., University of Virginia; Ed.S. Appalachian State University.

Ms. Rebecca Evans, Associate Professor, Accounting/Business. B.S.B.A., M.S.B.E., Southern Connecticut State University.

Ms. Kathi Fields, Assistant Professor, Mathematics. B.A., College of William and Mary; M.A., Miami University.


Ms. Samantha Franklin, Instructor, English. A.A.S., Southwest Virginia Community College; B.S., M.S., Radford University.

Ms. Deborah Hartman, Assistant Professor, Nursing. B.S.N., Winston-Salem State University; M.S.N., Old Dominion University.

Dr. Donna L. Hastings, Professor, Veterinary Technology. D.V.M., University of Georgia.

Dr. Darrell W. Hurst, Professor, English. A.B., M.A., East Carolina University; Ed.D., University of Virginia.

Ms. Marlena Jarboe, Assistant Professor, Information Systems Technology. B.A., James Madison University; M.S., Nova Southeastern University.

Mr. Robert J. Jobin, Assistant Professor, English and Philosophy. M.A., University of Munich.

Mr. Thomas Johnson, Associate Professor, Mathematics. B.S., Clarkson University; M.A., University of South Florida; M.A.; University of Florida.


Dr. Audrey A. Lail, Assistant Professor of Business. A.A., Western Piedmont Community College; B.S.B.A., B.A., University of North Carolina; M.B.A., Winthrop University; Ph.D., University of North Carolina.

Mr. Jeffrey B. Lanigan, Assistant Professor, History. B.A., Indiana University; M.A., University of Tennessee.

Dr. Jan Larsen, Associate Professor, Veterinary Technology. B.A., Old Dominion University; D.V.M., Virginia-Maryland Regional College of Veterinary Medicine.

Mr. James E. Leech, Instructor, Manufacturing Technology. B.S., Virginia Polytechnic Institute and State University.

Dr. Bernard H. Levin, Professor, Psychology. A.B., Temple University; M.S., North Carolina State University; Ed.D., Virginia Polytechnic Institute and State University.
Dr. Julia A. Lewis, Assistant Professor, Sociology. B.A., M.A., Marshall University; Ph.D., The Ohio State University.

Mr. Randy R. Lilly, Associate Professor, Speech. B.A., M.A., Kent State University; M.F.A., Ohio University.

Dr. Joseph Malcolm, Assistant Professor, Veterinary Technology. B.A., Virginia Tech; D.V.M., Virginia-Maryland Regional College of Veterinary Medicine.


Mr. John D. Maxfield, Assistant Professor, Information Systems Technology. B.S., Clarkson University; M.S., James Madison University.

Mr. Thomas E. Mayer, Professor, Automotive Analysis and Repair. B.S., University of Wisconsin-Stout; M.Ed., Bowling Green State University; ASE Master Certified Technician.

Ms. Donna P. Mayes, Assistant Professor, Reading/English. B.A., M.A., Virginia Polytechnic Institute and State University.

Mr. Lloyd Meadows, Associate Professor, Management, Supervision and Business. B.S., Radford University; M.B.A., James Madison University.

Mr. Mark Mills, Assistant Professor, Administration of Justice. B.A., University of Alaska; M.C.J., University of Colorado.

Ms. Pamela N. Monger, Instructor, Biology. B.S., Coastal Carolina University; M.S., Middle Tennessee State University.


Dr. William R. C. Munsey, Professor, Chemistry. B.S., M.A., College of William and Mary; Ph.D. University of Virginia.

Mr. Joseph M. Murray, Assistant Professor, Biology. B.A., Radford University; M.S., Virginia Polytechnic Institute and State University; M.A.T., University of Richmond.

Mr. W. Robert Oliver, Professor, Information Systems Technology. B.S., M.S., Columbus State University.

Mr. Kenneth J. Phillips, Instructor, Physics. B.S., George Mason University; M.S., University of Arkansas.

Dr. Stuart L. Porter, Professor, Veterinary Technology. B.S., Washington and Lee University; V.M.D., University of Pennsylvania.

Mr. Lawrence E. Rasheed, Instructor, Chemistry. B.S., M.S., University of Virginia.

Mr. James F. Richerson, Associate Professor, Electronics. B.S., M.S., Southern Illinois University.

Ms. Cathleen F. Ryan, Associate Professor, Nursing. B.S., Medical College of Virginia; M.S.N., University of Virginia.

Ms. M. Lynne Ryan, Assistant Professor, Mathematics. B.A., M.S., Virginia Polytechnic Institute and State University.

Ms. Susie Shomo, Instructor, Geology. B.S., James Madison University; M.S., University of North Carolina-Chapel Hill.

Ms. Ann C. Smith, Assistant Professor and Counselor. B.S., Longwood College; M.Ed., Lynchburg College.

Mr. Raymond Smith, Jr., Associate Professor, Administration of Justice. A.A., Florida Junior College; B.A., The Union Institute; M.S., Xavier University.

Ms. Carolyn P. Spangler, Associate Professor, Business. B.S., Radford University; M.B.A., Baker College.

Ms. Deborah Stevens Fitzgerald, Assistant Professor, Economics/Business. B.A., Our Lady of Angels College; M.B.A., Eastern Mennonite University.

Ms. Drew Strong, Assistant Professor, Nursing. B.S.N., University of Virginia; M.S.N., Old Dominion University.

Ms. Theresa Thomas, Assistant Professor, Mathematics. B.S.E., Millersville State University; M.S., James Madison University.

Ms. Nell Tiller, Assistant Professor, Spanish. B.A., Georgia College; M.A., University of Georgia.

Dr. Brett A. VanLear, Professor, Veterinary Technology. B.S., Virginia Polytechnic Institute and State University; D.V.M., Virginia-Maryland Regional College of Veterinary Medicine.

Ms. Loretta Wack, Associate Professor, Nursing. B.S.N., Georgetown University; M.S.N., University of Virginia.
Mr. Warren E. Wise, Assistant Professor, Mathematics.  A.A.&S., Blue Ridge Community College; B.S., M.S., James Madison University.

Mr. James N. Wright, Instructor, Health and Physical Education.  B.S., M.S., Virginia Polytechnic and State University.

Ms. Pamyla A. Yates, Assistant Professor , English.  B.A., University of Missouri; M.A., University of Illinois.

Ms. Rowan A. Zeiss, Associate Professor, Mental Health and Psychology. B.A., Lawrence College; M.S.Ed., James Madison University.

Mr. Charles R. Zickefoose, Assistant Professor, Mechanical Design Technology.  B.S., M.B.A., Virginia Tech; M.M.E., North Carolina State.

In addition to the full-time faculty members listed here, Blue Ridge Community College is fortunate to have adjunct faculty members who teach courses at the College. Due to their significant talents, these individuals make meaningful contributions to the educational programs at BRCC. A list of the names of the College’s adjunct faculty members is available in the Dean’s Office, E109.

**Professor Emeriti**

Mr. Max Couchman, Associate Professor, Biology. B.A., Passionist Monastic Seminary; M.A., Hofstra University.

Dr. E. B. Cox, Coordinator of Counseling Services. A.B., University of North Carolina at Chapel Hill; M.A. East Carolina University; Ed.D., University of Virginia.

Ms. Ann Grey, Associate Professor, Human Services. B.A., Marshall University; M.S.W., Ohio State University.

Ms. Linda S. Hurt, Instructor, Health and Physical Education.  B.S., East Tennessee State University; M.S., James Madison University.

Dr. Metro Lazorack, Professor, Mathematics and Dean of Instruction and Student Services. B.S. Kutztown State College; M.A., University of Illinois; Ed.D., University of Virginia.

Ms. Anne W. Nielsen, Associate Professor, Biology.  B.S., M.A., University of North Carolina.

Mr. Walter L. Pruchnic, Associate Professor, Business.  B.A., University of Northern Colorado; M.A., Grad. Spec. Cert., University of Missouri.

Ms. Teresa F. Showalter, A.B., Hunter College; M.F.A., Richmond Professional Institute (VCU).

Mr. Terry G. Slaubaugh, Assistant Professor, Mathematics. B.A., Bridgewater College; M.Ed., University of Virginia.

Ms. Shirley Thomas, Associate Professor, Nursing.  B.S., Old Dominion University; B.S.N., M.S.N., University of Virginia.

**Full-Time Staff**

Mr. John Abernathy, Aviation Instructional Assistant.

Ms. Ellyn Y. Alt, Enrollment Services Specialist, Admissions and Records Office.

Ms. Carolyn Anson, Administrative Assistant, Dean’s Office.

Ms. Becky W. Baker, Assistant Coordinator, Admissions and Records Office.

Ms. Vicki Ball, Accountant, Office of the Vice President of Finance and Administration.


Ms. Bridget B. Baylor, Public Relations Coordinator.

Ms. Leslie Bayne, Information Technology Applications Specialist and Trainer, Workforce Services and Continuing Education.

Ms. Sandi Belcher, Program Manager, Fine Arts Center, Workforce Services and Continuing Education.

Ms. Donna Bothoff, Fiscal Technician.

Ms. Linda Breeden, Off-Campus Manager, Workforce Services and Continuing Education.

Mr. Jack Brown, Building Construction Inspector.

Mr. Phillip Brown, Trades Technician.

Ms. Susan Carter, Accounts Receivable Technician.
Ms. Sue Ellen Church, Library Practitioner II, Library.
Ms. Doris A. Cline, Media Specialist II, Audio Visual/Duplicating.
Ms. Sally Jane Conner, Special Projects Coordinator, Development Office.
Mr. Kelly Dean, Trades Technician.
Ms. Charlene Dunning, Fiscal Technician Senior, Payroll, Office of the Vice President of Finance and Administration.
Ms. Nola M. Dunsmore, Off-Campus Facility and Program Support Supervisor, Workforce Services and Continuing Education.
Ms. Gail Foley, Laboratory Specialist, Veterinary Technology.
Ms. Cynthia A. Folsom, Fiscal Technician, Office of the Vice President of Finance and Administration.
Mr. Lance Foster, Graphic Design Supervisor, Office of Visual Communications.
Ms. Lisa Giovanetti, Laboratory Specialist, Biology.
Ms. Angela Glenn, Development Database and Communications Coordinator, Development Office.
Ms. Debbie Glenn, Supervisor, Plecker Center Rentals, Workforce Services and Continuing Education.
Ms. Ida Griffin, Media Specialist II, Audio Visual/Duplicating.
Ms. Elizabeth H. Hall, Coordinator of Career Services.
Ms. Patricia Hawk, Assistant Director of Student Financial Aid.
Ms. Lyell Hern, Enrollment Services Specialist
Ms. Lori Y. Hiner, Buyer Specialist
Ms. Sharon M. Hudson, Program Support Technician Senior, Office of the Vice President for Instruction and Student Services.
Mr. Wayne Huffman, Instructor, Commercial Driving Program.
Ms. Kris Keane, Laboratory Specialist, Veterinary Technology.
Ms. P.J. Landis, Administrative Coordinator, Tech-Prep Consortium
Ms. Martha Livick, Library Circulation Clerk.
Ms. Lisa Long, Supervisor, Administrative Support Operations, Workforce Services and Continuing Education.
Mr. Daniel Maggiolo, Programmer/Analyst.
Ms. Sandra S. Martin, Laboratory Specialist, Veterinary Technology Program.
Mr. Wayne Martin, Compliance and Security Coordinator
Ms. Catherine Mathias, Enrollment Services Specialist, Admissions and Records Office.
Ms. Betty May, College Information Specialist.
Ms. Marsha Moore, Payroll Specialist.
Mr. Tim Nicely, Director of Human Resources.
Ms. Cheryl O’Neil, Webmaster.
Ms. Mary Y. Paxton, Laboratory Specialist, Biology.
Mr. James Plonsky, Network and Systems Administrator.
Ms. June C. Powers, Personnel Analyst, Office of the Vice President of Finance and Administration.
Mr. Darrel Ralston, Help Desk, Installation, and Repair Technician, Institutional Computing Services.
Ms. Betty May, College Information Specialist.
Ms. Marsha Moore, Payroll Specialist.
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Ms. Betty May, College Information Specialist.
Ms. Marsha Moore, Payroll Specialist.
Mr. Tim Nicely, Director of Human Resources.
Ms. Cheryl O’Neil, Webmaster.
Ms. Rajan Shore, Student Services Coordinator.
Ms. Susan Simmers, Assistant Director of Student Loans and Scholarships.
Ms. Mary Kier Smith, Student Activities Coordinator.
Ms. Heather Soldato, Financial Aid Advisor
Ms. Beth Styer, Student Services Coordinator.
Ms. Elizabeth Tucker, Graphic Artist, Office of Visual Communications.
Ms. Charlynn Turner, Laboratory Specialist, Chemistry.
Ms. Jennifer F. Whitmore, Program Manager, Fine Arts Center, Workforce Services and Continuing Education.
Mr. Toby Whitesell, Help Desk Support Technician, Institutional Computing Services.
Mr. John R. York, Computer Systems Engineer.
Mr. David Zeiner, Trades Technician.

In addition to the full-time staff members listed here, Blue Ridge Community College is fortunate to have part-time staff who provide instructional and student support. Due to their significant talents, these individuals make significant contributions to the College. A list of the names of the College’s part-time staff members is available in the Human Resources Office.
College Policies

Americans with Disabilities Act Complaint Procedure

Blue Ridge Community College has adopted an internal procedure which provides for the prompt and equitable resolution of complaints alleging any action prohibited by the U. S. Department of Justice regulations implementing Title II of the Americans with Disabilities Act (ADA). Title II states, in part, that “no otherwise qualified disabled individual shall, solely by reason of such disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination” in programs or activities sponsored by a public entity.

Complaints should be addressed to the Vice President of Finance and Administration, who has been designated to coordinate ADA compliance efforts.

1. A complaint should be filed in writing, contain the name and address of the person filing it, and briefly describe the alleged violation of the regulations.
2. A complaint should be filed within 30 calendar days after the complainant becomes aware of the alleged violation.
3. An investigation, as may be appropriate, shall follow the filing of a complaint. The investigation shall be informal but thorough and afford all interested persons and their representatives, if any, an opportunity to submit evidence relevant to the complaint.
4. A written determination as to the validity of the complaint and a description of the resolution, if any, shall be issued and forwarded to the complainant no later than 10 calendar days after its filing.
5. The complainant can request a reconsideration of the case in instances of dissatisfaction with the resolution. The request for reconsideration should be made within 10 calendar days.
6. The ADA coordinator shall maintain the files and records relating to the complaints filed.
7. The right of a person to a prompt and equitable resolution of the complaint filed hereunder shall not be impaired by nor shall the use of this procedure be a prerequisite to the pursuit of other remedies.

Other remedies include the filing of an ADA complaint with the federal EEOC, or other responsible federal agency. State employees may also file a complaint with the state EEO or initiate a grievance under the state grievance procedure.

Campus Crime Report


Children on Campus

Childcare arrangements should be made because children will not be permitted to accompany parents to class or to remain on campus unsupervised. The College is not responsible for any unsupervised children on campus at any time.

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 work 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 subroutine 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). At BRCC, this is the Director of Institutional Computing.

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 Instruction 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 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 student offenders shall be in accordance with the college student standards of conduct.

4. The College President will report any violations 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.

Domicile Appeals Process

(Refer to 23-7.7 Code of Virginia)

I. Initial Determination - The Office of Admissions & Records is responsible for making an initial determination of eligibility for in-state tuition rates. The decisions shall be based on information provided on the “Application for Virginia In-State Tuition Rates”, supporting documents, and statements made by the student. The Office of Admissions & Records shall follow guidelines issued by the State Council of Higher Education in making determinations of eligibility for in-state tuition rates. The initial determination made by the Office of Admissions & Records shall be an oral determination. All documents needed to support determination of domicile must be submitted to the Office of Admissions and Records prior to the first day of semester classes.

II. Intermediate Review - A student who is aggrieved by an eligibility determination made by the Office of Admissions & Records may appeal the decision to the Vice President of Instruction and Student Services. The student must file a written appeal within five calendar days of initial determination. A “Supplemental Application for Virginia In-State Tuition Rates” may be required, if the Vice President of Instruction and Student Services determines that additional domicile information is necessary. Within ten calendar days of receipt of an appeal, the Vice President of Instruction and Student Services will review the initial determination. The student shall be provided with the opportunity to present information either in person, or in writing. In reviewing the initial determination, guidelines issued by the State Council of Higher Education shall be followed. The Vice President of Instruction and Student Services will notify the student of the outcome of the review in writing. Notification shall be within twenty calendar days of receipt of the appeal.

III. Final Administrative Review - A student who is not satisfied with the outcome of the review by the Vice President of Instruction and Student Services may appeal to the Domicile Appeals Committee. The Domicile Appeals Committee shall consist of three members of the Blue Ridge Community College faculty and/or staff appointed by the Vice President of Instruction and Student Services. No member of the committee may be a person who serves at a lower level of the domicile determination process. The student must file a written appeal to the chairperson of the Domicile Appeals Committee within five calendar days of notification. Within ten calendar days of receipt of an appeal, the chairperson of the Domicile Appeals Committee shall schedule a meeting to review the initial determination and intermediate review. A “Supplemental Application for Virginia In-State Tuition Rates” may be required, if the chairperson determines that additional domicile information is necessary. The student shall be provided with the opportunity to present information to the committee, either in person, or in writing. In reviewing the initial determination, the committee shall follow guidelines issued by the State Council of Higher Education. The committee shall maintain a written record of the proceedings of the meeting. The decision of the committee shall be in writing, and a copy of the decision shall be sent to the student via certified mail with return receipt requested. The letter shall clearly explain that the decision is final unless the student appeals it to the Circuit Court within 30 days after receiving the decision. Notification shall be within thirty calendar days of receipt of the appeal.

IV. Review by Circuit Court - A student who is not satisfied with the outcome of the review by the Domicile Appeals Committee may appeal to the Circuit Court of Augusta County. The student must file a petition for review with the Court within thirty days of receipt of the decision by the Domicile Appeals Committee. Upon notification of filing a petition for review, the chairperson of the Domicile Appeals committee will provide the Court with a copy of:

A. “Guidelines” issued by the State Council of Higher Education;

B. the Blue Ridge Community College Appeals Process;

C. the written decision of the Domicile Appeals Committee;
D. the student’s “Application for Virginia In-State Tuition Rates” form; and

E. all other documentary information pertaining to the initial determination and subsequent reviews. The chairperson of the Domicile Appeals Committee shall also notify the State Attorney General's Office upon notification of filing a petition for review with the Circuit Court.

V. Time Limitations

A. Extension of Time - It is important to good relationships that appeals be processed as rapidly as possible. Every effort shall be made by all parties to expedite the process. The time limitations specified for either party may be extended by written mutual agreement.

B. Effect of Failure to Appeal Within Time Limit - If there is no written mutual agreement to extend the time limits set herein and if a decision at one level of the procedure is not appealed to the next level of the procedure within the time limit specified, it shall be determined settled on the basis of the last decision rendered.

C. Effect of Failure to Respond Within Time Limit - Failure at any level of the appeals process to initiate communication of a decision to the student within the specified time shall permit the lodging of an appeal at the next level of the procedure within the time which would have been allocated had the decision been communicated by the final day.

Parking and Traffic Safety

Adequate parking space is provided free of charge for students and a limited number of spaces are reserved for visitors, handicapped individuals, and staff. The number of pedestrians and the crowded nature of the parking lots make low speed and careful driving a necessity. The speed limit on campus is 15 miles per hour.

Parking on campus is restricted to those vehicles that display a current sticker. Student parking is permitted in any paved space intended for that purpose and not otherwise restricted. Special parking is available to handicapped individuals whose vehicles display the appropriate license plates. Applications for handicapped plates should be made through the Department of Motor Vehicles. Campus parking stickers can be obtained from the College Information Specialist. Parking violations are subject to a monetary fine. Students with unpaid fines will not receive transcripts, grades or be permitted to register for the next semester. Students who wish to appeal a fine should contact the Cashier, located in the Houff Student Center. Vehicles parked illegally are also subject to towing or having devices applied to the vehicle to preclude movement (i.e. being “booted”). Such devices will not be removed before payment of outstanding fines. For further information see the Blue Ridge Community College booklet "Parking and Traffic Regulations," available in the Houff Center lobby.

Security is provided after normal business hours by a guard. Law enforcement and accident reporting are the responsibility of the public agencies which provide the same services to the community at large. Minor vehicle accidents in the College parking lots are generally not serviced by the enforcement agencies unless a law has been broken. While the Vice President of Finance and Administration will assist in such matters, they are ultimately resolved by the individuals and their insurance companies.

Pets on Campus

No animals are allowed on campus with the exception of guide dogs for students with documented disabilities and animal patients scheduled for treatment in the Veterinary Clinic. These patients will be housed in the area provided for that purpose and are not to be taken to other parts of the campus or left in vehicles.

Sexual Misconduct Policy

Blue Ridge Community College and the Virginia Community College System (VCCS) will not tolerate sexual misconduct in any form. Sexual misconduct is a flagrant violation of the values and behavioral expectations of a college community. All reported violations within the jurisdiction of the college, including sexual assault and harassment, will be investigated and, as warranted, will be resolved through appropriate college disciplinary processes and/or criminal proceedings in accordance with applicable state and federal laws. (c.f. The Virginia Community College System Policy Manual, Section 3.10, Appendixes III and XVII to Section 3, and Section 6.5.6.2).
An educational institution is a community of trust whose very existence depends on the recognition of each individual’s importance and value. This trust creates the freedom for each individual to live, think, act, and speak without fear of physical harm. Sexual misconduct shatters the bond of trust within a college community. If you believe that a member of the college community has violated this policy, we encourage you to follow the reporting procedures outlined below.

Sexual Assault and Sexual Harassment are behaviors specifically prohibited by this policy. Definitions of these behaviors are available from the College Title IX coordinator in the Counseling Center on the first floor of Houff Student Center. They are also available on-line at: (http://www.so.cc.va.us/Polcypdf/section/sec6.pdf).

**Reporting Procedures**

Students who believe that they have been subjected to sexual assault or harassment should report their complaint as soon as possible after the event occurs. Reports of sexual misconduct by another student may be made to the Title IX Coordinator located in the Counseling Center on the first floor of Houff Student Center at the Weyers Cave campus, telephone extension 2221, or to the Vice President of Instruction and Student Services.

Students’ allegations involving college employees may be reported to the supervisor of the accused employee or the College Human Resource Director telephone extension 2371, or the Title IX Coordinator.

Existing disciplinary and grievance procedures will serve as the framework for resolving allegations of sexual misconduct. Students found guilty of sexual misconduct will be subject to campus disciplinary penalties found in the Student Handbook. College employees found guilty of sexual misconduct will be subject to disciplinary action as specified by personnel policies. In addition, employees and students may face criminal prosecution in the event of violations of applicable laws. The College also reserves the right to refer a complaint to a law enforcement agency if it appears that a crime may have been committed.

The rights of both the accused and the complainant shall be protected, and the confidentiality of proceedings will be maintained to the fullest extent possible. The rights of the individual filing the grievance to pursue legal remedies through criminal or civil courts will not be infringed by use of College disciplinary or grievance procedures. Similarly, College disciplinary or grievance procedures will not be prejudiced by the initiation of such action.

**Smoking, Eating, and Drinking Policies**

Smoking or use of tobacco in any form is prohibited on the main campus except in areas designated specifically for the purpose. Eating or drinking in all laboratories is prohibited.

**Statement on Student Rights and Responsibilities, Disciplinary, and Grievance Procedures**

The Blue Ridge Community College Statement of Values is based upon respect for the dignity and worth of individuals within the campus community. Further, the college community welcomes diversity of ideas, intellectual debate, and the learning thereby engendered. Blue Ridge Community College strives for an environment which promotes these values and believes that, as members of the college community, each student contributes to uphold them. Therefore, the College clearly presents student rights and responsibilities and establishes the following disciplinary and grievance procedures to ensure that all members of the college community may benefit from the promotion of these values.

**Student Rights**

A. Students are free to pursue their educational goals so long as they meet the academic and behavioral standards of the College. The College shall provide appropriate opportunities for learning within the scope of its mission and resources.

B. Students have the right to fair treatment without discrimination on the basis of race, color, creed, national origin, gender, political affiliation, religion, or disability.

C. Students have a right to limited procedural due process in disciplinary and grievance matters.

E. Students are guaranteed the right to free inquiry, expression and assembly, provided they do not interfere with the rights of others or with the effective operation of the College.

**Student Responsibilities**

To ensure an environment consistent with the mission, values and vision of Blue Ridge Community College, students are expected to respect the rights of each member of the college community and to behave in a manner supportive of the collegiate environment. Behaviors which are considered to be disruptive of the collegiate environment and subject to disciplinary action include but are NOT limited to the following:

A. Providing false information or fraudulent documents to the College or any of its employees in the course of their duties; forgery, or alteration or misuse of college documents or instruments of identification.

B. Academic dishonesty, including cheating and plagiarism. Refer to the statement on Academic Honesty in the College catalog for more information. Please note that in addition to any penalty imposed on a student through this procedure as a result of a violation of academic dishonesty, faculty members may impose a grading penalty in accord with their syllabus and college policy in the course(s) in which the academic dishonesty occurred. Appeals of grading decisions must be conducted through the use of the grade appeal policy listed in the College catalog.

C. Disruption or obstruction of teaching, research, administration, disciplinary proceedings, or other activities authorized by the College.

D. Physical abuse, psychological abuse or the threat of such abuse of any person on college premises or at college activities or directed against any person because of their actions as an employee of the college.

E. Violation of established college policies including, but not limited to, the College Honor Code, the Computer Ethics Guidelines, Sexual Misconduct Policy, and the Substance Abuse Policy.

F. The on-campus purchase, consumption, possession or sale of alcoholic beverages as specified in the college substance abuse policy, except when specifically authorized by the College Board.

G. Possession, use, sale or purchase of any illegal drugs or hallucinogenic agents on college premises or at college activities, as specified by the college substance abuse policy.

H. Carrying firearms or other weapons on college property or at any college activity except as explicitly authorized for instructional purposes or as exempted by Virginia Code 18.2-308 et seq.

I. Unauthorized restriction of vehicular or pedestrian traffic on college premises or at college activities.

J. Destruction, misuse, or damaging of property of the college or property under its jurisdiction, or removal of such property without authorization.

K. Tampering with or misuse of fire-fighting or other safety equipment.

L. Violation of any local, state or federal law on campus or at a college authorized activity.

M. Failure to comply with directions of college officials acting in the performance of their duties.

**Disciplinary Guidelines and Procedures**

**Guidelines**

The College considers the guidelines set forth by the Student Rights and Responsibilities as conducive to a positive environment. If a student fails to behave in a manner consistent with these guidelines, the College reserves the right to impose disciplinary action. Disciplinary action may be initiated for violation of any rule or regulation of the College. The Blue Ridge Community College disciplinary procedure shall apply to conduct which occurs on property owned, occupied or used by Blue Ridge Community College, or to conduct which occurs while a student is attending or participating in any Blue Ridge Community College sponsored event or activity, or to conduct anywhere which is directed against any person employed by the College acting in their official capacity in performance of their duties.

**Procedures**

1. Procedure for Disciplinary Complaints: All disciplinary complaints against students should be brought to the Vice President of Instruction and Student Services. The President of the College may further designate any other College official to administer disciplinary policies and procedures as appropriate.
The Vice President shall investigate the alleged violation to determine the severity and nature of the problem. The Vice President will send notice to the student at the student's address of record (or hand the notice to the student in person) that a disciplinary investigation is taking place, along with a copy of this procedure. The student may request the assistance of a college Counselor, who will explain to the student the procedures of this policy. If, at the sole discretion of the Vice President of Instruction and Student Services it is appropriate, the investigation will include an interview with the accused student, and attempts will be made to resolve the complaint informally. The student may also state a response to the investigation in writing to the Vice President. If the matter cannot be resolved informally, the Vice President will proceed administratively according to the guidelines established in section 3.

2. Procedure for immediate suspension pending final disposition: When, in the opinion of the Vice President, the continued presence of any person on campus poses a serious threat to the well-being or safety of college personnel, college students, or to the property or operation of the College or any of its functions, such person may be immediately suspended and banned from the college campus and from all college-sponsored activities or events wherever they occur. This summary exclusion shall not prejudice the process or outcome of further proceedings initiated by any of the parties. When this decision is made, the Vice President will send notice to the student by mail at the student’s address of record. The correspondence will include the allegation against the student along with a general description of basis for the allegation and the basis by which the decision to immediately suspend the student was made. The correspondence will also make reference to the copy of this disciplinary procedure which the student received according to the procedure written above, thus informing the student of the procedures to be used to dispose of the case and for appeal of the disposition. At the discretion of the Vice President, the student may be allowed to return to the campus only for any and all activities related to this disciplinary procedure by requesting permission in writing. The Vice President will inform the student of the decision regarding this request by sending a certified letter to the student's address of record.

3. Administrative Disposition of a Violation: If, at the discretion of the Vice President, the complaint cannot be resolved informally, then the Vice President, or a designee of the Vice President, will prepare a written summary of the disposition of each violation of the behavior code. The summary will include a statement of the violation, a brief description of the evidence used to decide upon a sanction, and a statement of the sanction imposed. A list of possible sanctions is provided on the next page. The Vice President will use certified mail to send a copy of the summary to the student’s address of record, or to the parent or guardian of an unmarried and unemancipated student who is under 18 years of age, and to other appropriate administrative personnel. A copy of the written summary will also be placed in the student's file in the Admissions and Records Office and in a file in the Vice President of Instruction and Student Services' office.

Sanctions include but are not limited to:

A. Admonition: At the discretion of the Vice President, a verbal or written reprimand to a student indicating that the student is violating or has violated college rules and admonishing the student to refrain from further violations.

B. Warning Probation: A written reprimand indicating that further violations of regulations will result in more severe disciplinary action. Warning probation may be imposed for any length of time up to one calendar year, and the student shall automatically be removed from probation when the imposed period expires.

C. Disciplinary Probation: A written reprimand indicating that further violations may result in suspension.

D. Withholding of Transcript, Degree, Diploma, Certificate, or suspension of the right to register for classes: A penalty imposed upon a student who fails to pay a debt owed to the College or who has a disciplinary case pending final disposition. This penalty terminates upon payment of the debt or upon final disposition of the case.

E. Restitution: A requirement for the student to reimburse the College for damaged or misappropriated property. This may take the form of appropriate service to repair or otherwise compensate for damages.
F. Suspension from the College: Exclusion from attending the College as a student for a definite period of time not to exceed one year.

G. Dismissal: Termination of student status for not less than one year. The conditions of readmission, if any, will be stated in the order of dismissal.

H. Expulsion: Permanent severance from the College.

A student may appeal the administrative disposition of a violation by following the procedure outlined below.

**Appeal Procedure**

Appeals Committee: When a student appeals the administrative disposition of a violation, he or she is entitled to limited due process including a hearing before an Appeals Committee. A written request for a hearing must be made to the Vice President of Instruction and Student Services on or before the fifteenth business day following the mailing of the certified letter which describes the administrative disposition.

The Appeals Committee will be selected by the President of the College. The Committee shall consist of two teaching faculty members, one administrative faculty member, one classified staff person, and one student. The President will select the chairperson from among the committee members. All members of the committee are eligible to vote in the hearing.

Notice: The chairperson of the Appeals Committee shall set the date, time and place for the hearing, and the Vice President will send notice of the hearing to the student by certified letter at the student’s address of record. This notice shall be mailed within five business days of the receipt of the student’s written request for a hearing and the hearing date will be set for at least one week after the date the certified letter is mailed. The Vice President, or the committee chairperson may, for good cause, postpone the hearing so long as all interested parties are notified of the new hearing date, time and place, and the new date is set at least one week after the notice of postponement is sent to the student. Every effort should be made by all involved parties to conduct the hearing at the earliest date available.

**Procedure**

The Appeals Committee will determine whether or not to uphold the administrative disposition determined by the Vice President. The chairperson shall provide reasonable opportunities for witnesses to be heard. Legal rules of evidence do not apply to hearings before the Appeals Committee. Counsel for any and all parties may be present, but they cannot act on behalf of the party they represent. The committee chairperson may admit any pertinent information and may exclude irrelevant, immaterial and unduly repetitious evidence. The hearing shall proceed generally as follows:

1. The chairperson presents the allegations against the student, along with the administrative disposition of each allegation which the Vice President of Instruction and Student Services imposed.

2. The student presents the basis for appealing the administrative disposition.

3. At the discretion of the committee chairperson, the student, the Vice President, and other witnesses may be interviewed by the committee. However, the student may not be compelled to testify against himself or herself.

4. All evidence shall be offered to the committee during the hearing and made part of the hearing record.

5. Committee members may freely question witnesses.

6. The committee will vote the issue of whether or not to uphold the administrative disposition of each violation. The committee shall state in writing, for each alleged violation, whether they support the administrative disposition and the sanction imposed. The committee can uphold the administrative disposition or recommend a different sanction which may not exceed the sanction imposed by the Vice President.

The decision of a simple majority of the members of the committee shall be submitted as the final decision of the committee. The decision of the committee is final and binding.

Record: The hearing record shall include:

1. a copy of the notices sent to the student as described above,
2. all documentary and other evidence offered or admitted in evidence,
3. written motions, pleas, and any other materials considered by the committee, and
4. the committee’s finding.

The hearing record will be forwarded to the Vice President of Instruction and Student Services where it will be securely maintained. If the committee upholds the administrative disposition, a record of the committee's finding will also be placed in the student’s academic file in the Admissions and Records Office.

**Student Government Association Constitution**

Copies of the Student Government Association Constitution are available in the office of the Student Activities Director, located in the BRCC Bookstore facility.

**Student Organization Guidelines**

I. Organizations may be established within the College for any lawful purpose. Affiliation with an extramural organization, such as a national society, shall not in itself disqualify the College branch or chapter from institutional privileges.

A. All students and faculty sponsors or advisors of clubs, organizations, and activities, who wish to organize must apply to the College for official recognition. A packet of registration materials, including a copy of the College policies, is available from the office of the Student Activities Director. Several documents must be completed and submitted to the Student Activities Director:
   1. a constitution or statement of purpose;
   2. the name of the faculty advisor;
   3. a current list of officers; and
   4. the date, time, and place of regularly scheduled meetings.

B. After receipt of these completed documents, the Student Activities Director will take the following action:
   1. File the organization’s petition for official recognition with the various documents noted above and seek administrative approval.
   2. Respond in writing, with respect to the official action taken on the organization’s request for official recognition.

C. Recognition of an organization does not imply approval or disapproval of the aims, objectives, policies, and activities of the organization.

D. Any organization which fails to maintain a current advisor, officers, or schedule of meetings, or engages in illegal activities on or off campus, may have sanctions imposed against it. These sanctions may include admonition, probation, restitution, and withdrawal of college recognition. BRCC reserves the right to restrict the participation of students who have been convicted of a felony or who are listed on the Sex Offender registry.

E. College facilities may be assigned by the President of the College or his designee to college organizations and community civic groups for regular business meetings, social programs and other programs open to the public. If, in the opinion of the President, the group poses a serious threat to the continued well-being and safety of the institution, the use of facilities may be denied. Reasonable conditions may be imposed to regulate the timeliness of requests, to determine the appropriateness of the space assigned, to regulate time and use, and to insure proper maintenance.

II. A student group, or organization of the College may distribute non-commercial written material on campus without prior approval providing such distribution does not disrupt the operations of the institution. Editorial freedom of the student press entails a corollary obligation under the canons of responsible journalism and applicable regulations of the Federal Communications Commission. All student communications shall explicitly state an editorial policy on the editorial page to the effect that opinions expressed are not necessarily those of the College or its student body.
Student Photographs

Photographs taken of individual students or groups of students in classrooms, the student lounge, and outdoors on campus, may be used by the College for release to newspapers or other media and for reproduction in the College’s publications.

If a student does not want a photograph to be used in promotion of the College, that student must notify the photographer at the time the photo is taken, or notify the Coordinator of Public Relations within 24 hours after the photograph is taken.

Substance Abuse Policy

Blue Ridge Community College is committed to protecting the health, safety, and welfare of the citizens it serves by assuring that a drug-free workplace is maintained and that College employees and students perform their duties unimpaired by the effects of drugs or alcohol. The unlawful possession, use or distribution of controlled substances and alcohol on College premises or as a part of any of the College’s activities, by students and employees, is prohibited. College employees and students are to perform their assigned duties unimpaired by the effects of drugs or alcohol. Visit the following URL (www.brcc.edu/student/handbook/policy/substance.htm) for complete information regarding the Substance Abuse Policy.

Weather-Related and Emergency Closings

When severe weather or emergencies (snow, ice, flooding, power failures) require the College to be closed, notification will be made through announcements on the BRCC college website, by the greeting message on the College main telephone number (540-234-9261), and by local radio and television stations. The options for normal announcements, including any for delayed class times, are published online at (www.brcc.edu/student/weather.htm). In the absence of any announcement, the College is open and students are expected to be in attendance.

Since the College serves a large geographic area, students are expected to exercise their own judgment when hazardous conditions exist in their own areas. In the event that a student must miss a class for weather-related or emergency conditions, the student is obligated to notify the instructor as soon as possible and arrange for appropriate make-up work.
Resources for Students

Bookstore

The College Bookstore is located adjacent to the Houff Student Center and provides textbooks, supplies and miscellaneous items throughout the year. Regular hours of operation are Monday-Thursday, 9:00 a.m.-6:30 p.m., and Friday, 9:00 a.m.-1:00 p.m., unless otherwise posted.

Students may return or exchange new or used textbooks within a designated, posted time frame provided books are in original purchase condition, and the student presents a corresponding dated cash register receipt. All additional return policies are posted in the bookstore.

The College Bookstore buys used textbooks back for resale. Please see the Bookstore link on the BRCC website for more information.

Bulletin Boards

Bulletin boards are in all College buildings. Posting of information and/or announcements must be placed on the appropriate bulletin board. All postings must comply with the standards described in the BRCC Posting Policy, available from Student Services or on the Internet at www.brcc.edu/postings.htm

Computers for Student Use

Computer support for students is available on the Weyers Cave campus in room F112/F114 seven days a week. Hours are posted in the lab, on the internet at: (http://www.brcc.edu/computer_lab/) or call ext. 2219 for details. Other networked computing labs at Weyers Cave (D115, F108, F109, F115) are available to students when they are not being used for classes. There are also networked computers available for student use in the Houff Library, Learning Lab, and Fine Arts Building. Additional computing facilities are available at the BRCC Harrisonburg Center and at the Augusta Center on the Augusta Medical Center Campus (hours may vary). Computer labs are open to use by currently enrolled BRCC students only. Computers for public use are available in the College Library. Due to increasing volume and rising costs, students should print only what is needed for their BRCC courses.

Students should use only their official VCCS email accounts to communicate with College faculty, staff, and administrators. Similarly, students should check their VCCS accounts on a daily basis in order to remain informed of College and VCCS communications. If students make queries to BRCC or VCCS administrative offices or faculty from non-VCCS email accounts (such as Hotmail or AOL), they will be asked to resubmit their query using the official VCCS account.

Directory of Community Resources

(AIDS, Domestic Violence, Sexual Assault and Substance Abuse)

AIDS

AIDS HOTLINE ...........................................................................(800) 232-4636

Local Health Departments

Augusta-Staunton ...................................................................(540) 332-7830
Augusta-Waynesboro ................................................................. (540) 949-0137
Rockingham-Harrisonburg ...................................................... (540) 574-5100
Highland County .................................................................... (540) 468-2270

Domestic Violence

Child Abuse and Neglect Hotline .............................................. (800) 422-4453

Domestic Violence Hotline ...................................................... (800) 799-7233

First Step - A Response to Domestic Violence, Inc.
129 Franklin Street
Harrisonburg, VA 22801 ............................................................ (540) 434-0295
Sexual Assault

Collins Center (formerly CASA) ............................................................... (540) 434-2272

The Collins Center (formerly Citizens Against Sexual Assault or CASA) is a private, non-profit organization that provides crisis intervention, victim assistance, and community education services.

New Directions Center office: ................................................................. (540) 886-6800

The New Directions Center is a private, non-profit organization that provides crisis intervention, victim assistance, and education services to the Staunton, Waynesboro, and Augusta County area.

Substance Abuse

ASAP
350 N. Main Street ............................................................... (540) 434-0154
Harrisonburg, VA 22801

ASAP ............................................................... (540) 886-5616
240 N. Central Avenue Suite B
Staunton, VA 24401

Alcoholics Anonymous
Staunton, VA, 24401 ............................................................... (540) 885-6912
Waynesboro, VA ............................................................... (540) 949-7777
Harrisonburg, VA ............................................................... (540) 434-8870

Augusta Medical Center Recovery Choice
Route 608
P.O. Box 1000
Fishersville, VA 22939, (540) 213-2525 or toll free 800-932-0262, ext. 2525

This agency provides a number of alternatives best suited to treat individual problems with regard to chemical dependency. It offers both in-patient and out-patient programs, and free consultation and evaluation.

Harrisonburg-Rockingham Community Services Board
Intensive Treatment Program
1241 N. Main Street
Harrisonburg, VA 22801 ............................................................... (540) 434-1941

This program allows the chemically dependent person to live at home and continue employment throughout treatment.

Mental Health Association of Augusta
Professional Building, Room 206-208
Staunton, VA 24401 (540) 886-7181 or ............................................................... (540) 949-0169

University of Virginia Addiction Treatment Services
2955 Ivy Road, Suite 210
Health Sciences Center
Charlottesville, VA, 22901 ............................................................... (804) 243-4646

Services include detoxification, acute in-patient care, intensive day program, intensive out-patient program, and after-care groups.

Valley Community Services Board
Substance Abuse Services
110 W. Johnson Street
Staunton, VA 24401 ............................................................... (540) 887-3200

Emergency Information

Accidents and Injuries

If a serious accident or serious injury has occurred, any faculty, staff, student or visitor witness should call 911. The witness to the emergency should then follow the internal reporting procedure outlined below. The internal reporting procedure should also be followed for all accidents or injuries that are less serious in nature and which do not require immediate medical or police assistance.

Internal Reporting Procedure

All injuries, accidents and emergencies are to be reported to the College Information Specialist (by dialing “0”) and/or the Security Officer on duty by dialing 2370 (or cell phone 430-4564) and providing the person who answers with a description of what has occurred.
Please note: The College is not equipped to provide medical services on campus. However, a first aid kit has been placed in each laboratory and shop, in the Student Services reception area, and in the Business Office. Portable electronic defibrillators are located in the E/F Hallway, Plecker Workforce Services Center, Fine Arts Center, and Houff Student Center lobby, preferably to be used by an appropriately trained individual.

**Contacting Students on Campus Regarding Off-Campus Emergencies**

Emergency calls will be transferred to the Counseling Center and an attempt will be made to locate and inform the student. The Counseling Center maintains the right to inquire into the nature of the emergency, the identity of the caller, and to determine whether interruption of a class is justified. Incoming calls of a non-emergency nature will be posted on the chalkboard in the Lobby of Houff Student Center.

**Food Service and Student Lounge**

The food service, located in the student lounge on the ground floor of Houff Student Center, provides hot and cold entrees. Normal hours of operation during fall and spring semesters are 8:00 a.m. until 7:00 p.m. Monday-Thursday and 8:00 a.m. until 1:00 p.m. on Fridays. Summer semester hours are 8:00 a.m. until 1:00 p.m. Monday-Thursday. At other times, food machines are available in the lounge. The lounge is open for student use any time the College is open.

**Identification Cards**

Student identification cards are available to students enrolled in college credit courses. Identification cards may be obtained from the Student Activities Office at designated times in the beginning of each semester. Students are not required to obtain an identification card.

**License Plates**

License plates featuring the Blue Ridge Community College logo are available for purchase from the Department of Motor Vehicles (DMV). Blue Ridge plates can be ordered at DMV offices across the state by filling out an application. They can also be ordered on-line at www.dmv.state.va.us The plates cost $25 in addition to the regular DMV registration fee.

**Lost and Found**

Lost and Found is located in the Office of Admissions and Records in the Houff Student Center. Ordinary items which are turned in may be claimed during office hours. An effort will be made to locate owners of particularly valuable articles.

The College assumes no responsibility or liability for lost or stolen property. Valuables should be protected and marked appropriately. Student Services will dispose of items not claimed after 30 days.

**Meeting Rooms**

If students wish to use rooms to conduct meetings or other activities, they should check on the availability of the room with their course instructor or the Coordinator of Student Activities.

**Peer Tutoring**

The College offers one-on-one and small group academic support to students. The concept of students tutoring students has proven to be a successful, enriching endeavor for participants. This service is coordinated through the Academic Support Coach in the Counseling Center and involves no cost for those who participate. The Peer Tutoring schedule is found on the BRCC website at http://www.brcc.edu/services/peer/. The College pays qualified tutors a competitive wage.

Application to become a tutor, or to receive assistance, can be obtained from the Academic Support Coach in the Counseling Center, located in the Houff Student Center.

**Social Security Number**

Disclosure of your social security number is not required at this time, but it is highly recommended. Disclosure ultimately will be required for most students at the time of enrollment, per Section 60908 of the Restructuring and Reform Act of 1998, or at the time of disbursement of federal financial aid, per 34 Code of Federal Regulations Part 668.36. Section 23-2.2:1 of the Code
of Virginia also authorizes the Virginia Community College System to collect student social security numbers and other personally identifiable information prior to a student’s enrollment, and requires it to electronically transmit enrollment data to the State Police. However, the VCCS will only use your social security number in accordance with federal and state reporting requirements, and for identification and research purposes within the VCCS. It shall not permit further disclosure unless required or authorized by the Family Educational Rights and Privacy Act of 1974, 20 U.S.C. Code 1232G, or pursuant to your obtained consent.

Student Development (SDV) Courses

A one-credit student development course is required for graduation in all degree and diploma programs and in some certificate programs. New students are strongly encouraged to take the student development course within two semesters of enrollment at the College. The purpose of student development courses is to help new students be successful in college and to acquire practical information about career exploration, college resources and services, study skills, time and stress management, and educational opportunities. Students who have completed a two-year or four-year academic degree program or the equivalent of 60 credit hours or more at another regionally accredited college or university may request a waiver of the required student development course.

Student Health Insurance

Contact the Office of Admissions and Records for a list of providers of Student Health Insurance.

Telephones

A pay telephone is available on campus for public use and is located in the west lobby of the Houff Student Center adjacent to the entrance of the student lounge.
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