

2013-2014

# College Catalog



## Virginia Western Community College

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Roanoke, VA 24015

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### General information and registration system

(540) 857-8922

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# Welcome

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ON BEHALF OF THE ENTIRE FACULTY AND STAFF, I would like to welcome you to Virginia Western Community College. We are dedicated to helping you achieve your academic, professional and personal goals. Whether you intend to earn an occupational or technical degree, transfer to a four-year institution, acquire and improve skills to advance in your current career or begin a new one, or just wish to enrich your life through higher education, we'll take you there.

It is our mission to provide affordable, accessible and quality educational opportunities and workforce training to meet individual, community and global needs. We do this by offering cutting-edge classes at our main campus in Roanoke, online and at off campus sites such as The Franklin Center, the Greenfield Education and Training Center in Botetourt County, and at the Roanoke Higher Education Center.

This catalog provides information about our extensive program offerings to help you plan your goals, and includes information about financial aid and scholarship opportunities to help you fund them. We understand that individual needs vary, and an education at Virginia Western has never been more convenient with day, evening, Full-Time Friday and weekend classes. In addition, many students are now enjoying the flexibility of our wide array of distance learning classes as well.

Virginia Western offers a comprehensive college experience with numerous student activities and support services available. We offer athletics, student-run clubs and other extracurricular activities like theater programs and movies. To develop well-rounded students, we provide opportunities to socialize and collaborate outside of the classroom.

Our dedicated faculty and staff are here to guide you academically when you are enrolled at Virginia Western and to help you take the next steps in your life. We can make your transfer to a four-year institution a seamless process and we will assist you in your search for a fulfilling career.

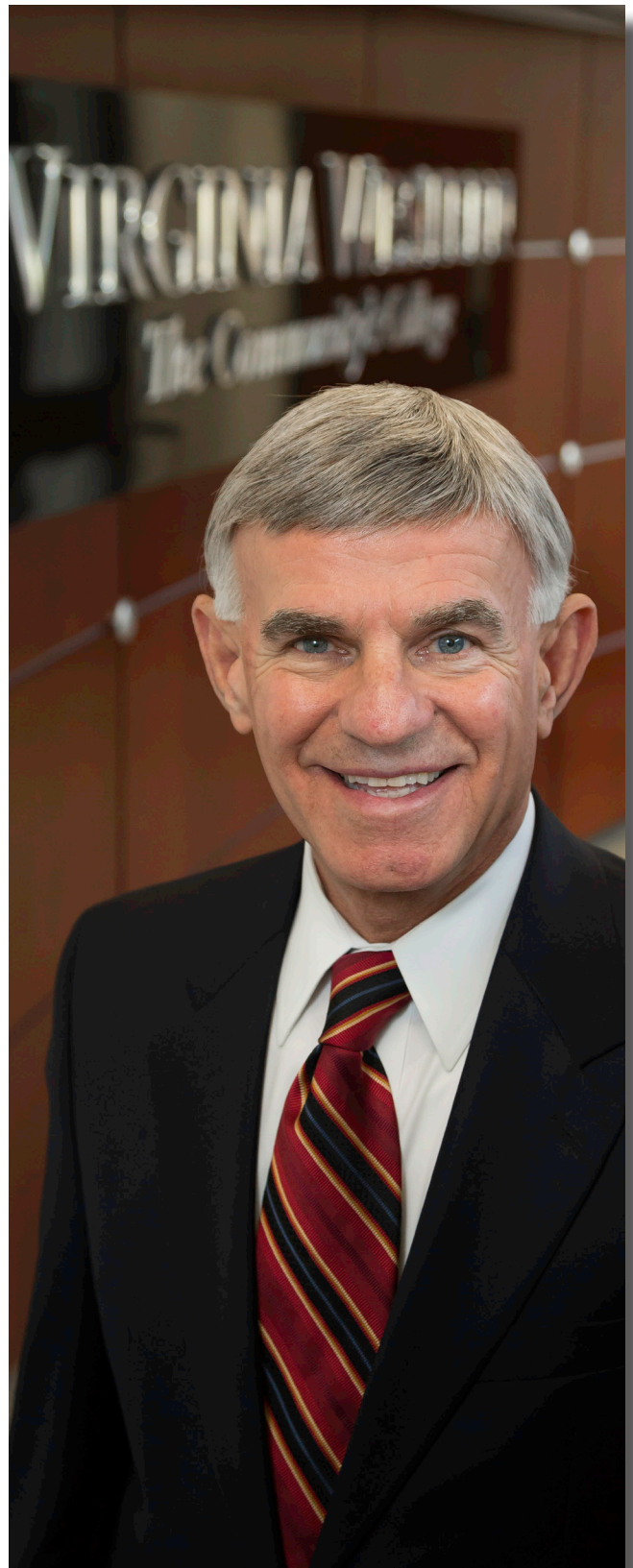
I encourage you to find out more about Virginia Western by visiting [www.virginiawestern.edu](http://www.virginiawestern.edu) or calling our Information Center at (540) 857-VWCC. If you would like to schedule a tour of our campus, there are student ambassadors who are available to assist you.

Thank you for choosing Virginia Western to continue your education and best wishes to you for a successful academic year.

Sincerely,

Virginia Western Community College President

*Robert H. Soudel*



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# Campus Telephone Numbers

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Academic and Student Affairs, Vice President of .....	(540) 857-7313
Admissions Office and Registration.....	(540) 857-7231
Alliance for Excellence .....	(540) 857-7583
Bookstore .....	(540) 857-7334
School of Business, Engineering and Technology	
Business .....	(540) 857-7272
Engineering.....	(540) 857-7275
Campus Police .....	(540) 857-7979
Career and Employment Assistance.....	(540) 857-7298
Advising & Retention Services	
Advising.....	(540) 857-7237
Retention Services .....	(540) 857-7583
Dental Clinic .....	(540) 857-7221
Developmental Education .....	(540) 857-6323
Distance Learning .....	(540) 857-6202
Educational Foundation .....	(540) 857-7312
Emergency.....	(540) 857-7979
Facilities Management Services.....	(540) 857-7341
Financial Aid.....	(540) 857-7331
Financial & Administrative Services.....	(540) 857-7201
Greenfield Education Training Center.....	(540) 966-3984
Gymnasium Office .....	(540) 857-6068
Honors Institute .....	(540) 857-6240
Human Resources .....	(540) 857-7282
Information/Registration .....	(540) 857-8922
Institutional Effectiveness .....	(540) 857-6187
International Education .....	(540) 857-6021
Learning Technology Center.....	(540) 857-7250
School of Liberal Arts & Social Sciences.....	(540) 857-7271
Library.....	(540) 857-7303
Math Center.....	(540) 857-7250
President's Office .....	(540) 857-7311
Records Office.....	(540) 857-7236
School of Science, Mathematics and Health Professions	
Health Professions .....	(540) 857-7306
Science and Mathematics .....	(540) 857-7273
Student Activities .....	(540) 857-6326
Student Services (Dean's Office) .....	(540) 857-6348
Student Support Services.....	(540) 857-7286
Veterans' Affairs .....	(540) 857-7395
Workforce Development Services.....	(540) 857-6076
Writing Center .....	(540) 857-7250

# Academic Calendar

## 2013-2014

### Summer Term 2013

#### 10-Week Session

First Day to Enroll .....	April 12
First Day of Classes .....	May 16
Last Day to Register/Add a Class.....	May 22
Memorial Day Holiday .....	May 27
Last Day to Drop and Receive a Refund .....	May 28
Last Day to Apply for Graduation This Term .....	June 7
Break (no classes) .....	June 24
Last Day to Withdraw Without Grade Penalty.....	June 29
Independence Day .....	July 4
Last Day of Classes .....	July 30
Last Grade Reporting Day (9:30 a.m.).....	August 1

#### First 5-Week Session

First Day of Classes .....	May 16
Last Day to Register/Add a Class.....	May 20
Last Day to Drop and Receive a Refund .....	May 21
Memorial Day Holiday .....	May 27
Last Day to Apply for Graduation .....	June 7
Last Day to Withdraw Without Grade Penalty.....	June 6
Last Day of Classes .....	June 21
Last Grade Reporting Day (9:30 a.m.).....	August 1

#### Second 5-Week Session

First Day of Classes .....	June 25
Last Day to Register/Add a Class.....	June 27
Last Day to Drop and Receive a Refund .....	July 1
Independence Day .....	July 4
Last Day to Withdraw Without Grade Penalty.....	July 15
Last Day of Classes .....	July 30
Last Grade Reporting Day (9:30 a.m.).....	August 1

### Fall Semester 2013

#### 16-Week Session

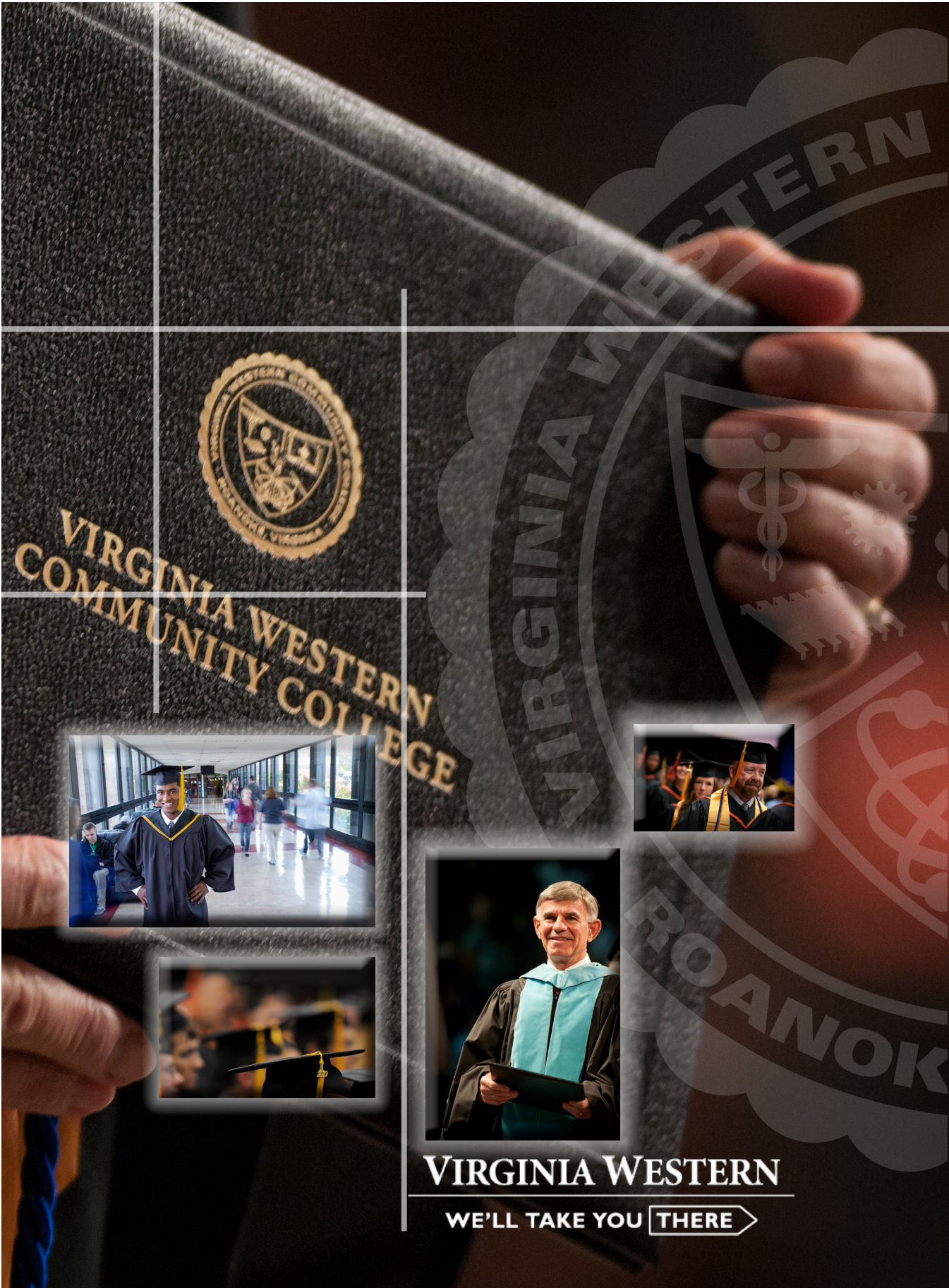
First Day to Enroll .....	April 19 (currently enrolled) June 24 (open enrollment)
First Day of Classes .....	August 21
Last Day to Register/Add a Class.....	August 27
Labor Day Holiday.....	September 2
Last Day to Drop and Receive Refund .....	September 9
Last Day to Apply for Fall Graduation .....	October 15
Last Day to Withdraw Without Grade Penalty ..	October 26
Faculty In-Service Day-No Day/Night Class ..	November 26
Faculty Research Day-No Day/Night Class ....	November 27
Thanksgiving Holidays .....	November 28-Dec 1
Last Day of Classes .....	December 10
Final Examinations .....	December 11 - 17
Last Grade Reporting Day (9:30 a.m.) .....	December 19

### Spring Semester 2014

#### 16-Week Session

First Day to Enroll .....	November 11
First Day of Classes .....	January 7
Last Day to Register/Add a Class.....	January 13
Last Day to Drop and Receive Refund .....	January 24
Last Day to Apply for Spring Graduation.....	February 10
Spring Break/Makeup* .....	March 2 - 9
Last Day to Withdraw Without Grade Penalty.....	March 22
Last Day of Classes .....	April 28
Final Examinations .....	April 29 – May 5
Last Grade Reporting Day (noon).....	May 6
Commencement Ceremony .....	May 9

\* Spring Break may be used as makeup days if too many instructional days are missed due to inclement weather.



VIRGINIA WESTERN  
COMMUNITY COLLEGE

**VIRGINIA WESTERN**

WE'LL TAKE YOU **THERE**



# College Information

## The College

Virginia Western Community College is a two-year public institution of higher education operating under a statewide system of community colleges. The College operates under the policies established by the State Board for Community Colleges and the Virginia Western Community College Local Board. It derives its charter from the General Assembly of Virginia through the Community College Act of 1966. The College is financed primarily by state funds; however, local governments and the Virginia Western Educational Foundation, Inc. also provide support.

The service region of the College includes Roanoke, Salem, Roanoke County, Craig County, southern Botetourt County, and northern Franklin County. Day, evening, and weekend classes are provided on a 70-acre campus located in southwest Roanoke. Classes are also offered at off campus locations in the area and through distance learning. The College was established in 1966 and has grown from an initial enrollment of 1,352 students to its current enrollment of nearly 13,000.

## Vision Statement

As a student-oriented center for lifelong learning, Virginia Western Community College will meet the needs of our diverse community by providing comprehensive educational programs and workforce development.

## Mission Statement

Virginia Western Community College provides affordable, accessible, and quality educational opportunities and workforce training to meet individual, community, and global needs.

Revised and approved by the Virginia Western Community College Local Board on May 21, 2009.



## Core Values

### Integrity

- Maintain the highest standards of honesty, fairness, and ethical conduct

### Excellence

- Encourage our students, faculty, and staff to strive for academic, professional, and personal excellence
- Pursue continuous improvement and high quality in staff, facilities, programs, and services

### Service

- Foster a community that demonstrates care and support for students, faculty, staff, and the citizens of our service region
- Promote service to others

### Community

- Respect and appreciate all cultures, learning styles, and ideas that reflect the community we serve
- Provide access to services and programs for all students who may benefit
- Promote a safe and secure environment that facilitates student learning



## Institutional Goals

In striving to fulfill its mission in the most effective way possible, the College has established the following goals. Virginia Western Community College will...

**Goal 1:** Promote effective teaching and learning through quality instruction, programs, and services designed to meet the needs of a diverse student body.

**Goal 2:** Cultivate relationships and partnerships with the educational community, business, industry, and government to create educational and workforce development opportunities to support economic vitality.

**Goal 3:** Practice sound stewardship of financial, physical, and technological resources to support high quality programs and services.

**Goal 4:** Foster a safe and secure campus environment that is conducive to learning.

Revised and approved by the Virginia Western Community College Local Board on May 21, 2009.

## Accreditation

Virginia Western Community College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call (404) 679-4500 for questions about the accreditation of Virginia Western Community College. Normal inquiries, such as admission requirements, financial aid, educational programs, etc., should be addressed directly to Virginia Western and not to the Commission's office.

The College is a member of the Virginia Community College System and is approved by the State Board for Community Colleges. Virginia Western is also approved by the State Council of Higher Education for Virginia. Certain curricula of the College are accredited by specialized accrediting organizations. They include business programs accredited by the Association of Collegiate Business Schools and Programs as well as health professions programs approved or accredited by the Virginia State Board of Nursing, the Joint Review Committee on Education in Radiologic Technology, and the American Dental Association Commission on Dental Accreditation.

## College Facilities

Virginia Western is divided by Colonial Avenue into North and South Campuses. The **South Campus** has eight buildings, four of which were acquired in 1966 from the Roanoke Technical Institute.

**Chapman Hall** houses Admissions, Records, Advising & Retention Services, Cashier, Financial Aid and Veterans Affairs and the Student Services Division Office.

**Craig Hall** contains the College Bookstore.

**Duncan Hall** contains classrooms and faculty offices.

**Webber Hall**, alongside Colonial Avenue, houses the laboratories for automated manufacturing,

Cisco, construction engineering, drafting, electrical, electromechanical, microcomputer systems, CAD, engineering; HVAC, and Welding; classrooms for accounting, management, paralegal studies, and the engineering and technology programs; faculty offices for accounting, management, and engineering and technology faculty; and the School of Business, Engineering and Technology Office. Student Support Services is temporarily housed on the second floor of Webber Hall while the Student Center is closed.

The **Humanities Building** on the South Campus opened in November 1994. The 30,000 square-foot building houses studios, gallery, lecture, and computer graphics lab spaces for the Art Department, as well as a photography darkroom and laboratory space, general classrooms, and a gymnasium.

The **Thomas Center for Advanced Studies** consolidates the four-year baccalaureate offerings on campus and houses the Old Dominion University programs for upper-level studies. The Hall Associates Career and Employment Assistance Center, Workforce Development/ Lifelong Learning, and the Student Activities office are temporarily housed in the Thomas Center while the Student Center is closed.

A 2,100 square foot greenhouse, along with a two-acre **Community Arboretum**, is also located on South Campus.

The **Student Center** is currently closed for renovations.

The **North Campus** has four buildings with a center courtyard referred to as the Court of Four Seasons. The campus was dedicated on October 23, 1969, and its buildings were named after influential people in education or in the development of the southwestern Virginia region.

**Anderson Hall** houses mathematics as well as additional space for the natural sciences. Anderson Hall contains laboratories, classrooms, and faculty offices.

The ground floor of **Brown Library** houses the Learning Technology Center, which includes the Writing Center, Math Center, Testing Center, Tutoring Center, and a computer lab. The first floor contains the library's Reference Department, magazines and newspapers, reading areas, computers, study rooms, study carrels, and a coffee bar. The Circulation Department is temporarily located on the first floor while the second floor of the library is being renovated. When the new second floor opens, it will house the Circulation Department, reading areas, study rooms, study carrels, computers, and the library's circulating and reserves collections of books and other items.

The **Business Science Building**, alongside Colonial Avenue, contains Information & Educational Technology Services, Printing Services, classrooms, laboratories, an open computer lab, and faculty offices for the Administrative Management Technology and Information Systems Technology. The Office of Instructional Technology and Distance Learning is temporarily housed on the third floor of the Business Science building while the Student Center is closed. A Campus

Commons area, drama and speech classroom, theater workshop, and the Whitman Theater are also located in this building on the ground level.

**Fishburn Hall**, the administrative building, houses the offices of the President, the Vice President of Academic and Student Affairs, the Vice President of Financial and Administrative Services, the Vice President of Institutional Advancement, Institutional Effectiveness, Human Resources, Payroll Office, Marketing and Public Information Office, Grants, and the Educational Foundation.

The **Fralin Center for Science and Health Professions** contains facilities for the Health Professions programs: Nursing, Dental Hygiene, Radiography, Radiation Oncology, and Phlebotomy as well as the Natural Sciences. The Dental Hygiene Clinic, which is open to the public and offers services at no charge, is also located in the Fralin Center.

The campus also has a bridge spanning Colonial Avenue that connects Webber Hall and the Business Science Building. This connection provides easy access to both North and South Campus.

A covered walkway connects Webber Hall to Chapman Hall, Craig Hall, and Duncan Hall. An enclosed walkway connects Duncan Hall to the Humanities Building. These walkways allow convenient access to the buildings on South Campus.

The College's six lighted tennis courts are located on North Campus.

## Workforce Development Services/Lifelong Learning

The Workforce Development Services/Lifelong Learning Division provides training, resources, skills information and assessment, and educational support services to the business community. Whether you have 5 or 5,000 employees, Virginia Western can customize training to suit your employment needs and training budget.

If your business or organization needs solution-focused training or employee development, our advisors can assist. We can come to you and your employees or train in our facilities located throughout the region.

Virginia Western's Workforce Development Services can provide state-of-the-art training and re-training resources, consultation and support services to your business. We customize classes to meet your schedule. Customized training can include computer training, customer service, supervisory skills, time management, and leadership skills, as well as various technical skills.

### Vision

The strategic vision of Workforce Development is to provide responsive and innovative approaches to the needs of our business community.

### Mission

The mission of Workforce Development Services/Lifelong Learning at Virginia Western Community College is to:

Provide substantive educational and training services to the citizens and employers within the College's service area

Develop sustainable partnerships with business, governments and the citizenry of the Roanoke region in order to promote the economic vitality of the area

Provide Work Keys® job assessments for schools, industry and the region

Our mission can be accomplished through adherence to the following priorities:

Efficient "just in time" training and educational delivery strategies

Business, industrial, and organizational personnel development partnerships

Commitment to the development of higher-level business and industrial training

Development of comprehensive curricula for nontraditional training and educational programs that incorporate technology and manufacturing standards

Promotion of continuous improvement of workforce development programs and services in an effort to increase participation of underemployed and underrepresented populations

Advancement of certified education and training programs for workforce development professionals

For additional information, contact:

### Workforce Development Services/Lifelong Learning

Virginia Western Community College  
Thomas Center - Main Campus  
P. O. Box 14007  
Roanoke, VA 24038-4007  
Telephone: (540) 857-6076

### Off-Campus Workforce Development Sites

#### Greenfield Education and Training Center

Greenfield Education and Training Center, located in Daleville, is a 40,000 sq. ft. development facility dedicated to serving the training and education needs of regional employers, employees, and local citizenry. The building houses advanced training and technological resources designed to deliver the best in technological programming. Phone: (540) 966-3984.


#### Roanoke Higher Education Center

Roanoke Higher Education Center is located in downtown Roanoke. The space is dedicated to serving workforce development needs through access to modern, well equipped computer labs. Phone: (540) 857-6076.

#### The Franklin Center for Advanced Learning & Enterprise

The Franklin County Center is located in Franklin County. The space connects job seekers and employers with workforce development services. Our partnership brings together service providers committed to serving the needs of residents, businesses, students, and the community. Phone: **(540) 483-0179 ext. 2116.**

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We provide affordable,  
accessible, and quality  
educational opportunities  
and workforce training to  
meet individual, community,  
and global needs.

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# Admissions

## General Admission

Individuals are eligible for admission to Virginia Western if they are high school graduates or the equivalent, or if they are 18 years of age or older and otherwise qualified to be a community college student, as demonstrated by taking the assessment in reading, writing and math. To demonstrate the ability to benefit, a student must place into Preparation for College English I (ENF 1) or higher on the assessment test. Students who score below the cut-off in this area, regardless of a high school diploma, will be permitted to enroll in non-credit classes only. The college also reserves the right to require placement test for any individual seeking to take credit classes.

Students not possessing a high school diploma or the recognized equivalent (General Equivalency Diploma or Home School Completion Certificate) must place into Preparation for College English I (ENF 1) or higher on the assessment test. High school students and home-schooled students interested in admission to the college should refer to the subsequent sections addressing the enrollment of these populations.

For all curricular students, a completed official application for admission with social security number and documentation of a diploma from an accredited high school or equivalent is required. Graduates who complete secondary school in a home school setting must provide a graduation date and may be required to provide documentation of coursework.

For all non-curricular students, a completed official application for admission is required with social security number. Non-curricular students must satisfy all required course pre-requisites, placement testing requirements, or both before enrolling in specific college-level courses.

Others with special circumstances may attend with approval of the Virginia Western Community College Admissions Committee. **For additional information, contact the Admissions Office at (540) 857-7231.**

The college reserves the right to evaluate and document special cases and to refuse or revoke admission if the college determines that the applicant or student poses a threat, is a potential danger, is significantly disruptive to the college community, or if such refusal or revocation is considered to be in the best interest of the college. The college also reserves the right to refuse admission for applicants that have been expelled or suspended from, or determined to be a threat, potentially dangerous or significantly disruptive by, another college. Students whose admission is revoked after enrollment must be given due process.

Possessing, brandishing, or using a weapon while on any college or VCCS office property, within any college or VCCS office facilities, or while attending any college or VCCS educational or athletic activities by students is prohibited, except where possession is a result of participation in an organized and scheduled instructional exercise for a course, or where the student is a law enforcement professional. By proceeding with the application process, you acknowledge and agree to abide by this policy if accepted to a VCCS college.

## Admission of High School Students

Dual enrollment courses are offered at many high schools in the Virginia Western Community College service area. These courses allow a student to be enrolled in, and receive credit for, college courses and high school courses simultaneously. The courses are taught at the college level by instructors who meet the academic requirements to teach a college course and are offered at the high school following the high school schedule. Enrollment in these courses is initiated through the student's high school and is approved by the college's Dual Enrollment Coordinator.

Virginia Western will also consider the admission of high school juniors and seniors enrolled in a public or private secondary educational program. The following admission and registration procedures have been developed to assist these students in meeting their educational goals:

1. Complete a Virginia Western Application for Admission and Application for Virginia Domicile for students requesting in-state tuition;
2. Submit a completed High School/Home School Enrollment Approval form to the college Admissions Office;
3. Complete an on-campus placement test prior to enrollment in classes;
4. See an Advising Specialist prior to each subsequent registration for course approval.

According to Virginia Community College System policy, dual enrollment is restricted to high school juniors and seniors and home school students studying at the high school junior or senior levels. All students admitted under this section must demonstrate readiness for college, meet the applicable college placement requirements and address all other college admission criteria. Home school 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 school for religious exemption. Documentation of parental permission is required for all dual enrollment students. Because enrolling freshman and sophomore students is considered exceptional, the college-

## VIRGINIA WESTERN COMMUNITY COLLEGE

ready status of each prospective freshman and sophomore student will be treated on a case-by-case basis.

Enrollment of freshman and sophomore students will require the approval of the president or his designee. Placement testing will be required prior to enrollment. Other conditions, as deemed appropriate by the president and/or dean, may also apply.

*A Request for Special Circumstance Admission Form* must be completed by the freshman and sophomore level applicant to determine admission to the college.

Federal regulations do not permit financial aid to be awarded to students who are simultaneously enrolled in public or private secondary educational programs. In addition, high school students are not eligible to enroll in a curriculum of study at the college until they have earned a high school diploma or GED, or are beyond the age of compulsory school attendance.

### Admission of Home School Students

Virginia Western will consider the admission of junior and senior level students enrolled in a home school program. The following admission and registration procedures have been developed to assist home school students in meeting their educational goals:

1. Complete a Virginia Western Application for Admission and Application for Virginia Domicile for students requesting in-state tuition;
2. Provide a copy of a home school agreement approved by the school district or a letter declaring home school for religious exemption. Documentation of parental permission is required;
3. Complete an on-campus placement test prior to enrollment in classes;
4. See an Advising Specialist prior to each subsequent registration for course approval.

According to Virginia Community College System policy, dual enrollment is restricted to high school juniors and seniors and home school students studying at the high school junior or senior levels. All students admitted under this section must demonstrate readiness for college, meet the applicable college placement requirements and address all other college admission criteria. Home school 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 school for religious exemption. 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 treated on a case-by-case basis.

Enrollment of freshman and sophomore level students will require the approval of the president or his designee. Placement testing will be required prior to enrollment. Other conditions, as deemed appropriate by the president and/or dean, may also apply.

*A Request for Special Circumstance Admission Form* must be completed by the freshman and sophomore level applicant to determine admission to the college.

Federal regulations do not permit financial aid to be awarded to students who are simultaneously enrolled in public or private secondary educational programs or home school. In addition, home school students are not eligible to enroll in a curriculum of study at the college until they have earned a high school diploma or GED, or are beyond the age of compulsory school attendance.

### Admission of Returning Students

Returning students who have not been enrolled in credit courses at the college during the past three years must reapply by resubmitting a Virginia Western Application for Admission prior to registration. Please direct all inquiries concerning applications to the Admissions Office.

### Admission of Transfer Students/Transfer Credit

Transfer students must submit a Virginia Western Application for Admission and should have transcripts from all previous institutions attended sent to the Admissions Office. Usually a transfer student who is eligible to re-enroll at the last college of attendance will be eligible for admission to Virginia Western. Transfer students who are ineligible to return to a college previously attended will generally not be eligible to enroll at Virginia Western until at least one semester has elapsed. Special conditions for the admission of such students, including placement on probation, will be imposed as deemed appropriate by the college.

Students wishing to have their transcript evaluated for possible transfer credit must complete a Request for Transcript Evaluation form in the Admissions, Records, or Advising & Retention Services office. No credit will be given for courses with grades lower than a "C" when students transfer from other colleges. 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 their curriculum.

In determining transfer credit, course work applicable to the curriculum at Virginia Western will be accepted if the work completed at an institution is applicable to the student's program at the college, if the course/content/level of instruction is at least equal to the content/level at Virginia Western, and a comparable course is/has been taught within the Virginia Community College System.

Credit may be transferable from colleges and universities that are accredited by SACS or other Commission on Colleges regionally accredited associations, or by the Commission on Higher Education. A student who is requesting transfer credit from an institution that is not recognized by a regional accrediting agency or association will need to make an appointment with the appropriate academic dean for the curriculum in which they are enrolled. The student will need to provide the dean with the

following information for each of the courses he/she wishes to have an award of credit: 1) course description, 2) course syllabus, and 3) faculty credentials of the instructor who taught the course.

Transfer courses are not calculated into the student's Virginia Western GPA computation.

## Admission of International Students

In addition to the general admission requirements of the college, all international students must demonstrate proficiency in both written and spoken English. An I-20 may not be issued less than 60 days from the beginning of the next semester. Students must also present proof of health insurance before registering for classes.

Proficiency in written English is required. Written proficiency may be proven by a combined total score of 500 or greater on the TOEFL (Test of English as a Foreign Language) written test, a score of 173 or greater on the TOEFL computer-based test, a score of 61 or greater on the TOEFL Internet-based test, or a score of 400 or greater on the SAT verbal section. Testing agencies should report TOEFL or SAT scores using Virginia Western code 5868.

Current policies of the U.S. Department of Homeland Security state that international students must prove that financial responsibility will be met. All other immigration policies must also be satisfied.

## Admission of Senior Citizens – Citizens 60 Years of Age or Older

Senior citizens are encouraged to take advantage of free tuition provided for by the Senior Citizens Higher Education Act of 1974. Senior citizens who are Virginia residents and who had a taxable individual income not exceeding \$15,000 for Virginia income tax purposes for the year preceding enrollment may register for and enroll in courses for academic credit on a tuition-free basis. Senior citizens registering under the provisions of this Act must complete a Senior Citizen Tuition Assistance Agreement form prior to the class starting date. In addition, senior citizens registering under the provisions of this Act may register only after tuition-paying students are accommodated, unless the senior citizen has completed 75 percent of their degree requirements at Virginia Western. All senior citizens, regardless of income, may audit credit courses and take non-credit courses free of charge.

Senior citizens who wish to confirm space in a class can also register and pay as regular students. However, no refunds will be issued.

Additional information about enrollment for senior citizens may be obtained from the Admissions Office.

## Admission of Students on the Sexual Offender Registry

Section 23 - 2.2:1 of the *Code of Virginia* requires that the VCCS send enrollment information to the Virginia State Police concerning applicants to institutions of higher education. This information is transmitted electronically and compared against the Virginia Criminal Information Network Crime Information Center Convicted Sexual Offender Registry. Language on the web application informs applicants that their information is being transmitted to the State Police.

In the event that the State Police determine that an applicant to Virginia Western Community College is listed on the Sex Offender Registry, the State Police will notify Virginia Western. When the college receives such a notification, the following procedures apply:

- A. The applicant will be denied admission to Virginia Western in accordance with its admission policy as published in its catalog:  
The College reserves the right to evaluate and document special cases and to refuse or revoke admission to applicants when considered advisable in the best interest of the college.
- B. If the applicant registers for classes and becomes a student before the college received notification from the State Police, the student will be immediately informed that he/she is being dropped from classes and will receive a refund.
- C. An applicant may invoke his/her right to an appeal process.

## Appeal Process for Denial of Admission or Withdrawal for Convicted Sex Offender

When a convicted sex offender is denied admission to or is administratively dropped from classes at Virginia Western Community College, he/she may invoke the following appeal process:

- A. The applicant or withdrawn student will receive a letter from the Dean of Student Services stating his/her denial of admission or administrative drop from classes.
- B. The applicant/dropped student may write a letter of appeal to the Dean of Student Services in which he/she provides the following information:
  1. Disclosure of the nature of the offense for which he/she has been convicted;
  2. Justification for consideration of admission/reinstatement;
  3. Statement acknowledging his/her understanding that his/her identity and status as a convicted sex offender will be publicized on the college campus in accordance with federal and state law if he/she is admitted or reinstated.

**Note: If a student is appealing a denial of admission or an administrative drop, he/she must submit the letter of appeal to the Dean of Student Services within seven (7) calendar days of the receipt of the letter.**

- C. The Appeals Committee will review the information submitted and make a decision by a simple majority vote within fourteen (14) calendar days of receiving the letter of appeal. The Dean of Student Services will serve as the convener of the panel and will be a member of the panel.
- D. The Dean of Student Services will inform the applicant/dropped student by letter of the decision of the appeals panel. The decision of the appeals panel shall be final.

### Admission of Students on Probation, Suspension, or Dismissal

Virginia Western will consider for admission those applicants who were in poor academic standing at the college last attended.

#### Academic Probation

Applicants on academic probation may be admitted with academic restrictions.

#### Academic Suspension

Applicants on academic suspension are eligible after one semester has passed and may be admitted after meeting the following conditions:

1. Completion of the Petition for Admission/Reinstatement;
2. Completion of appropriate placement tests;
3. Upon recommendation of a Virginia Western Advising Specialist;
4. With approval from the Registrar or Dean of Student Services.

All conditions must be satisfied prior to the begin date of the desired term of entry.

Exceptions to the waiting period of one semester may be made if one of the following conditions exist:

1. Noncurricular students wishing to take courses that are primarily job training in nature;
2. Students who feel they have mitigating circumstances should complete the Petition for Admission/Reinstatement and direct a letter to the Registrar or Dean of Student Services asking for acceptance. The letter must address the following:
  - a. The course(s) desired;
  - b. The goal or curriculum that will be pursued;
  - c. A statement explaining the academic difficulty that led to suspension;
  - d. An explanation of what has been done to enhance the student's chances for success.

#### Academic Dismissal

Applicants who have been academically dismissed may appeal to the Registrar or Dean of Student Services for admission if they feel mitigating circumstances warrant consideration. Academic dismissal normally is permanent unless, with good cause, students apply and are accepted under special consideration

for admission by the Registrar or Dean of Student Services. Completion of appropriate placement tests may be required. A Petition for Admission/ Reinstatement and formal written appeal should be directed to the Admissions Office containing the following:

1. The course(s) the applicant wishes to take;
2. The curriculum the applicant wishes to enter and the applicant's educational goal;
3. A statement describing the academic difficulty that led to dismissal;
4. A strong case on behalf of the applicant as to why success is expected in the third or more attempt at college level education. These applicants may be requested to provide additional information on an individual basis.

All documents must be submitted two weeks prior to the begin date of the desired term of entry.

**Note:** In all cases, Virginia Western reserves the right to deny admission to anyone who the college determines is unable to benefit from attendance at the institution.

### Classification of Students

All students are classified according to the following categories:

**Curricular** A student working toward completion of an associate degree, certificate, or career studies program.

**Non-curricular** (1) A student auditing course(s) for no credit; (2) a high school or home school student enrolled in a college course; or (3) a student not enrolled in an associate degree, diploma, or certificate program who may be taking a course(s) for credit.

**Full-time** A student is considered full-time if carrying 12 or more course credits. Note: A student wishing to complete a degree on schedule should take 15–17 credits per semester.

**Part-time** A student is considered part-time if carrying fewer than 12 course credits.

**Freshman** A student is classified as a freshman until 30 course credits are completed in a designated curriculum.

**Sophomore** A student is considered a sophomore after 30 or more course credits are completed. Transfer credits are included providing they meet requirements of the student's curriculum.

### Application Procedure

All applicants must submit a Virginia Western Application for Admission.

Applicants may be required to complete an on-campus placement test prior to enrollment in certain classes or programs. The placement test is used to assist in placing students at the appropriate level of instruction.



Applicants who do not meet academic requirements for a specific course or curriculum may be required to complete a developmental course or program.

Applicants who wish to enter a program of study (curriculum) should provide official transcripts from all high schools, colleges, and universities attended and are required to meet with an Advising Specialist prior to admission to: (a) discuss educational interests, (b) determine needed placement tests, (c) plan admission to a specific curriculum, and (d) examine other reasonable standards to ensure that applicants possess the potential to meet curriculum requirements.

Current year high school graduates are strongly encouraged to provide official copies of their high school transcripts.

Official transcripts are required in order to be considered for admission in the Computed Tomography Imaging, Dental Hygiene, Nursing, Practical Nursing, Radiation Oncology, or Radiography curricula.

Applicants seeking admission to these Health Professions programs must meet additional specific entrance requirements. Applicants interested in one of these programs should meet with the health professions information specialist and complete specific requests for entry into the curriculum.

Non-curricular students must complete an official application for admissions with social security number and satisfy all required course pre-requisites, placement testing requirements, or both before enrolling in specific college-level courses.

## Admissions Requirements

Virginia Western Community College reserves the right to deny admission to a student who does not demonstrate the ability to benefit from college-level credit courses. To demonstrate the ability to benefit, a student must place into Preparation for College English I (ENF 1) or higher on the assessment test. Students who score below the cut-off in this area, regardless of a high school diploma, will be permitted to enroll in non-credit classes only.

Please note that students not possessing a high school diploma or the recognized equivalent (General Equivalency Diploma or Home School Completion Certificate) are ineligible for financial aid.

## Alternative Forms of Credit

### Advanced Standing and Previous Completion Credit

Students may be awarded college credit if they are enrolled in a curriculum of study at the college and can demonstrate previous educational study, training, or work experience that entitles them to credit for specific courses applicable to

their program of study. Documentation for special training or experience must be provided and included in the student's file. The supporting documentation must include samples of work or projects completed, certificates, letters from employers, etc., to assist the division in credit determination. Students wishing to be awarded previous completion credit for a specific course should contact the appropriate division office in which the course is taught. The college reserves the right to place a time limit on prior learning experiences for which advanced standing may be granted. The college also has a time limit for accepting credit for technical courses taken previously at Virginia Western or other institutions. The Registrar, in consultation with the appropriate faculty, will determine if courses taken or learning experiences completed more than five years ago can be used in your current program of study.

Virginia Western Community College does not award credit for courses taken as noncredit. If a noncredit course leads to credentialing, then the credential could be used to provide credit as outlined above.

### Credit-by-Examination

In disciplines where no CLEP or AP exam is accepted by Virginia Western, locally developed department "challenge" exams may be a means of earning college credit for prior learning by demonstrating satisfactory academic competency in a particular subject. In order to be eligible for credit-by-exam, the student must be admitted to Virginia Western as a curricular student, and the request must be made with at least two weeks prior notice of the requested exam date. Credit-by-exam is not available for all courses taught at Virginia Western. Requests for departmental exams must be submitted to the appropriate academic office. Each departmental exam may be taken only one time for a course, and the student must attain a "C" or higher in order to receive credit for the examination. An exam may not be used to remove an "I," "F," "X" or "W," or to improve a grade already earned. In addition, a student may not challenge a lower level course in a subject which he or she has previously earned credit. Credits awarded by challenge examination may apply toward graduation requirements and will become part of the student's permanent record. However, the grade earned on the exam will not be calculated into the student's cumulative GPA. The grade earned on a department exam will be recorded on the student's official transcript.

### CLEP, Advanced Placement, and International Baccalaureate

In order to be awarded CLEP, AP, or IB credit at Virginia Western, the student must be enrolled in a curriculum of study. Specific information about CLEP, AP, IB and other external credit can be found on the Virginia Western home page or in the Records, Admissions, and Advising and Retention Services office at Virginia Western.

CLEP is a national program of credit-by-exam that offers students the opportunity to attain college credit for prior academic achievement. Virginia Western accepts most of

the CLEP offered exams and uses the American Council on Education recommended minimum score of 50 for awarding CLEP credit. (Credit for foreign language, Level 2 credit requires a higher score.) An official copy of the CLEP transcript must be submitted to the Virginia Western Records Office directly from the CLEP organization in order to obtain credit.

Many area high schools offer Advanced Placement (AP) or International Baccalaureate (IB) programs to their students giving them the opportunity to complete college level work while attending high school. A minimum AP score of 3 is required for credit at Virginia Western. Students who have completed the IB Standard Level Certificate with a score of 4–7 may be granted advanced standing credit for a variety of courses. An official copy of the AP or IB transcript must be submitted to the Records Office in order to obtain credit.

### Military Credit

A student's military training, courses, and occupational specialty may all be considered for college credit. As a participating member of Servicemembers Opportunity Colleges (SOC), Virginia Western follows the American Council on Education's (ACE) Guide to the Evaluation of Educational Experiences in the Armed Services in determining the value of learning acquired in military service when applicable to the service member's program of study. Military service credit in the occupational/technical areas (i.e. Engineering, Health Professions) may require approval by the appropriate school dean prior to award. In order to receive credit for military training, the student must be enrolled in a curriculum of study, submit a military transcript, which includes the ACE recommended credit and initiate a request for evaluation to the Records Office. If a student submits only a copy of their DD214 and no military transcript, only credit for HLT 110 will be awarded. An honorable discharge must have been awarded to receive credit. Students who have completed basic training, regardless of the date of military experience, may receive up to three credits for health or physical education. The college also uses CLEP, DANTES, and Advanced Placement (AP) credit-by-examination for awarding credit to service members.

### Refunds, Credits, and Reinstatement as a Result of Military Service

In accordance with the Code of Virginia, Section 23-9.6:2 and the corresponding SCHEV Virginia Tuition Relief, Refund, and Reinstatement Guidelines, Virginia Western Community College provides for the tuition relief, refund and reinstatement of students whose service in the uniformed services has required their sudden withdrawal or prolonged absence from their enrollment due to a call or order to active duty, of more than 30 days, after the beginning of a semester. See website for detailed information: <http://www.viriniawestern.edu/admissions/tuition/refunds.php>.

### Student Permanent Record

The Records Office at Virginia Western maintains records on each student attending, or who has attended, the college. A record of the student's grades and courses taken will be permanently maintained in an electronic format. A student's file will be maintained during the student's enrollment in the college, but will be destroyed after the student has not been in attendance for at least three years. The student's file may contain the following:

1. High school transcripts;
2. Other college transcripts and evaluations;
3. Correspondence with student;
4. Grade Change forms;
5. Course Substitution and Advanced Standing forms.

The Records Office is in charge of student records. Administrators, Advising Specialists, and faculty who need to see student records to assist in the student's academic pursuits may have access to these records. College personnel involved in institutional research may be permitted access to records on a need-to-know basis. All others are required to have written permission from the student.

Eligible students have the right to inspect and review their educational records within 45 days of submitting a written request to Virginia Western. The student must submit the request to the Records Office and identify the record(s) they wish to inspect. The Records Office will then make arrangements for access and notify the student of the time/place where the records may be inspected. The college is not required to supply copies of records unless there are specific reasons (i.e., great distance from the college) that prevent the student from reviewing the records.

A student may also ask the college to amend a record believed to be inaccurate or misleading. If the school decides to not amend the record, the eligible student has a right to a formal hearing. If, after the hearing, the school still chooses to not amend the record, the eligible student has the right to place a statement with the record commenting on the contested information.

### Release of Directory Information

Directory information (name, address, e-mail address, telephone number, dates of attendance, major field of study, number of credit hours enrolled, grade level, degrees received, awards and honors, photos, participation in clubs and activities, weight/height of members of athletic teams, most recent educational institution) may be released upon request at the discretion of the college. Although the college has deemed these items Directory Information, faculty and staff do not generally release a student's telephone number or address without the student's written authorization. A student may formally request that Virginia Western not release directory information on their

behalf by submitting a Student Request for Non-Disclosure of Records to the Records Office or by accessing their on-line Student Center account and changing their privacy settings. When this request is made, a notation will be flagged in the Student Information System, and every reasonable effort will be made to safeguard the confidentiality of such information. In addition, once this request has been made, the student will not be allowed to request an official or unofficial transcript via the Web in the college's student information system. Rather, the student will be required to submit written authorization, with proof of identity, to the Records Office prior to releasing a transcript. In addition, the college will not respond to calls from potential employers to verify enrollment for students who have made this request without the student's written authorization.

**Note:** The college reserves the right to publish the names of students who receive academic honors.

## FERPA

The Family Educational Rights and Privacy Act (FERPA), also known as the Buckley Amendment, is a federal law that was enacted in 1974 to protect the privacy of students and their educational records. The intent of the legislation is to protect the rights of students and to ensure the privacy and accuracy of educational information. The Act provides for the right of eligible students and parents to:

- Inspect and review their educational records;
- Request an amendment to records that are believed to be inaccurate;
- Require the school to obtain written consent prior to disclosure of personally identifiable information, except those items noted herein;
- File a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with FERPA.

"Educational Information" refers to any record maintained by an educational institution, including files, documents, and materials of any type which contain information directly related to students, and which allows a student to be identified.

What is not included in the Educational Information is:

- Sole possession records or private notes held by educational personnel which are not accessible or released to other personnel;
- Law enforcement or campus security records which are solely for the law enforcement purposes;
- Records related to individuals who are employed by the institution;

- Records related to treatment provided by a physician, psychiatrist, psychologist, or other recognized professional;
- Records of an institution which contain only information about an individual obtained after that person is no longer a student at the institution (i.e., alumni records).

Students who are protected under FERPA are those students who are currently enrolled or formerly enrolled, regardless of their age or status in regard to parental dependency. Students who have applied but have not attended an institution, and deceased students do not come under FERPA guidelines.

Upon request, Virginia Western discloses education records without the student's consent to officials of another school in which a student seeks or intends to enroll, or where the student is already enrolled, so long as the disclosure is for purposes related to the student's enrollment or transfer.

Student educational information may also be used without a student's written approval in educational research conducted by Virginia Western instructors and other school officials with legitimate educational interests.

## Parents Rights Under FERPA

Parents lose their FERPA rights when their child turns 18 or starts attending or taking classes in college (or any post-secondary institution), whichever happens first.

Under 20 USC 1232g(d) all rights of parents (including the right to inspect educational records and to consent to the disclosure of personally identifiable information) transfers to the student at the earlier of: 1) the attainment of age 18, or 2) attendance at an "institution of postsecondary education."

However, as stated later in this document, parents of a financially dependent student (defined by the IRS) may obtain their child's records, but must submit proof of the student's dependency (via most recent federal tax form) prior to receiving the requested information.

As far as FERPA is concerned, a student's spouse is an "unrelated third party," and therefore, has no rights under FERPA. While there is an exception that allows a college to disclose educational information to parents of a financially dependent student in the absence of consent, there is no such exception for spouses, even if the spouse is supporting the student.

## Frequently Asked Questions

### What do I need to do to enroll for classes at Virginia Western?

New students apply online at [www.virginiawestern.edu](http://www.virginiawestern.edu). Students who have not been enrolled for more than three years must reapply to the college. Most students can register themselves online once they have met with an Advising Specialist or are in good standing.

### When does registration begin and end?

The registration period for regular session classes normally begins about four weeks before the start of each semester and continues throughout the first week of classes. Specific dates are published online at [www.virginiawestern.edu/academics/calendar.php](http://www.virginiawestern.edu/academics/calendar.php) or by calling Admissions at (540) 857-7231.

### Can I register and pay my tuition without coming to campus?

Eligible students can register and pay tuition online at <https://vw.my.vccs.edu>. Students may also mail a check to the college; checks must have the correct amount and should include the student's social security number. Cash should not be mailed.

### How and when can I receive a tuition refund?

Students may drop a class online at <https://vw.my.vccs.edu>. Students may also drop in person during the refund/drop period by submitting an add/drop form to the Admissions Office. The refund/drop deadline can be found online at [www.virginiawestern.edu/academics/calendar.php](http://www.virginiawestern.edu/academics/calendar.php) or by calling (540) 857-7231. Students who wish to drop a class in person must do so during normal operating hours. For hours of operation, please call (540) 857-8922. Most refunds are processed after the last day to drop, and it normally takes 2-4 weeks for refunds to be processed through the state treasurer in Richmond. Refunds are mailed directly to the student. Students who withdraw from a class after the refund/drop period cannot receive a tuition refund (or a tuition credit) for the course.

### What can I do if a class I need is closed?

Students are registered on a first-come, first-serve basis. Some classes have firm size limits, such as science lab courses. Students can view class information online, which will let them know if a class has re-opened. This information may also be obtained from the academic school offering the class. In some instances, another section may be opened to accommodate additional students. Academic school offices will be responsible for making this decision. Also, some seats may become available after the deadline for deferred tuition payment.

### Where can I get a catalog?

Catalogs are sold at the cashiers' office located in Chapman Hall and in the Bookstore located in Craig Hall. Catalogs can also be obtained by mail by phoning the Admissions Office. The cost is \$5.00.

### How can I get a transcript sent?

A student may send a written request (a note with the student's name, address, telephone number, student ID, social security number, signature, and the address where it is to be mailed), or stop by the Records Office to obtain a form. They may also request a transcript online at <https://vw.my.vccs.edu>. There is no charge for this service. The Records Office is located in Chapman Hall (C107).

### Does the college provide employment assistance to students?

Yes. The college provides career counseling and employment assistance in The Hall Career and Employment Assistance Center (Thomas Center).

### Does the college provide assistance with housing?

Yes. The Student Activities Office provides a referral service for off-campus apartments and rooms for rent. The Student Activities Office is located in the Thomas Center, on South Campus.

VIRGINIA WESTERN

WE'LL TAKE YOU  THERE

What do you  
need to enroll  
for classes at  
Virginia Western?



# Expenses

## Tuition

Current tuition information can be obtained from the Admissions Office and/or online at [www.virginiawestern.edu/admissions/tuition](http://www.virginiawestern.edu/admissions/tuition).

Student tuition is paid on a credit-hour basis. The typical full-time academic load is between 15–17 credits. College approval is required to enroll for more than 18 credits per semester. (Exception: 18 credits plus one credit for orientation does not require approval.)

Payment of tuition enables the student to use the Bookstore and other facilities of the College.

The State Board approves all tuition and fees for community colleges and has the authority to change any and all tuition and fees without prior notice.

## Student Responsibility to Avoid Tuition Obligation Related to Dropping a Course

Students who enroll for courses after the official last date to pay for the term must pay their tuition at the time of enrollment. Failure to pay tuition does not guarantee that the student will be automatically dropped from the course. It is the student's responsibility to officially drop all unpaid courses prior to the beginning date of the course. Students may drop classes online through their MyVWCC account. Failure to drop courses may cause the student's record to be incorrectly flagged with an outstanding financial obligation. Outstanding financial obligations will prevent enrollment for future terms.

## Tuition Refunds

Students shall be eligible for a refund for those credit hours officially dropped during the drop period for the session. The refund will be at the full credit rate for those credits dropped. After the drop period for the session has passed, there will be no refund unless there is a documented extreme, mitigating circumstance which could provide an exception to the policy.

Students may drop a class online at <https://vw.my.vccs.edu>. Students may also drop in person during the refund/drop period by submitting an add/drop form to the Admissions Office. The refund/drop deadline for regular session classes is published online at [www.virginiawestern.edu/academics/calendar.php](http://www.virginiawestern.edu/academics/calendar.php). The refund/drop deadline for all other session classes is available by calling (540) 857-7231. If the refund/drop deadline for a class falls on a non-business day and the student prefers to drop the class in person, the drop must be submitted to the Admissions Office during normal operating hours prior to the refund/drop deadline. For hours of operation, call (540)

857-7231. Most refunds are processed after the last day to drop, and it normally takes 2–4 weeks for refunds to be processed through the state treasurer in Richmond. Refunds are mailed directly to the student.

## Eligibility for In-State Tuition

For purposes of in-state tuition, a Virginia resident is defined by state law as one who has lived in Virginia, with the intent to remain a Virginian, for a period of at least one year prior to the beginning of the first official year of class within the semester or term of the program for the institution for which he/she is enrolling. The burden of proving eligibility for in-state tuition rates rests with the applicant. All applicants to the College who claim entitlement to Virginia in-state tuition rates must complete the domiciliary items included with the application form and provide whatever documentation may be deemed necessary.

The appeals process for applicants determined ineligible for in-state tuition rates is as follows:

1. A member of the admissions staff will make initial determination.
2. Intermediate review will be conducted, upon appeal, by the College Domicile Officer.
3. Final administrative review will be made by an appeals committee.



Students classified as out-of-state who can provide clear and convincing evidence that they were eligible for Virginia domicile on the first day of class for a term may have their status changed for the current term. Students should follow the domicile appeal policy noted above.

In the event that a student's circumstances change after a term has begun, the student's status may be eligible for reclassification. This reclassification shall be effective for the next academic term or the term following the date of the application for reclassification.

It is the responsibility of the student to submit a petition for reclassification in status to the college's Admissions Office. The college will not assume responsibility for initiating such an inquiry independently.

### Books and Materials

Students are expected to obtain their own books, supplies, and consumable materials needed in their studies. It has been estimated that the cost of these items will average approximately \$450.00 per semester for the full-time student. This cost can vary with the curriculum and is subject to change since it is based on publishers' and suppliers' listed prices.

The Bookstore sells textbooks, school supplies, art material, computer software, and general merchandise.

### Rules for Bookstore Refunds

The Bookstore Managers are the only authorized persons who may accept books for refund. Books returned for refund are subject to inspection and must be in mint condition. If the books were purchased in shrink-wrap, the books must still be in the unopened original wrap with no markings or other damage. The books must be presented to the Bookstore Manager within the first two weeks of fall or spring semester to receive a refund. The return period for summer semester is the first week. Refunds or credits are made according to original payment. No refunds are issued without a receipt. All software and computer sales are final.

### Suspension of Student for Nonpayment

A student's continued attendance at the college is dependent upon proper settlement of all debts owed the institution. Should the student fail to satisfy all amounts due for tuition and fees, college loans, college fine, or other debts owed the college, the student may be suspended. If suspended, the student will not be allowed to register in any succeeding semester until all current debts owed to the college have been satisfied.

Students who damage or lose school property are expected to pay charges for such losses.

No transcripts, certificates, diplomas, or degrees will be issued, nor will students be permitted to complete registration, until accounts are satisfied with the Business Office, Bookstore, Library, and other college offices as appropriate.



# Financial Aid

## How and When to Apply

The first step to applying for financial aid is completing the Free Application for Federal Student Aid (FAFSA). This is a federal application used to determine your eligibility for various forms of financial aid from both public to private funds including grants, scholarships, student loans, and work-study funding.

The FAFSA can be submitted directly over the internet at [www.fafsa.ed.gov](http://www.fafsa.ed.gov). Students are strongly encouraged to use the online application. This ensures the quickest processing by the Department of Education. A paper application can also be obtained by calling **1-800-4-FED-AID**. Using a paper application extends processing time. A new financial aid application must be submitted for each academic year of enrollment. Institutional and other locally sponsored scholarship programs often use the FAFSA data as a tool to determine eligibility in those programs, in addition to academic performance. Candidates for these scholarships should also submit a FAFSA.

Many sources of financial aid have limited funding, so the date of application is a critical factor. An application may be submitted as early as January 1 (e.g., January 1, 2013, for the 2013–2014 academic year). Primary consideration is given to students whose applications are received and processed by the **priority date** published on the VWCC Financial Aid web site (<http://www.viriniawestern.edu/financialaid/deadlines.php>). Please submit your financial aid application materials as early as possible.

Pell Grant support can be provided to eligible students throughout the academic year. Pell eligible students whose eligibility is determined prior to the semester and who have a Pell award that exceeds the amount of tuition and fees can charge books and supplies prior to the beginning of the semester at the VWCC bookstore. However, tuition/book coverage at the beginning of a semester requires submission of a valid FAFSA, with additional documentation as required by the **priority date**. To allow for processing time, a student should complete and submit the FAFSA at least six to eight weeks before the beginning of the semester. A student whose Pell eligibility is determined after the start of the term may need to pay for books and supplies out of pocket and receive a reimbursement, assuming the Pell award exceeds the cost of tuition and fees.

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

## Eligibility for Financial Aid

Each student's eligibility for financial aid is determined individually upon receipt of the FAFSA data, and additional documentation if required. All students must have a high school diploma, GED, or home school equivalent and meet other requirements for aid eligibility. Once eligibility is determined and an award is granted a student must continue to meet satisfactory academic progress to maintain eligibility. The financial aid office staff is available to answer any questions regarding student eligibility.

## Types of Financial Aid

There are four basic types of financial aid: grants, scholarships, work-study, and student loans. A grant consists of financial support for which neither work nor repayment is required, provided the student completes the coursework. Scholarships are funds that are available to students who fit a particular profile. These funds are generally not expected to be repaid. Federal Work-Study involves actual employment, either on-campus or at an approved off-campus public or private nonprofit agency. Student loans are a form of financial aid that must be repaid.

## Financial Aid Programs

**Federal Pell Grant** - The Pell Grant is a federal aid program based on financial need. Completion of the FAFSA is required to determine eligibility. A recipient must be enrolled in an eligible program of study and cannot have previously received a bachelor degree. Amounts awarded are based on the Expected Family Contribution which is determined by the FAFSA. In the 2013-14 award year an eligible full-time student may be awarded up to \$5,645 for an academic year. Awards are for both direct and indirect educational expenses.

### Federal Supplemental Educational Opportunity Grant (FSEOG)

- FSEOG is a federal program designed to assist students with financial need. Priority is given to Pell Grant eligible students. Completion and submission of a FAFSA is required to determine eligibility for this fund.

### College Scholarship Assistance Program Grant (CSAP)

- The CSAP program is administered by the State Council of Higher Education for Virginia and is designed to assist students with exceptional financial need. To qualify for an award, a student must be a domiciliary resident of Virginia and must be enrolled on at least a half-time basis.



**Commonwealth Award Program** - COMA is a state program under which students with financial need can receive support not to exceed their tuition and fees. To qualify, a student must be a domiciliary resident of Virginia and must be enrolled on at least a half-time basis.

**Part-Time Tuition Assistance Program (PTAP)** - PTAP is a state aid program similar to the Commonwealth Award Program and it cannot exceed the cost of tuition and fees. It is directed to students enrolled for 1–8 credits per semester.

**Virginia Community College System Grant (VCCS)** - VCCS is a state aid program under which students with financial need can receive an award that assists with tuition, fees and books. To qualify, a student must be a domiciliary resident of Virginia.

**Virginia Guaranteed Assistance Program (VGAP)** - VGAP is a state program under which first-time freshmen with financial need can receive an award that assists with tuition, fees and books. To qualify, a student must be a dependent applicant, enrolled on a full-time basis, and demonstrate a high school grade point average of at least 2.50. Second year awards are made to students in the program that maintain a college grade point average of 2.0.

**Virginia Public Service Orphans Education Program** - This program provides tuition support for children of law enforcement officers, firefighters, and rescue squad members. Applicants must be at least 16 years of age and no older than 25 and must have a parent who was killed in the line of duty while living in or serving in the Commonwealth in one of the above capacities.

**Foster Care Tuition Grant Program** - This program provides tuition and fee support to students who were in foster care, in the custody of the Department of Social Services, or considered a special needs adoption at the time of high school graduation or completion of the GED. To qualify, a student must be a domiciliary resident of Virginia, must be enrolled at least half time in an academic program of at least one academic year in length, and must not have been previously enrolled full-time in a postsecondary institution for more than five years. A student already receiving other grant funds sufficient to cover tuition and fees is not eligible.

**Virginia Western Educational Foundation, Inc.** - Community citizens, companies, and organizations generously provide the money to fund scholarships for deserving students. Annual awards are disbursed from a wide array of scholarship programs. A complete listing of the scholarships, with their criteria, is available online at <http://viriniawestern.edu/foundation/scholarship/>, or in the Foundation Office located in Fishburn Hall. The applicant's academic major and past academic performance is strongly considered, with financial

need sometimes also being an essential criterion. Visit <http://viriniawestern.edu/foundation/scholarship/> for instructions on completing an application online.

**Community College Access Program (CCAP)** - The Educational Foundation currently administers a Community College Access Program for Botetourt County, Craig County, Franklin County, Roanoke City, Roanoke County and Salem City. Students who graduate in the current academic year at the high schools in these localities may have the opportunity to attend Virginia Western for two years tuition-free. The College Access Program is a need-tested program that uses the financial aid process to identify student need. The program supports as many eligible students as possible based on financial need and funds available for the program. Information about this program including the application deadline and program eligibility criteria is available online at [www.viriniawestern.edu/ccap](http://www.viriniawestern.edu/ccap).

**External Scholarship Programs** - Numerous scholarships are available each year from external sponsors. Eligibility is generally determined through the sponsor's application process. Eligibility can be based on financial need so we advise all students to complete and submit the FAFSA. To ensure that the most current information is available to our students, resource information for scholarship opportunities is maintained on the Virginia Western Financial Aid website <http://viriniawestern.edu/financialaid/scholarships.php>.

**Federal Stafford Loan Program** - Federal Stafford loans are need and non-need based student loans for students enrolled at least half time in a program of study. There are two types of loans for which eligibility is determined:

- Subsidized loans are loans for which the federal government subsidizes the interest while the student is attending at least half-time in an eligible program of study.
- Unsubsidized loans do not carry a federal government subsidy for interest while a student is attending. These loans can have interest payments made while in school or the student can choose to allow the interest to capitalize.

Completion and submission of a FAFSA is required to determine eligibility for these types of loans. Amount of eligibility may vary from student to student. A Student Loan Request form must be submitted to the financial aid office, in addition to the FAFSA, to request a loan.

**Parent Plus Loans** - The Parent PLUS Program is designed to assist the parent – defined as biological or adoptive mother or father – of a dependent student whose educational expenses exceed other financial resources. Repayment normally begins within 60 days from the date of disbursement. Completion and submission of a FAFSA is required to determine eligibility for this loan. Amount of eligibility may vary from student to student. A PLUS Request form must be submitted to the Financial Aid Office, in addition to the FAFSA, to request a loan.



**Federal Work-Study Program** - Federal Work-Study (FWS) is need based aid that is earned through federally funded part-time employment opportunities on and off campus. It is used to assist students in meeting the need of their educational expenses and also serves as a way to get valuable work skills. Completion and submission of a FAFSA is required to determine eligibility. For application and additional eligibility information visit the Virginia Western financial aid webpage for FWS at <http://viriniawestern.edu/financialaid/workstudy.php>.

### Veterans' Affairs

The Veterans Affairs office assists students in applying for VA benefit, in furthering the process of certifying eligibility, and in maintaining accurate enrollment and student status records. All veteran students receiving educational benefits must be enrolled in an official curriculum leading to a diploma, certificate, or degree. Veterans and eligible dependents of veterans should contact the Office of Veterans Affairs, Chapman Hall, Room C106, on the Virginia Western campus. **The telephone number is (540) 857-7395.** The Commonwealth of Virginia Department of Education for VA Entitlements approves programs of education offered at Virginia Western Community College.

### Virginia Military Survivors and Dependents Education Program

This program provides educational assistance for the spouse or child between 16 and 29 years of age of a military service member who died; who became permanently and totally disabled due to a war-related injury; or who is listed as a prisoner of war or missing in action. Further information and application forms are available at <http://www.dvs.virginia.gov/veterans-benefits.shtml#education>. Applications should be submitted at least four months before the expected date of enrollment.

### Virginia National Guard Tuition Assistance Program

This program provides partial reimbursement for tuition costs. Demonstration of financial need is not required. Members of the Virginia National Guard may be eligible. Applications are available from unit commanders.



# Financial Aid - Frequently Asked Questions

## What types of financial aid are available?

There are four kinds of financial aid at Virginia Western: grants, scholarships, loans, and work-study. Our largest program is Pell. The maximum Pell award is \$2,823 per semester. Other types of aid may supplement Pell Grants.

## When are refund checks ready?

Usually the initial disbursement is 6–8 weeks into the semester and refund checks are received up to two weeks after disbursement. Subsequent disbursements are made periodically throughout the term.

## If I am Pell eligible when can I obtain books?

Textbooks and supplies can be charged to the Pell award generally a week before the semester if an award has been determined and the Pell award exceeds the total of your tuition and fees. Review your financial aid award letter for specific details.



## Must I repay my financial aid if I withdraw from school during the semester?

A financial aid student who withdraws from all classes during the first 60% of the semester likely will have to repay a portion of the financial aid that he or she has received. The institution is required to determine the amount of unearned aid that a student may have as of a result of withdrawing at or before the 60% point in the semester. Students that cease attendance in the semester without official notification to the school may also have unearned aid. Please visit <http://www.virginiawestern.edu/financialaid/titleivrefunds.php> for details regarding this policy.

## What is the application deadline for financial aid?

Students should apply as early as possible to allow sufficient time for processing, generally 6-8 weeks before the beginning of the semester. Additional time may be required if additional information is requested for verification and/or corrections. For some types of aid, such as Pell grants and Stafford loans, students can apply anytime during the year. However, they should be prepared to pay for tuition and books and receive reimbursement if their application cannot be processed within seven days prior to the start of classes.

## What financial aid is available for part-time students?

With the exception of some scholarships, which are restricted to full-time students, students enrolled for at least six credits may qualify for most types of financial aid provided at Virginia Western. PTAP and Pell eligible students may receive an award at an enrollment status of less than half time.



# Student Services

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## Career Services

The Hall Associates Career and Employment Assistance Center, located in the Thomas Center, is a counseling, assessment, and resource facility offering career-related services to Virginia Western students and alumni. The center features a resource library, computerized career exploration software, and online and computerized skills inventories and assessments. Information is also available on job descriptions, duties, work environments, wages, salaries essential skill requirements, training and education requirements related to the job market.

Students and alumni may use these resources to explore careers, choose a major, and search for degree-related employment or employment to assist with college expenses. Assistance is also available in writing a resume, and preparation for a job interview.

The center also maintains an online job bank that lists jobs targeted to Virginia Western students and graduates. Students, alumni, and employers may access this job bank through the Career Services page on Virginia Western's web site.

## Advising Services

Prospective students and newly enrolled students should contact the Advising and Retention Services Office, located in Chapman Hall, C105, for admission and registration information, assistance in making decisions in career choice, curriculum of study, and other academic or personal matters. An Advising Specialist does initial advising with new students; however, each student in a curriculum of study is assigned to a faculty advisor consistent with the student's program of study. The faculty advisor will assist the student in selecting proper courses, interpreting curriculum requirements, and assessing academic progress. Students are encouraged to confer with their faculty advisors on a regular basis during office hours. Students may locate the name of their faculty advisor on the Virginia Western web site: <http://www.viriniawestern.edu/services/advising/advisors.php>.

Because student success is the highest priority of the college, a staff of Advising Specialists is available to assist students in determining and fulfilling their educational goals. The Advising and Retention Services office offers assistance in a variety of formats, including classroom instruction, group sessions, and one-on-one individualized advising. Classes are taught on subjects such as college survival, study skills, career exploration, and personal development. Information is provided to students seeking assistance with educational, career, or personal concerns.

Students desiring information and assistance with transferring may connect with the Advising and Retention Services office staff, their faculty advisor, or the transfer services information on the Virginia Western web site. Students may access web sites and Transfer Guides for Virginia Public Colleges and Universities through this link <http://viriniawestern.edu/services/transfer/index.php>.

## REACH/Student Support Services Program

The Student Support Services program at Virginia Western Community College is designed for students with academic potential who are in need of special services. The focus of Student Support Services is to help qualified students successfully complete college. Services available include: tutoring, career counseling, personal counseling, assistance in obtaining financial aid, academic counseling, cultural activities, transfer assistance, and individualized assistance as needed.

## Retention Services

Virginia Western's campus-wide retention initiative focuses on retaining students and increasing student satisfaction and success. Retention activities are coordinated through the Advising and Retention Services Office and include the following components:

1. A referral system for faculty to identify and refer students to the retention office for assistance in utilizing available resources to help them successfully complete their classes;
2. A series of special topic success skills workshops; and
3. A program of intrusive advising for developmental, academic warning and academic probation students to help them achieve success.

**For more information, contact the Advising and Retention Services office (C105) at (540) 857-7583.**

## Referral for Counseling

The Advising and Retention Services office provides information and referrals to community agencies, organizations, and health care facilities for treatment of a variety of health care concerns to include mental health issues and substance abuse. To the extent permissible by law, confidentiality is protected so that students who seek help for problems can receive counseling and referral for treatment without fear of reprisal. Questions regarding counseling should be directed to the Advising and Retention Services office (C105).

## Services for Persons with Disabilities

Persons with a disability who are considering applying for admission on a full- or part-time basis should schedule an appointment with a Student Support Services counselor. The purpose of the meeting is to discuss program accessibility and individual needs. Applicants with disabilities planning to enroll are encouraged to advise a Student Support Services counselor, in advance of the beginning of classes, of their need for auxiliary aids, readers, tutors, interpreters, taped materials, or other services and devices. Students interested in applying for services should go to the Student Support Services office located in Webber Hall, Rm. W212. **The phone number is (540) 857-7286 and TTY number is (540) 857-6351.** The ADA/Section 504 Coordinator is also located in the same office at the same telephone number, should anyone have concerns or need specific information.

## Student Activities Program

The student activities program is based on the belief that a complete college experience involves not only the development of academic and/or vocational competencies, but also opportunities for students to develop their social and intellectual abilities through organized co-curricular activities. The Student Activities Office, located in the Thomas Center, coordinates social, cultural, educational, and recreational programs to enrich campus life. Music and dance performances, art exhibitions, lectures, plays and team sports are all part of the student activities program of the College.

## Student Council

The Student Council serves as a vital link in communication among students, faculty, and administration. All students are members of the Student Council and are entitled to participate in meetings and election of officers. As the purpose of the Student Council is to further the interests of students and the College through student representation, Student Council officers are members of other college committees and organizations that affect student life.

## Campus Clubs and Organizations

Official recognition is given to scholastic, civic, athletic, professional, and religious clubs and organizations that have applied for and received College approval. Every club or organization must have a faculty or staff sponsor. **Students interested in information regarding new or established clubs and organizations should contact the Student Activities office at (540) 857-6326.**

1. Procedures for forming an organization may be obtained from the Student Activities office. Rules for the governance of all student clubs and organizations may also be obtained from the Student Activities office.
2. A group shall become a recognized organization when approved by the Student Activities Coordinator and the Dean of Student Services.

## Student Publications

The Student Handbook is published annually to provide students with information about policies and procedures of the College.

## Off-Campus Housing

The Student Activities office provides a listing of available housing and other pertinent information within the community. **For more information, call (540)857-6326.**

## Student Health Services

Because Virginia Western is a commuter college, no health services are provided. Students are encouraged to attend to their own personal well being by following good health practices. Information on the Virginia Community College System Student Referral Insurance Providers may be found in the Student Activities Office. In the event of a medical emergency, first aid kits and trained personnel are available for assistance in most buildings on campus.

## Services for Pregnant and Parenting Students

Pregnant and parenting students, including men, whose partners are pregnant, may connect with a variety of resources to include: education services, health services, social services, counseling and/or other support services for sexual assault, domestic violence, or stalking. **For more information, call (540) 857-6685.**

## Identification Cards

Identification (ID) cards distributed to students, staff, and faculty may be obtained in the Student Activities Office. The ID card is intended for the sole and exclusive use of those to whom it is issued for the purpose of identification as a member of Virginia Western Community College.

Students who register and pay for one or more classes are eligible to receive a Virginia Western Student ID card. Other staff and faculty members are eligible upon proof of status with the college. The first card is issued free of charge to all students, staff, and faculty. ID cards identify the individual by name and bear a photo and a semester validation sticker, in the case of students and part-time employees. Each semester, students and part-time employees must visit the ID Card Office to receive a current semester validation sticker. The sticker is placed on the current ID card and verifies current enrollment or employment. Without this sticker, the card is invalid. There is a replacement fee for any lost or stolen cards. The detailed ID card policy can be obtained from the Student Activities Office.

## Valley Metro Partnership/Public Transportation

Students with a valid Virginia Western student identification (ID) card, with a semester validation sticker, may utilize the Valley Metro Service free of charge. Bus service is provided

## VIRGINIA WESTERN COMMUNITY COLLEGE

Monday through Friday each week, (no Saturdays or weekends). Students must show their valid ID in order to ride for free. Students may obtain their ID and validation sticker from the Student Activities Office. Additional information is available on the web at <http://www.virginiawestern.edu/services/valleymetro.php>.

### Library

The library supports the mission of the College and is an integral part of the college's instructional program. As a center for academic life, Brown Library provides resources and services needed by both on-campus and off campus students to fulfill the reading and research requirements of the college's course offerings. Library staff members are committed to providing a friendly and positive environment in which all faculty, staff, and students can learn together through the free exchange of ideas and information.

The library strives to provide well-organized access to a balanced collection in a variety of formats that enhance teaching and learning. The print collection is cultivated and preserved while online collections are developed, all with the goal of giving Virginia Western students every opportunity to succeed in their academic ventures.

Library staff members provide individual and group instruction in the identification, use and evaluation of information resources. Brown Library users are empowered to become capable researchers and effective users of the information resources provided.

### Learning Technology Center

The Learning Technology Center, located on the ground floor of Brown Library at Virginia Western Community College, is a multi-functional resource and instructional support center for students. It serves as the college's testing center for English, mathematics, and reading placement tests, as well as proctored exams for distance learning courses.

The Learning Technology Center provides supplementary instructional support to students in two drop-in centers: the Math Center and the Writing Center. Additionally, for eligible students, The Power Hour Program provides assistance to students who need more intense tutoring than is available in the college's Math, Writing and Academic labs. Qualified students are matched with tutors who are available to work with the student one-on-one several times a week. All of these services and supports are free to students enrolled at Virginia Western Community College.

The Center also houses an open lab which is available to students when not in use for special and overflow testing.

### Policies and Procedures for Student Conduct

The administration of each community college is authorized by the State Board for Community Colleges to impose appropriate penalties including expulsion from the college for student conduct which tends to discredit or injure the college.

The Virginia Community College System guarantees to students the privilege of exercising their rights of citizenship under the Constitution of the United States without fear of prejudice and takes special care to ensure due process and to spell out defined routes of appeal when students feel their rights have been violated.

Each individual is considered a responsible adult, and it is assumed that men and women of college age shall maintain standards of conduct appropriate to membership in the college community. Failure to meet standards of conduct acceptable to the college may result in disciplinary probation, suspension, dismissal, or other penalty depending upon the nature of the offense.

Procedures concerning student conduct, academic misconduct and student grievances can be found in the Student Handbook. Hard copies are located in the Student Activities Office in the Thomas Center room 210. Copies are available on the web at <http://www.virginiawestern.edu/documents/StudentHandbook.pdf>.

### Policies and Procedures Relating to Sexual Misconduct

Sexual misconduct is a violation of the values and behavioral expectations of the College and is not tolerated. 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.

#### Sexual Assault

Sexual assault consists of physical contact of a sexual nature without consent.

Sexual assault is defined as sexual intercourse without consent, including rape (whether by an acquaintance or a stranger), sodomy, or other forms of sexual penetration. To constitute lack of consent, the acts must be committed either by force, threat of force, intimidation, or through use of victim's mental helplessness of which the accused was aware or should have been aware. Mental helplessness includes incapacitation by alcohol or other drugs. Sexual assault also includes intentionally touching, either directly or through clothing, the victim's genitals, breasts, thighs, or buttocks without the victim's consent, as well as touching or fondling of the accused by the victim when the victim is forced to do so against his or her will.

Verbal misconduct, without the accompanying physical contact as described above, is not defined as sexual assault. Verbal misconduct may constitute sexual harassment, which is also prohibited under VCCS regulations and is specifically addressed elsewhere in Section 6.5.6 of the VCCS Policy Manual.

## Sexual Harassment

Sexual harassment consists of unwelcome sexual advances, requests for sexual favors, or other verbal or physical conduct or written communication of a sexual nature, which is intimidating, hostile, or offensive. Sexual harassment shall be considered to have occurred when the following circumstances are presented:

1. Toleration of the conduct is an implicit or explicit term or condition of admission or status;
2. Submission to or rejection of such sexual conduct is used as a basis for academic evaluation affecting such individual;
3. Such conduct interferes with a student's academic performance, or creates an intimidating, hostile, or offensive learning environment.

### Reporting Procedures

**Students who believe that they have been subjected to sexual assault or harassment by another student should take their complaints to the Title IX Coordinator located in Chapman Hall, room 102, telephone number (540) 857-6348. Students' allegations involving college employees may be reported to the appropriate supervisor, the Human Resources Manager, Fishburn Hall, room 003, telephone number (540) 857-7282, or the Title IX Coordinator.**

Existing disciplinary and grievance procedures or informal proceedings, as appropriate, shall serve as the framework for resolving allegations of sexual misconduct. Students found guilty of sexual misconduct will be subject to campus disciplinary penalties ranging from probation to expulsion, and, in addition, criminal prosecution in the event of violations of applicable laws. College employees found guilty of sexual misconduct will be subject to disciplinary action as specified by personnel policies.

The rights of both the accused and the complainant shall be protected, and the complainant's sexual history will be excluded in campus proceedings. The confidentiality of proceedings will be maintained to the fullest extent possible.

## Policy on Substance Abuse

Substance abuse is a serious impediment to the efforts of the college to provide the best possible educational opportunity for students. Furthermore, alcohol and drug abuse interfere with clear thinking and performance and imperil personal health and public safety. Accordingly, the college is committed to a three part policy on substance abuse: education and prevention, enforcement, and referral for counseling.

### Education and Prevention

Information on alcohol and drugs for the purpose of helping students develop a realistic understanding of the consequences of substance abuse and to make responsible decisions for their own welfare and the welfare of others is available from the Advising and Retention Services Office and

the Office of Student Activities. In addition, various seminars, speakers, and other events are periodically sponsored by the college to promote awareness of substance abuse. Credit courses that develop students' understanding of this issue are offered through Liberal Arts and Social Sciences, Health Professions and Student Services.

### Enforcement

In accordance with policies adopted by the State Board for Community Colleges, students may not possess, use, or distribute any illegal substances while on campus; attending a college sponsored, off campus event; or while serving as a representative of the college at off campus meetings. This prohibition includes alcoholic beverages, except where permitted. Students who violate this policy will have college charges processed against them in the normal manner of due process provided by college disciplinary procedures. Violations of this policy that involve a criminal offense will result in notification to the appropriate local, state, or federal law enforcement authorities for appropriate action.

## Weapons Policy

The most current Weapons Policy is available for viewing in the Campus & Workplace Violence Prevention Policy on the college website: <http://virginiawestern.edu/facstaff/violenceprevention.php>.

## Parking on Campus

The use of any motor vehicle on the campus by any student is a privilege. Copies of the regulations governing parking on the campus are available in the Cashier's Office. Students should obtain copies each year to assure that they have current regulations.

A thorough understanding of the regulations is important. Traffic tickets will be issued for violation of college parking regulations. Repeated violations will result in disciplinary action, which may include removal of campus parking privileges. Where circumstances warrant, the college may have a vehicle removed at the owner's expense.

**Student parking on campus is permitted only in the spaces marked in white; reserved spaces are marked in yellow.**

During late afternoon and evening hours some faculty and reserved spaces are opened to students. When these spaces are used, diligent attention must be paid to the signs posted at the entrance to the lot. The college assumes no responsibility for the care or protection of any vehicle or contents at any time it is being operated or is parked on campus.

Handicapped parking is provided near each building. The college requires persons utilizing handicapped parking spaces to display an authorized permit from the State Division of Motor Vehicles (DMV).

## Children on Campus

Virginia Western is not responsible for visiting children who are left unattended at the college. Accordingly, all parents and accompanying adults should be aware of the following policy:

Children who are not students at Virginia Western must be under the direct supervision of a parent, guardian, or sponsor (18 years of age or older). Unattended children are prohibited in all college buildings or on the grounds.

If a child is left unattended, the campus police will attempt to locate the parent, guardian, or sponsor of the child and, upon doing so, advise the adult of the college's policy relating to unattended children on campus. If the parent, guardian, or sponsor of the child cannot be located, campus police will escort the child to the Campus Police Office and, if deemed appropriate, notify the Roanoke Youth Bureau.

Children are permitted to accompany parents or guardians to classes only in emergency situations and only then with the permission of the instructor. To ensure their safety and security, children are not allowed in college laboratories or the Learning Technology Center under any circumstances.

## Pets on Campus

No animals are allowed on campus with the exception of guide dogs for students with documented disabilities and animals scheduled for legitimate educational purposes in the Veterinary Technology program. These animals will be kept in the area provided for that purpose and are not to be taken to other parts of the campus or left in vehicles.

## Voter Registration

If you wish to register to vote, you may do so by going to the Registrar's Office in the locality in which you live, or you can register by mail. Voter registration applications are available in the Library on the main floor. Mail the completed registration form to the locality in which you live.

If you have a disability and need assistance completing the form, please go to the REACH/Student Support Services office in the Student Center and they will gladly assist you.





# VIRGINIA WESTERN

WE'LL TAKE YOU **THERE** 



# Computer Guidelines

## Virginia Community College System

### Computer Lab Use Policy

This policy applies to the computer lab facilities available at Virginia Western used in supporting the computing needs of the students, faculty, and staff of the college. Its purpose is to ensure the equitable, legal, and economical use of these facilities by authorized college users. The following policies relate to their use:

1. Because of the expenses associated with operating and supporting computing facilities, computer labs are neither designed nor available for use by the general public. Access is limited to students, faculty, and staff engaged in college related activities only. Use by others must receive specific approval.
2. Computer equipment and software are to be used in support of the mission of the college and are not to be used for commercial or personal objectives, or non-college related activities. Staff can and will periodically examine computer records (which may include file, logs, and listings) to diagnose problems and to assure these policies are being followed.
3. In cases where an account is assigned to an individual, it must not be used by others without explicit permission. The individual is responsible for the proper use of the account, including proper password protection.
4. No user shall attempt to alter in any manner the setup of the hardware or software on individual computer workstations or enterprise systems (Blackboard, SIS, etc.) unless expressly authorized by support personnel. Utilization of files from outside sources is highly discouraged due to possible contamination from viruses.
5. Users shall not attempt to gain access to any privileged account or files unless specifically authorized. This includes access to operating system files and files belonging to other users. Each user is expected to utilize the computing resources and facilities in a manner which does not infringe upon use of these resources by others.
6. Use of the facilities for required work has priority over use for convenience. Recreational use of the equipment and software is expressly forbidden.
7. No user shall use any equipment or software in an activity which violates federal, state, or local laws.
8. Computer software protected by copyright is not to be copied except as permitted by law or by the contract with the owner of the copyright. The number of copies and distribution of the copies may not be done in such a way that the number of simultaneous users exceeds the total authorized for the college. Private copies of software should not be used on college equipment. College staff is expressly forbidden to assist in the use of illegally obtained or improperly licensed software.

### Information Technology Student/Patron Acceptable Use Agreement

As a user of the Virginia Community College System's local and shared computer systems, I understand and agree to abide by the following acceptable use agreement terms. These terms govern my access to and use of the information technology applications, services and resources of the VCCS and the information they generate.

The college has granted access to me as a necessary privilege in order to perform authorized functions at the institution where I am currently enrolled. I will not knowingly permit use of my entrusted access control mechanism for any purposes other than those required to perform authorized functions related to my status as a student. These include logon identification, password, workstation identification, user identification, digital certificates or 2-factor authentication mechanisms.

I will not disclose information concerning any access control mechanism unless properly authorized to do so by my enrolling college. I will not use any access mechanism that the college has not expressly assigned to me. I will treat all information maintained on the college computer systems as strictly confidential and will not release information to any unauthorized person.

Computer software, databases, and electronic documents are protected by copyright law. A copyright is a work of authorship in a tangible medium. Copyright owners have the sole right to reproduce their work, prepare derivatives or adaptations of it, distribute it by sale, rent, license lease, or lending and/or to perform or display it. A student must either have an express or implied license to use copyrighted material or data, or be able to prove fair use. Students and other users of college computers are responsible for understanding how copyright law applies to their electronic transactions. They may not violate the copyright protection of any information, software, or data with which they come into contact through the college computing resources. Downloading or distributing copyrighted materials such as documents, movies, music, etc. without the permission of the rightful owner may be considered copyright infringement, which is illegal under federal and state copyright law. Use of the college's network resources to commit acts of copyright infringement may be subject to prosecution and disciplinary action.

The penalties for infringing copyright law can be found under the U.S. Copyright Act, 17 U.S.C. §§ 501-513 (<http://www.copyright.gov/title17/92chap5.html>) and in the US Copyright Office's summary of the Digital Millennium Copyright Act (<http://www.copyright.gov/legislation/dmca.pdf>).

I agree to abide by all applicable state, federal, VCCS, and college policies, procedures and standards that relate to the Virginia Department of Human Resource Management Policy 1.75 – Use of Internet and Electronic Communication Systems, VCCS Information Security Standard and the VCCS Information Technology Acceptable Use Standard. These include, but are not limited to:

- Attempting to gain access to information owned by the college or by its authorized users without the permission of the owners of that information;
- Accessing, downloading, printing, or storing information with sexually explicit content as prohibited by law or policy;
- Downloading or transmitting fraudulent, threatening, obscene, intimidating, defamatory, harassing, discriminatory, or otherwise unlawful messages or images;
- Installing or downloading computer software, programs, or executable files contrary to policy;
- Uploading or downloading copyrighted materials or proprietary agency information contrary to policy;
- Sending e-mail using another's identity, an assumed name, or anonymously;
- Attempting to intercept or read messages not intended for them;
- Intentionally developing or experimenting with malicious programs (viruses, worms, spy-ware, keystroke loggers, phishing software, Trojan horses, etc.) on any college-owned computer;
- Knowingly propagating malicious programs;
- Changing administrator rights on any college-owned computer, or the equivalent on non-Microsoft Windows based systems;
- Using college computing resources to support any commercial venture or for personal financial gain.

Students must follow any special rules that are posted or communicated to them by responsible staff member, whenever they use the college computing laboratories, classrooms, and computers in the Learning Resource Centers. They shall do nothing intentionally that degrades or disrupts the computer systems or interferes with systems and equipment that support the work of others. Problems with college computing resources should be reported to the staff in charge or to the Information Technology Help Desk.

If I observe any incidents of non-compliance with the terms of this agreement, I am responsible for reporting them to the Information Security Officer and/or management of my college.

I understand that I must use only those computer resources that I have the authority to use. I 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. I must not use VCCS IT resources to gain unauthorized access to computing resources of other institutions, organizations, individuals, etc.

The System Office and colleges reserve the right (with or without cause) to monitor, access and disclose all data created, sent, received, processed, or stored on VCCS systems to ensure

compliance with VCCS policies and federal, state, or local regulations. College or System Office officials will have the right to review and/or confiscate (as needed) any equipment (COV owned or personal) connected to a COV owned device or network.

I understand that it is my responsibility to read and abide by this agreement, even if I do not agree with it. If I have any questions about the VCCS Information Technology Acceptable Use Agreement, I understand that I need to contact the college Information Security Officer or appropriate college official.

By acknowledging this agreement, I hereby certify that I understand the preceding terms and provisions and that I accept the responsibility of adhering to the same. I further acknowledge that should I violate this agreement, I will be subject to disciplinary action.

### Official E-mail Communications with Students

VCCS has established e-mail as a primary vehicle for official communication with students. An official VCCS Gmail e-mail address has been established and assigned by the VCCS and the colleges for each registered student, and current faculty and staff member. All communications sent via e-mail will be sent to the students' Gmail address. Faculty members will use their official VCCS e-mail address to communicate with a student registered in their classes and administrative units will correspond with students via this address.

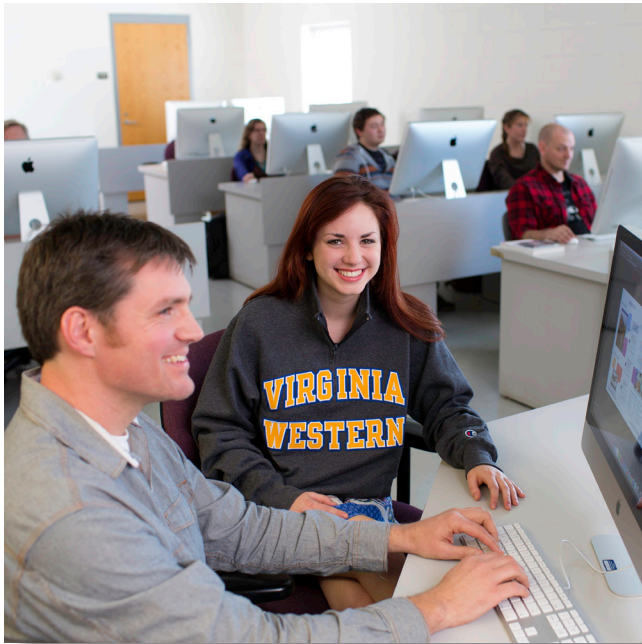
The VCCS expects that students will receive and read e-mail in a timely manner. Students are expected to maintain their accounts and check their e-mail periodically so that new mail will be properly received and read. A student's failure to receive and read official college communications delivered to their Gmail e-mail address in a timely manner does not absolve that student from knowing and complying with the content of such communications.

While students are allowed to redirect e-mail from their official VCCS e-mail address to another address (e.g. @hotmail.com, @aol.com), they do so at their own risk. The VCCS is not responsible for the handling of e-mail by other service providers. Having e-mail redirected does not absolve students from knowing and complying with the content of the communication sent to their official college e-mail address.

- Temporary restriction of the violator's computing resource access for a fixed period of time, generally not more than six months.
- 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.

In the event that a student is the offender, the accuser should notify the Vice President of Academic and Student Affairs. The VP, in cooperation with the CIO, will determine the appropriate disciplinary actions that may include but are not limited to:

- Temporary restriction of the violator's computing resource access for a fixed period of time, generally, not more than six months.
- Restitution for damages, materials consumed, machine time, etc. on an actual cost basis. Such restitution may include the cost associated with determining the case facts.
- Disciplinary action for student offenders shall be in accordance with the college student standards of conduct.



### Personnel Security–Acceptable Use

#### PURPOSE

Thousands of users share VCCS Information Technology 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 these 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), invasion of privacy (18.2-152.5), or theft of computer services (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.

#### SCOPE

In accordance with the COV ITRM 501-01, Acceptable Use requirements define a acceptable and permitted use of COV, VCCS, and college IT resources.

#### APPLICABILITY

The Acceptable Use Standard is applicable to the System Office and all Colleges.

#### DEFINITION

VCCS information technology resources include mainframe computers, servers, desktop computers, notebook computers, handheld devices, networks, software, data file , facilities, and the related supplies.

#### STANDARD

The following standards shall govern the use of all VCCS information technology resources:

1. All users of VCCS IT resources must adhere to Virginia Department of Human Resource Management Policy.
2. 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 VCCS IT resources to gain unauthorized access to computing resources of other institutions, organizations, individuals, etc.
3. 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.
4. You must use your computer resources only for authorized purposes. Students or staff, for example, may not use their accounts for private consulting or to support a personal business venture. 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 any VCCS facility must comply with the policies of acceptable use promulgated by the organizations responsible for those networks.
5. 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.
6. The data owner, data custodian, 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.
7. You must not distribute or disclose third party proprietary software without prior authorization from the licensor. You must not install proprietary software on systems not properly licensed for its use.
8. 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.

9. You should report any violation of these regulations by another individual and any information relating to a flow or bypass of computing facility security to the Information Security Office or the Internal Audit department.
10. You must not use the Commonwealth's Internet access or electronic communication in cases where it:
  - interferes with the user's productivity or work performance, or with any other employee's productivity or work performance;
  - adversely affects the efficient operation of the computer system;
  - results in any personal gain or profit to the user
  - violates any provision of this policy, any supplemental policy adopted by the agency supplying the Internet or electronic communication systems, or any other policy, regulation, law or guideline as set forth by local, State or Federal law. (See Code of Virginia §2.1-804-805; §2.2-2827 as of October 1, 2001.)

**Note:** Any user of VCCS IT resources employing the Commonwealth's Internet or electronic communication systems for personal use must present their communications in such a way as to be clear that the communication is personal and is not a communication of the agency or the Commonwealth.

### ENFORCEMENT PROCEDURE

1. Faculty, staff, students, and patrons at the college or System Office should immediately report violations of information security policies to the local Chief Information Officer (CIO).
2. If the accused is an employee, the CIO will collect the facts of

the case and identify the offender. If, in the opinion of the CIO, the alleged violation is of a serious nature, the CIO will notify the offender's supervisor. The supervisor, in conjunction with the College or System 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 cost 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. The VP, 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 cost 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 or designee will report any violations of state and federal law to the appropriate authorities.
  5. All formal disciplinary actions taken under this policy are subject to the Commonwealth's personnel guidelines and the accused may pursue findings through the appropriate grievance procedure.



# Academic Regulations

## Credits and Academic Load

The normal academic course load for students taking courses in the fall and spring semester is 15–17 credits. The minimum full-time load for the fall and spring semester is 12 credit hours and the maximum full-time load is 18 credits. Students wishing to carry an academic load of more than 18 credits in the fall or spring semester must obtain approval from the Registrar.

**Exception:** 18 credits plus one credit for orientation does not require approval.

The normal academic course load for students in the summer semester is 8–10 credits. The minimum full-time load in the summer semester is 8 credits and the maximum load is 12 credits. Students wishing to carry an academic load of more than 12 credits in the summer semester must obtain approval from the Registrar.

**Exception:** 12 credits plus one credit for orientation does not require approval.

Approval to take credit loads above the normal levels are generally approved under the following circumstances:

1. Students with a grade point average (GPA) of 3.0 or above may take 19–21 credits in the fall and spring semester and 13–16 credits in the summer semester;
2. Students may take in excess of 18 but never more than 21 credits in the fall and spring semester, and 13 but never more than 16 credits in the summer semester when recommended by an Advising Specialist if they have demonstrated the ability to handle this load and special circumstances exist;
3. Transient students may take up to 21 credits in the fall and spring semester and 16 credits in the summer semester when recommended by the host college or university.

Upon recommendation by an Advising Specialist, students may be required to take less than the minimum full-time academic load if:

1. Students are on academic warning or probation;
2. Student placement test scores are low and developmental courses are recommended;
3. High school graduates with a GPA of 2.0 or less.

## Placement Testing

All incoming, curricular students must take college placement tests in English and mathematics. Students who have earned certain SAT or ACT scores within the past two years and/or who present evidence of satisfactory performance in postsecondary courses in English and mathematics at another regionally accredited college or university may be exempt from placement testing.

Placement test results are used to help plan the best sequence of classes to ensure a student's success in college. Results of placement tests may indicate the need to enroll in developmental education courses to prepare for college-level coursework. Should placement test results indicate the need for preparatory work, students must enroll in and successfully complete the specified developmental English or mathematics courses prior to enrolling in any course with an established English and/or mathematics prerequisite. The college reserves the right to drop or withdraw students from classes when the appropriate prerequisite courses have not been completed.

## Virginia Placement Testing Guidelines

In accordance with Virginia Community College System policy, students are permitted one attempt and one re-test on the Virginia Placement Test (VPT) within a twelve month period. Students who attempt developmental English and/or mathematics courses are ineligible for a retest. Virginia Placement Test (VPT) scores are valid for two years after the date of the test.

## Prerequisites

Some college courses require prerequisites or co-requisites. These are requirements that must be completed first to provide a foundation for understanding of course content and the potential to complete a course successfully. Prerequisites and co-requisites are identified in the description of Courses section of the catalog. Students may not enroll in courses for which they do not meet the prerequisites at the time the course begins. The college reserves the right to administratively drop a student from any course for which they have not met the prerequisites.

## SDV – Orientation

All curricular students, except those in career studies certificate programs, shall participate in an SDV course designed primarily to foster student success. This course should be completed within the first 15 credit hours of enrollment at the community college, unless the student is not required to complete an SDV course because it is waived. The requirement may be waived for students who hold an Associate Degree or Bachelors Degree from a regionally accredited institution. Students must still successfully complete the required number of credits for their degree.

## Grading System

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

- A** Excellent: 4 grade points per credit
- B** Good: 3 grade points per credit
- C** Average: 2 grade points per credit
- D** Poor: 1 grade point per credit
- F** Failure: 0 grade points per credit

**I Incomplete: no grade point credit.** The "I" grade is to be used only for verifiable, unavoidable reasons that a student is unable to complete a course within the normal course time. 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 will complete documentation that (1) states the reason for assigning the grade; (2) specify the work to be completed and indicate its percentage in relation to the total work of the course; (3) specify the date by which the work must be completed; and (4) identify the default grade based upon course work already completed. Completion dates may not be set beyond the subsequent semester (including the summer term) without the written approval of the chief academic officer of the campus, or his designee. Once documentation has been completed, the instructor submits to the Records office. An "I" grade will be changed to a "W" only under documented, mitigating circumstances which must be approved by the chief academic officer of the campus, or his designee. NOTE: If the work is not completed by the last day of class of the subsequent semester, the student will be awarded the "default" grade. The default grade will be final. At the end of each term, the Records office will change all outstanding "I" grades to the default grade just prior to grade processing for the term.

**P Pass:** Credit earned but not included in grade point average. Applies to non-developmental studies courses, non-credit courses, orientation, and specialized courses and seminars at the discretion of the college. Up to seven credit hours for which the "P" has been awarded may be applied toward completion of a program. A grade of "P" may be used as a grading option with the permission of the Academic Dean.

**S Satisfactory: No grade point credit;** used only for satisfactory completion of a developmental studies course (numbered 01–09).

**R Re-enroll: No credit.** The student is making progress but the course objectives have not been completed; to be used only for developmental studies courses (numbered 01–09). Re-enrollment for the completion of course objectives may be required.

**U Unsatisfactory: No credit.** The student has not made satisfactory progress. Applies only to developmental studies courses (numbered 01–09), noncredit courses, orientation, specialized courses, and seminars at the discretion of the college.

**W Withdrawal: No credit.** A grade of "W" is awarded to students who withdraw or are withdrawn from a course after the drop period but prior to the completion of 60 percent of the session. (Withdrawal deadlines are published in the General Catalog and online at [www.virginiawestern.edu/academics/calendar.php](http://www.virginiawestern.edu/academics/calendar.php).) Students who cease attendance prior to the withdrawal deadline for a class will be reported to the Admissions Office and withdrawn from the class. Students who are dropped or withdrawn by the instructor for non-attendance or non-participation will not be reinstated unless instructor error is determined. After the withdrawal deadline, students will receive a grade of "F" if they stop attending class, unless they request and are granted an administrative withdrawal because of mitigating and appropriately documented circumstances. Such requests should be submitted to and approved by the Registrar in the Admissions Office (via an Administrative Withdrawal form) during the term in which the discontinuance of attendance occurs. In addition, the instructor must sign the form indicating that the student had been making satisfactory progress in the course at the time of withdrawal.

**X Audit:** Students desiring to attend a course without taking the examination or receiving credit for the course may do so by registering to audit through the usual registration process and paying the normal tuition. Permission of the academic dean or the registrar is required to audit a course. Audited courses carry no credit and do not count as part of the student's course load. 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". Advanced standing credit should not be awarded for a previously audited course.

## Grade-Point Average

The grade-point average (GPA) is determined by dividing the total number of grade points earned (A=4, B=3, C=2, D=1, F=0) by the number of credits attempted. Grades of I, P, R, U, S, W, and X are not included in the calculation of GPA.

## Grade Changes

Once a grade has been awarded for a class, it is normally permanent. Situations may arise where there are documented, mitigating circumstances, the following steps should be followed:

**Step One:** The student should contact the college faculty member about a grade dispute. Every reasonable effort should be made by all parties to resolve the matter informally at this level, and no written records of the matter will be placed in the student's official file. If the situation is resolved informally and the instructor agrees that an error was made, the instructor will submit a Grade Change Form to the appropriate academic dean, who will forward it to the Records Office.

**Step Two:** If the grade dispute cannot be resolved at the first step, a Student Grievance Form must be submitted by the student within five business days of the notification of grade unless otherwise indicated by the instructor. (<http://www.virginiawestern.edu/services/handbook/StudentGrievanceProcessForm.pdf>).

**Step Three:** The Program Head will follow the Student Grievance Process using the Student Grievance Form. Course syllabi and evaluation materials will be included in the review of the grade dispute.

**Step Four:** Following the Student Grievance Procedure, if the student is not satisfied with the Program Head's decision, the student may follow the process outlined on the Student Grievance Form to appeal the decision to the academic dean and the Vice President of Academic & Student Affairs if necessary. The decision of the Vice President of Academic & Student Affairs is final.

**Step Five:** If at any time it is determined that a grade change is warranted, a grade change form will be submitted to the Records Office.

## Final Grade Appeal Procedures

The grade appeal procedure provides an equitable and orderly process to resolve situations in which a student may contest a final grade assigned in a course during the previous academic semester. Students should be aware that establishing course requirements and assignments, evaluating a student's work, and assigning a grade are the responsibility and the prerogative of the individual instructor. In the event that the final grade received in a course was assigned in a manner inconsistent with the course outline, or was assigned using a method other than that used to compute other students' grades in that course, the matter may be resolved through an informal or a formal procedure.

**Timeline:** Students are allowed to submit a grade appeal only if they do so within one month after the grade is posted.

**Exception:** In circumstances where the student has mitigating documented circumstances, grade changes must be requested within one year of the receipt of the grade in question.

**Informal Procedure:** The student should attempt to resolve the final grade dispute with the instructor informally. If the situation is resolved informally and the instructor agrees that an error was made, the instructor will submit a Grade Change Form to the appropriate academic dean, who will forward it to the Records Office.

**Formal Procedure:** If final grade conflicts cannot be resolved informally as described above, students must adhere to the following:

1. It is the responsibility of the student to notify the Program Head within five business days of the instructor's decision to deny a grade change through the informal process using the Student Grievance Form (<http://www.virginiawestern.edu/services/handbook/StudentGrievanceProcessForm.pdf>).
2. There are two grounds for formal grade appeal:
  - a. The assignment of a grade in a manner other than as described on the course outline or amended by the instructor without appropriate notice;
  - b. The assignment of a grade using a method other than that used for the other students in the class.
3. The Program Head will follow the Student Grievance Process using the Student Grievance Form. Course syllabi and evaluation materials will be included in the review of the disputed grade.
4. Following the Student Grievance Procedure, if the student is not satisfied with the Program Head's decision, the student may follow the process outlined on the Student Grievance Form to appeal the decision to the academic dean and the Vice President of Academic & Student Affairs if necessary. The decision of the Vice President of Academic & Student Affairs is final.
5. If at any time it is determined that a grade change is warranted, a grade change form will be submitted to the Records Office.

## Repeating a Course

Students will be allowed to enroll for the third time in a course without having to obtain approval from the Academic Dean and the Dean of Student Services or the Registrar when:

1. The course is a developmental course and the last grade is either a "W" or an "R."
2. The first two attempts in the course include one or more "W" grades.
3. The course is a non-developmental course and the last grade earned is a "D."

Except under the conditions cited above, a student will not be allowed to enroll in a course more than two times without the approval of the Academic Dean and the Dean of Student Services or the Registrar.

"W" and "I" grades are included when counting the number of course attempts.



Should the student request to enroll in the same course more than twice, the need must be documented and approved by the Academic Dean and Dean of Student Services or the Registrar. Quarter credit courses are exempt from the course repeat policy.

Students should consult with an Advising Specialist or faculty advisor before repeating a course for credit. All grades earned for all courses taken one or more times are indicated on the student's permanent record, but only the last grade earned is used in calculating the student's cumulative grade point average and for satisfying curricular requirements. This policy applies only to courses taken since summer 1994, and also to courses taken since the conversion to the semester system (summer 1988) and repeated since fall 1996. For further information regarding this policy change and how it may affect students, contact the Records Office.

## Student Responsibility to Avoid Tuition Obligation Related to Dropping a Course

Students who enroll for courses after the official last date to pay for the term must pay their tuition at the time of enrollment. Failure to pay tuition does not guarantee that the student will be automatically dropped from the course. It is the student's responsibility to officially drop all unpaid courses prior to the beginning date of the course. Students may drop classes online through their MyVWCC account. Failure to drop courses may cause the student's record to be incorrectly flagged with an outstanding financial obligation. Outstanding financial obligations will prevent enrollment for future terms.

## Grade Forgiveness — Academic Renewal Policy

A student who has been separated from the college (not enrolled) for a period of at least five years (minimum of 60 months), and who earns at least a 2.5 grade point average for the first twelve credits completed after re-enrollment, may petition for "Academic Renewal." Academic Renewal may be granted only one time. Once granted, it cannot be revoked. With the granting of Academic Renewal, all grades of "D" and "F" earned prior to re-enrollment will be excluded from the student's grade point average. Excluded grades will still be shown on the student's transcript, and the notation of "Academic Renewal" will be printed on the transcript. Academic Renewal petition forms may be obtained from the Records Office and must be approved by the Registrar. Students should be aware that any grade that has been forgiven will not count toward graduation requirements.

## Attendance

Registration in a course assumes that students will attend scheduled classes and laboratory sessions. When absence from a class becomes necessary, it is the responsibility of the student to inform the instructor. Frequent unexplained absences may jeopardize the student's grade or may result in dismissal from a course.

The student is responsible for making up all work due to absence. If a student cannot take a test or final examination at the scheduled time, (s)he should contact the instructor. If (s)he is unable to reach the instructor, the division office should be contacted.

When the number of unexcused absences reaches a sum equivalent to 30 percent of the total instructional time (e.g., five weeks in a 15-week course), the instructor will drop the student from class, with the exception of seminar classes. (See explanation under "Grading System.") There is no refund of tuition or reinstatement in the course when an instructor has dropped a student for nonattendance.

Because courses are designed and conducted in diverse ways, instructors will inform students, through the course syllabus, if there are specific expectations for attendance and participation that differ from the college policy above. The student will be held to the requirements provided in the course syllabus.

## No-Show Policy

Students must either attend their face-to-face courses or demonstrate participation in their distance learning courses by the last date to drop for a refund or they will be reported to the Admissions Office and withdrawn as no-show students. In this case, there will be no refund of tuition in the course, and the student will not be allowed to attend/participate in the class or submit assignments. Failure to attend or participate in a course will adversely impact a student's financial aid award.

## Withdrawal Policy

Students who violate the attendance or participation guidelines for the course as of the withdrawal deadline will be reported to the Admissions Office and withdrawn with a grade of "W." Students who stop attending or participating in a course after the withdrawal deadline will receive a grade of "F." There will be no refund of tuition or reinstatement in the course. Financial aid recipients who receive all "W" or "F" grades in their courses will incur an outstanding tuition debt to the college and will be blocked from future enrollment.

## Final Examinations

All students are expected to take final examinations at the regularly scheduled times. No exceptions are made without prior approval of the instructor and the Vice President of Academic and Student Affairs.

## Grade Reports

Final grades can be accessed via MyVWCC at the Virginia Western web site ([www.viriniawestern.edu](http://www.viriniawestern.edu)) after the end of each semester. Final grades are a part of the student's record and are recorded on the student's permanent report. Students should report a conflict in grade to their instructor within one month after the grade is posted.

## Academic Honors

Eligible students are awarded academic honors at the end of each semester. The Dean's List recognizes the regular full-time students who earned a grade point average between 3.2 and 3.4. The President's Honor Roll recognizes all regular full-time students who earned a grade point average of 3.5 or better. The college is not responsible for newspaper publicity of these lists. Academic honors are noted on the student's official transcript.

Students who earn an associate degree or certificate from Virginia Western are eligible for graduation honors. However, students who earn a Career Studies certificate are not eligible for graduation honors. Appropriate honors based on the overall academic achievement (cumulative grade point average) at Virginia Western Community College are as follows:

- **3.2 Cum laude (with honor)**
- **3.5 Magna cum laude (with high honor)**
- **3.8 Summa cum laude (with highest honor)**

## Honor Society

Phi Eta is Virginia Western's local chapter of Phi Theta Kappa, an international honor society that recognizes and encourages scholarship among two-year college students. It provides opportunity for the development of leadership and service, for an intellectual climate for exchange of ideas and ideals, for lively fellowship for scholars, and for stimulation of interest in continuing academic excellence. Invitations to join are extended to full- and part-time associate degree students who display academic excellence. Full-time degree students who have completed 12 credits must have a grade point average of 3.5 or better and part-time degree students must have earned 12 or more credit hours and have a 3.5 average or better. Invitations are usually extended in January.

## Academic Standing

Students are considered to be "in good academic standing" if they maintain a semester minimum GPA of 2.0, are eligible to re-enroll at the college, and are not on academic suspension or dismissal status. Students on academic warning or academic probation who are eligible to re-enroll may be considered eligible to receive financial aid assistance or other benefits requiring a "good academic standing" status.

## Academic Warning

Students who fail to attain a minimum GPA of 2.0 for any semester shall be placed on academic warning. Students on academic warning should be encouraged to consult with their Advising Specialist and take advantage of academic support services provided by the college.

## Academic Probation

Students who fail to maintain a cumulative grade point average of 1.50 will be on academic probation until such time as their cumulative average is 1.75 or better. The statement "Academic

Probation" will be placed on their permanent records. Generally, a student on probation is ineligible for appointive or elective office in student organizations unless the Vice President of Academic and Student Affairs or his designee grants special permission. Students usually will be required to carry fewer credits than normal the following semester. Students on academic probation are required to consult with their probation Advising Specialist. Students shall be placed on probation only after they have attempted 12 semester credit hours.

## Academic Suspension

Students on academic probation who fail to attain a semester GPA of 1.50 or better shall be placed on suspension only after they have attempted 24 semester credits. Academic suspension shall be for one semester. The statement "Academic Suspension" shall be placed on the students' permanent records. Students who are placed on academic suspension and wish to appeal should follow the appeal process established by the college. Suspended students may be reinstated at the conclusion of the suspension period by following the process established by the college. Students who have been reinstated from academic suspension must achieve a 2.0 GPA for the semester of their reinstatement and must earn at least a 1.75 GPA in each subsequent semester of attendance. The statement "Subject to Dismissal" shall be placed in the student's permanent records. Students who have been reinstated from academic suspension will remain subject to dismissal until their cumulative GPA is raised to a minimum of 1.75. Reinstated students may be required to carry less than a normal course load the following semester and are required to consult with their Advising Specialist.

## Academic Dismissal

Students who do not attain at least a 2.00 GPA for the semester of reinstatement following academic suspension shall be academically dismissed. Students who achieve at least a 2.00 GPA for the semester of their reinstatement following academic suspension must earn at least a 1.75 GPA in each subsequent semester of enrollment. Failure to attain a 1.75 GPA in each subsequent semester until the cumulative GPA reaches 1.75 shall result in academic dismissal. The statement "Academic Dismissal" shall be placed on the Students' permanent records. Academic dismissal is normally permanent. In exceptional circumstances, students may appeal and be reinstated following processes established by the college. Students who have been reinstated after academic dismissal will remain subject to dismissal until their cumulative GPA is raised to a minimum of 1.75. The reinstated student may be required to carry less than normal course load the following semester and are required to consult with their Advising Specialist.

## Suspension for Lack of Progress

Two or more consecutive terms of withdrawal from all classes without successful completion of any credit courses may subject a student to academic probation and/or suspension.

## Why community college students should complete their associate degree before transferring:

### Graduation increases the probability of acceptance by a four-year college or university.

Many senior institutions give transfer admissions priority to students who have completed an AA or AS degree. Some institutions even guarantee admission to transfer graduates.

### Graduation reduces the possibility of having to take additional general education courses at the senior institution.

State senior institutions grant transfer graduates upper division (junior) class standing and accept the general education courses completed in the associate degree as a package, equivalent to the lower-division general education requirements at the senior institution. Students who transfer without graduating cannot be assured that they have satisfied all of the general education requirements of the senior institution.



### Graduation can improve the likelihood of success.

Assessment data provided by four-year institutions consistently shows that most graduates have better success rates than non-graduates.

### Graduation Increases opportunities for scholarships.

Graduation is an eligibility requirement for many scholarships.

### Graduation provides significant tuition savings.

The cost of tuition for a full-time student at Virginia Western is less than \$4,000/year. Tuition at a public four-year college in Virginia costs (on average) more than \$9,500 per year. Tuition at private colleges is substantially higher.

(Data Source: SCHEV)

# Transfer Information

## Transfer Degree Programs

The Associate of Arts (AA) and Associate of Science (AS) degree programs are specifically designed for students who want to transfer to a senior institution (four-year college or university). Programs are offered in Business Administration, Computer Science, Engineering, Fine Arts, General Studies, Education, Health Sciences, Integrated Environmental Studies, Liberal Arts, Mathematics, Science, and Social Science. Advising Specialists are available to help students choose the program that will best prepare them for the type of degree they eventually want to earn at the baccalaureate level. Most four-year colleges and universities in Virginia encourage community college transfer students to complete their degree before transferring. When reviewing admission applications from transfer students, some institutions give admissions priority to students who have completed their degree. Public four-year colleges in Virginia have agreed that the general education courses completed by AA and AS degree graduates will be accepted as the equivalent of the general education courses that are required of their freshmen and sophomores. (There may be some exceptions regarding foreign language requirements.)

## Occupational/Technical Degree Programs

Although the Associate of Applied Science (AAS) occupational technical degree programs are designed for students who want to enter directly into the job market, some of these programs can also be used to prepare a student for transfer to a four-year college or university. Radford University, for example, offers Virginia Western students who have completed relevant AAS degree programs, bachelor degree programs in social work, nursing, and criminology on Virginia Western's campus. Old Dominion University offers bachelor degree programs on Virginia Western's campus for Virginia Western graduates who have completed relevant AAS degree programs in engineering technology, criminal justice, health sciences, occupational/technical studies, and nursing.

## Transfer Courses

Senior colleges readily accept Virginia Western courses that are designed for transfer. All senior public institutions in Virginia have prepared transfer guides. These guides provide detailed listings of which courses will transfer from Virginia Western and other community colleges. The guides also identify the equivalent courses at the senior institution for which credit will be given. A senior college's transfer guide can be obtained by contacting the senior college's Admissions Office. Students may access college and university websites through the Virginia Western website. They can also find transfer information for all Virginia colleges and universities at the following website, which is administered by the State Council of Higher Education for Virginia: <http://www.schev.edu/students/transfer/default.asp>.

## Guaranteed Admissions Agreements

Virginia Western has guaranteed admissions agreements with specific programs at Virginia senior institutions. Please see an Advising Specialist or visit the website: <http://www.virginiawestern.edu/services/transfer/guaranteedadmissions.php> for further information on these articulation agreements.

Virginia Western has the following guaranteed admissions agreements:

- Roanoke College offers Virginia Western students guaranteed admission at the junior level provided they complete an Associate of Arts or Associate of Science degree program with a GPA of 2.2 or higher.
- Virginia Intermont College (VIC) offers Virginia Western students guaranteed admission at the junior level provided they complete an Associates of Arts or an Associates of Science Degree.



## GUARANTEED ADMISSIONS AGREEMENTS

The Virginia Community College System (VCCS) offers guaranteed admissions agreements with the following institutions:

### Virginia's Public Colleges and Universities

Christopher Newport University  
 College of William and Mary  
 Longwood University  
 Norfolk State University  
 Old Dominion University  
 Radford University  
 University of Mary Washington  
 University of Virginia  
     UVA-Engineering  
 University of Virginia's College at Wise  
 Virginia Commonwealth University  
 Virginia State University  
 Virginia Tech  
     College of Agriculture and Life Sciences  
     College of Engineering

### Virginia's Private Colleges and Universities

Bluefield College (Nursing)  
 Emory & Henry College  
 Ferrum College  
 Hollins University  
 Liberty University  
 Lynchburg College (Nursing)  
 Mary Baldwin College  
 Randolph College  
 Regent University  
 Roanoke College  
 Shenandoah University  
 Sweet Briar College  
 Virginia Intermont College  
 Virginia Union University  
 Virginia Wesleyan College

### Other Colleges and Universities

ECPI  
 George Washington University (Nursing)  
 Regis University  
 Strayer University  
 Troy University  
 Western Governors University (Online Nursing)

*For more information, go to the following website:*  
<http://www.vccs.edu/Students/TransferList.aspx>.



# Programs of Study and Graduation Requirements

## DEGREES AND CERTIFICATES

The college offers the following degrees, certificates, or career studies certificates for students who successfully complete approved programs at the college.

### Degree Program

A planned program of study composed of a minimum of 60 semester hours at the 100 and 200 course levels which culminate in a degree.

**Degree** An award at the associate level that represents completion of the requirements of a degree program.

**Major** A collection of courses that are necessary to meet the requirements of the degree program under which the major is classified. Some majors provide specializations, which give students alternative ways of completing the major requirements for the degree. Only the name of the major is identified in the degree award.

**Specialization** A collection of courses that vary by 9–15 credit hours from the major requirements of the degree program under which the parent major is classified. Both the name of the major and the name of the specialization are identified in the degree award.

**Associate of Arts degree (AA)** A two-year program of 60-63 credits for students majoring in the Liberal Arts. Students receiving an AA degree generally transfer to four-year colleges or universities.

**Associate of Science degree (AS)** A two-year program of 60-63 credits (up to 72 for Engineering) for students majoring in such specialized curricula as business administration, engineering, science, and social sciences. Students receiving an AS degree generally transfer to four-year colleges or universities.

**Associate of Applied Science degree (AAS)** A two-year program of 65-69 credits (up to 72 for some health technologies) with a major in an occupational-technical curriculum. Students receiving an AAS degree may elect to pursue immediate employment or transfer to selected four-year colleges or universities.

### Certificate Program

A program of study typically less than two years in length with a major in an occupational/technical area consisting of 30-59 credits that may include courses numbered 10-299. A minimum of 15% of a certificate's credit hour requirement shall be in general education, including a three-credit hour English class.

### Career Studies Program

A program of study typically less than one year in length with a major in an occupational/technical area consisting of 9-29 credits which may include courses numbered 10-299. These programs are not required to include general education courses.

### Technical Studies Plan of Study

A program designed to meet the rapidly changing workforce training needs of business and industry. The curriculum allows employers to develop a specific plan of study negotiated with, and approved by, appropriate College, VCCS and State processes. The basic structure of the curriculum includes four components (general education, a technical core, occupational-technical content area(s), and work-based learning.)

## LIST OF PROGRAMS

### Associate of Arts (AA)

Liberal Arts major  
Fine Arts specialization

### Associate of Science (AS)

Business Administration major  
Engineering major  
Computer Science specialization  
General Studies major  
Science major  
Health Sciences specialization  
Integrated Environmental Studies specialization  
Mathematics specialization  
Social Sciences major  
Education specialization

### Associate of Applied Science (AAS)

Accounting major  
Administration of Justice major  
Administrative Management Technology major  
Medical Administrative Management specialization  
Architectural/Civil Engineering Technology major  
Geographic Information Systems specialization  
Communication Design major  
Culinary Arts major  
Dental Hygiene major  
Early Childhood Development major  
Electrical Engineering Technology major  
Human Services major  
Information Systems Technology major  
Management major  
Human Resource Management specialization  
Marketing specialization

Mechanical Engineering Technology major  
 Mechatronics Systems Engineering Technology major (pending)  
 Nursing major  
 Paralegal Studies major  
 Radiation Oncology  
 Radiography major  
 Technical Studies Energy Management major  
 Technical Studies: Mechatronics Technology specialization  
 Veterinary Technology major (awarded through BRCC)

### Certificate Programs

Administrative Management Technology  
 AMT: Administrative Professional  
 Exercise Science and Personal Training  
 General Education  
 Geographical Information Systems  
 Health Information Management  
 HIM: Electronic Medical Records Management  
 Practical Nursing  
 Surgical Technology (awarded through PVCC)

### Career Studies Programs

Accounting  
 Administrative Management Technology  
 AMT: Executive Assistant  
 Advanced Technology in Mechatronics  
 Advanced Technology in Mechatronics - Fundamentals  
 Air Conditioning and Refrigeration  
 Architectural/Civil Engineering Aide  
 Automotive Analysis and Repair  
 Cisco™ CCNA Networking  
 Computed Tomography Imaging  
 Computer Aided Drafting Career Exploration  
 Culinary Arts  
 Culinary Arts: Baking and Pastry  
 Early Childhood Development  
 Electrical Wiring  
 Energy Management Systems Introduction  
 Energy Management Systems Technician  
 Energy Management Systems Installer  
 Engineering  
 Geographical Information Systems: Career Exploration  
 Health Information Management  
 HIM: Health Records Coding  
 HIM: Medical Office Specialist  
 Horticulture  
 Greenhouse Management  
 Landscaping  
 Viticulture  
 Information Technology  
 IT: Database and Program Developer  
 IT: Desktop Support Technician  
 IT: Network and Security Administration  
 IT: Web Designer  
 IT: Web Programmer  
 Maintenance Technology  
 Management

Business Industrial Supervision  
 Entrepreneurship Plus  
 Human Resource Development  
 Organizational Leadership  
 Microcomputer Systems Technology  
 Phlebotomy  
 Water and Wastewater Technology  
 Welding and Metal Processing  
 Wellness

## GRADUATION REQUIREMENTS

The college shall ensure that students who receive associate degrees or certificates shall have completed the established graduation requirements that follow:

### Associate Degree

To be eligible for graduation with an associate degree from the college, students must:

1. Fulfill all of the course and credit hour requirements of the degree curriculum, with at least 25 percent of the total semester hours acquired at Virginia Western;
2. Earn a grade point average of at least 2.0 in all studies attempted that are applicable toward graduation in their curricula;
3. File an application for graduation with his/her faculty advisor by the established deadline;
4. Submit the graduation fee to the VWCC Cashier's Office;
5. Resolve all financial obligations to the college and return all library and college materials.

### Certificate and Career Studies

To be eligible for graduation with a certificate from the college, students must:

1. Fulfill all of the course and credit hour requirements of the degree curriculum, with at least 25 percent of the total semester hours acquired at Virginia Western;
2. Earn a grade point average of at least 2.0 in all studies attempted that are applicable toward graduation in their curricula;
3. File an application for graduation with his/her faculty advisor by the established deadline;
4. Submit the graduation fee to the VWCC Cashier's Office;
5. Resolve all financial obligations to the college and return all library and college materials.

### Requirement Term (Catalog Year) for Graduation

The Requirement Term (Catalog Year) to be used to determine graduation requirements is the one in effect at the time of the student's initial program placement into the plan, or any catalog thereafter, as long as the student has maintained an active status with the college.

In the event that there has been a break in a student's enrollment at the college resulting in discontinuation, the catalog in effect at the time of the student's re-admission into the plan, or any catalog thereafter, is the catalog that shall be in effect for the student. Following a three-year period of non-enrollment resulting in discontinuation, the student may only be re-admitted to those plans that are currently active. A student may not be re-admitted to a plan which has been inactivated.

In the event that a student remains in an active status with the college, but their plan of study becomes inactive, the student will be notified of their options and the time period required for completing the degree.

The catalog used for certifying graduation shall have been in effect no more than five years prior to the time of graduation.

### Multiple Degrees

Students may be eligible to graduate with multiple degrees and certificates if the content of the curricula differ from one another by at least 25 percent. Questions regarding the awarding of multiple degrees should be directed to the appropriate Academic Dean or to the Registrar.

Students are not eligible to earn more than one degree in the same curriculum. For example, students who earn degrees in a curriculum with a specialization (i.e., an A.S. in Social Sciences with a specialization in Education) will not be eligible to receive a second degree in the same curriculum (i.e., an A.S. in Social Sciences).

Students may not receive multiple degrees in the following curricula:

- AS: Business Administration and General Studies
- AS/AA: Business Administration and Liberal Arts
- AS: Business Administration and Science
- AS: Business Administration and Science – Math
- AS: Engineering and Science
- AS: Engineering and Science – Math
- AS: Engineering – Computer Science and Science – Math
- AS/AA: General Studies and Liberal Arts
- AS/AA: General Studies and Liberal Arts – Fine Arts
- AS: General Studies and Science
- AS: General Studies and Science – Health Science
- AS: General Studies and Social Sciences
- AS: General Studies and Social Sciences – Education
- AA/AS: Liberal Arts and Science
- AA/AS: Liberal Arts and Social Sciences
- AA/AS: Liberal Arts and Social Sciences – Education
- AS: Science and Social Sciences
- AS: Science and Social Sciences – Education
- AS: Science – Health Science and Social Sciences

### Participation in Commencement

All graduating students are expected to participate in the annual commencement ceremony held at the end of the spring

semester. Summer graduates may participate and be recognized in the spring semester commencement ceremony. Students who wish to be excused from commencement must submit a written request (as part of their graduation application) to the Registrar stating the reason why they will be unable to attend.

### Outcomes Assessment Requirement

Students may be required to take one or more tests designed to measure general education achievement and/or achievement in selected major areas prior to graduation for the purpose of evaluation of academic programs. No minimum score or level of achievement is required for graduation. Test results will remain confidential and will be used for the sole purpose of improvement of the college.

### General Education Goals and Student Learning Outcomes

The importance of providing every graduate with a strong background in general education is reflected in both the structure and content of the associate degree programs at Virginia Western Community College. Programs typically devote twenty-five percent or more of the credits required for graduation to the study of general education courses, including at least one course from each of the following: Humanities/Fine Arts, Social/Behavior Sciences, Natural Sciences/Mathematics, and Health/Physical Education. These general education courses, specialized courses in the major field, orientation sessions, and extracurricular activities, are designed to provide each graduate with a collegiate experience that supports the development of the following general education goals:

1. **Communication:** A competent communicator can interact with others using all forms of communication, resulting in understanding and being understood. Degree graduates will demonstrate the ability to:
  - (a) understand and interpret complex materials;
  - (b) assimilate, organize, develop, and present an idea formally and informally;
  - (c) use standard English;
  - (d) use appropriate verbal and non-verbal responses in interpersonal relations and group discussions;
  - (e) use listening skills;
  - (f) recognize the role of culture in communication.
2. **Critical Thinking:** A competent critical thinker evaluates evidence carefully and applies reasoning to decide what to believe and how to act. Degree graduates will demonstrate the ability to:
  - (a) discriminate among degrees of credibility, accuracy, and reliability of inferences drawn from given data;
  - (b) recognize parallels, assumptions, or resuppositions in any given source of information;
  - (c) evaluate the strengths and relevance of arguments on a particular question or issue;
  - (d) weigh evidence and decide if generalizations or conclusions



- based on the given data are warranted;
- (e) determine whether certain conclusions or consequences are supported by the information provided;
- (f) use problem solving skills.

3. **Cultural and Social Understanding:** A culturally and socially competent person possesses an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities. Degree graduates will demonstrate the ability to:

- (a) assess the impact that social institutions have on individuals and culture—past, present, and future;
- (b) describe their own as well as others' personal ethical systems and values within social institutions;
- (c) recognize the impact that arts and humanities have upon individuals and cultures;
- (d) recognize the role of language in social and cultural contexts;
- (e) recognize the interdependence of distinctive worldwide social, economic, geopolitical, and cultural systems.

4. **Information Literacy:** A person who is competent in information literacy recognizes when information is needed and has the ability to locate, evaluate, and use it effectively (adapted from the American Library Association definition). Degree graduates will demonstrate the ability to:

- (a) determine the nature and extent of the information needed;
- (b) access needed information effectively and efficiently;
- (c) evaluate information and its sources critically and incorporate selected information into his or her knowledge base;
- (d) use information effectively, individually or as a member of a group, to accomplish a specific purpose;
- (e) understand many of the economic, legal, and social issues surrounding the use of information and access and use information ethically and legally.

5. **Personal Development:** An individual engaged in personal development strives for physical wellbeing and emotional maturity. Degree graduates will demonstrate the ability to:

- (a) develop and/or refine personal wellness goals;
- (b) develop and/or enhance the knowledge, skills, and understanding to make informed academic, social, personal, career, and interpersonal decisions.

6. **Quantitative Reasoning:** A person who is competent in quantitative reasoning possesses the skills and knowledge necessary to apply the use of logic, numbers, and mathematics to deal effectively with common problems and issues. A person who is quantitatively literate can use numerical, geometric, and measurement data and concepts, mathematical skills, and principles of mathematical reasoning to draw logical conclusions and to make well-reasoned decisions. Degree graduates will demonstrate the ability to:

- (a) use logical and mathematical reasoning within the context of various disciplines;
- (b) interpret and use mathematical formulas;
- (c) interpret mathematical models such as graphs, tables and schematics and draw inferences from them;
- (d) use graphical, symbolic, and numerical methods to analyze, organize, and interpret data;
- (e) estimate and consider answers to mathematical problems in order to determine reasonableness;
- (f) represent mathematical information numerically, symbolically, and visually, using graphs and charts.

7. **Scientific Reasoning:** A person who is competent in scientific reasoning adheres to a self-correcting system of inquiry (the scientific method) and relies on empirical evidence to describe, understand, predict, and control natural phenomena. Degree graduates will demonstrate the ability to:

- (a) generate an empirically evidenced and logical argument;
- (b) distinguish a scientific argument from a non-scientific argument;
- (c) reason by deduction, induction and analogy;
- (d) distinguish between causal and correlational relationships;
- (e) recognize methods of inquiry that lead to scientific knowledge.

## Computer Competency

Virginia Western Community College ensures that students are able to demonstrate college entry-level computer skills necessary for academic success and discipline-specific skills necessary for successful transfer or employment.

## Program Competencies

The AS and AA degree programs are designed for students who plan to transfer to a four-year college or university baccalaureate degree. Upon completion of an AA or AS program, the graduate should have:

1. A broad, general education and the knowledge and skills required of all associate degree students at Virginia Western;
2. Computer literacy competencies required of all associate degree students at Virginia Western;
3. The educational knowledge and skills resulting from completing a core of major courses that will provide support for the student's transfer goals;
4. The course work needed to transfer as an upper-level student to a four-year college or university with little or no loss of credit;
5. The academic background and study skills needed to succeed after transferring to a baccalaureate degree program.

**AAS degree programs** are designed to prepare students for direct entry into the job market in technical and paraprofessional fields. A few of the programs also prepare students to transfer to selected baccalaureate degree programs.

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Upon completion of an AAS degree program, the graduate should have:

1. A broad, general education and the knowledge and skills required of all associate degree students at Virginia Western;
2. Computer literacy competencies required of all associate degree students at Virginia Western;
3. The educational background and occupational training necessary for immediate employment;
4. The skills and knowledge needed to perform satisfactorily on the job;
5. The course work necessary to transfer to and succeed in baccalaureate degree programs that accept transfer students from technical degree programs.

**Certificate programs** are designed to prepare students for direct entry into the job market as technicians, skilled, and semi-skilled workers. Upon completion of a certificate program, the graduate should have:

1. A background in general education;
2. The educational background and occupational training necessary for immediate employment;
3. The skills and knowledge needed to perform satisfactorily on the job.

**Career Studies programs** are designed to prepare students for direct entry into the job market in occupational fields that require entry-level skills and knowledge. Some of the programs also provide persons already employed with an opportunity to upgrade their skills and knowledge. Upon completion of a career studies program, the graduate should have:

1. Entry-level skills and knowledge needed for immediate employment in selected fields
2. The skills and knowledge needed to perform satisfactorily on the job;
3. Up-to-date knowledge and skills in a designated occupational area.

## Distance Learning

Distance learning courses are provided to accommodate the needs of students who cannot attend campus-based classes due to distance or time constraints. These courses fall into two broad groups: synchronous and asynchronous.

### Synchronous Courses

Synchronous courses are provided to students at remote locations, such as another college or a Virginia Western off campus center with a specially equipped electronic classroom. The instructor communicates with students through a live, two-way audio/ video link. These courses have regularly scheduled class meetings and are essentially the same as regular courses except for the fact that two or more sites are connected. They are called synchronous distance learning courses because teaching and learning takes place at the same time, even though the teacher and students are at different locations.

### Asynchronous Courses

Asynchronous courses normally do not have class meetings. Courses designated as hybrid require campus class meetings for some of the instruction; the remainder of the course is asynchronous. Students receive a syllabus and instructional materials, such as prerecorded videotaped programs, that they use independently. They are called asynchronous distance learning courses because the students are learning at time and place of their own choosing. These courses are designed for students with the need and ability for an independent learning environment instead of the traditional classroom setting. Distance education courses offer a flexible, convenient alternative to regular courses with equivalent requirements and standards. A qualified instructor is assigned to each course to guide, assist, and evaluate students. The amount and methods of interaction between students and the instructor vary.

Distance learning courses have the same content, grading system, and credit value as campus-based courses. The tuition is also the same for in-state students. Learning resources and support services are available to students in distance learning courses; moreover, special accommodations are available, such as access to library materials by phone or mail. While synchronous courses are often restricted to students in a special program at another institution, asynchronous courses are open to all qualified students. Registration information is provided in the Schedule of Classes each semester and is available from the Admissions Office.

### Full-Time Fridays

Virginia Western launched Full-Time Fridays for the first time Spring 2012. This option is for students who are seeking to earn a degree while balancing priorities with work, families and life in general. Full-Time Fridays will give those students the opportunity to earn an Associate of Science Degree in General Studies in just two years while taking in-class and hybrid courses on Fridays only. Courses are offered from 8 a.m. - 6:30 p.m.

For more information about enrolling in Full-Time Fridays, visit our website: <http://www.virginiawestern.edu/academics/fridays.php>.



## Weekend College

Virginia Western's Weekend College is an innovative program designed to meet the educational needs of adult learners. Weekend college is intended for students whose other responsibilities prevent them from attending classes during the week, who want to accelerate their progress toward a degree, or who desire a more flexible schedule for completing their coursework. Through a combination of weekend courses and distance-learning classes, students enrolled in Weekend College can complete the requirements that lead to an AS degree in General Studies or Social Sciences. These curricula are specifically designed for students who want to transfer to a four-year college or university.

Each Weekend College class meets on alternating Saturdays, half the number of hours that day and evening classes normally meet. To maintain the academic quality of these courses, instructors supplement classroom instruction with additional materials that students study independently between class meetings. Because of the format for weekend courses, attendance at each of the eight class meetings is crucial for student success, as are class participation and the completion of assignments between classes. **For further information about Weekend College, please call the School of Liberal Arts and Social Sciences at (540) 857-7271.**

## Honors Institute

The goal of the Honors Institute at Virginia Western Community College is to offer academic, cultural, and practical opportunities for academically talented students. The Honors Institute offers intellectually stimulating course work through Honors contracts and Honors classes. The Institute also places emphasis on students exploring new ideas, engaging in in-depth discussion, as well as critical thinking. Such opportunities are made available, both in and out of the classroom, through participation in events sponsored by the Institute and the academic community as a whole. Opportunities include cultural events, field trips and lectures which further the education of the students, while building long-lasting relationships with fellow honors students and faculty members.

The benefits of membership in the Honors Institute include: Honors designation on diploma and transcripts. Specifically, members are recognized on their transcripts as an "Honors Member" with 12 honors credits completed and an "Honors Graduate" with 18 honors credits completed. Additionally, members may receive cords to wear at graduation and members at large may be recognized at graduation. Honors members who have gained honors credits may also be more desired for further academic studies or employment opportunities given their advanced work. Also, prior to graduation, honors members have access to the Institute's private computer lab, as well as individualized academic and career advisement with the Institute Coordinator.

Students must apply for membership to the Honors Institute. A combination of factors determines admission, including an interview with the Honors Institute Coordinator and a minimum grade point achievement. For students new to Virginia Western with less than 12 college credit hours completed; a 3.5 GPA, SAT 1650 (New SAT), top 10% of high school graduating class, and two letters of reference are required. For students enrolled at Virginia Western, completion of 12 college credit hours with a cumulative 3.2 GPA, and two on-campus references are required.

Direct interest or questions to:

**The Honors Institute**  
Duncan Hall Room 215  
Virginia Western Community College  
P.O. Box 14007  
Roanoke, Virginia 24038

**(540) 857-6240**, [honorsinstitute@viriniawestern.edu](mailto:honorsinstitute@viriniawestern.edu)



## VIRGINIA WESTERN COMMUNITY COLLEGE

The Virginia Community College System and the State Council of Higher Education have approved Virginia Western's General Studies degree program as a transfer degree program.

Below is a list of the courses offered via distance learning and/or Weekend College to fulfill the requirements for the AS degree in General Studies and Social Science from Virginia Western. For complete information on degree requirements, refer to the General Studies degree section and the Social Science degree section of this catalog.

### General Studies Degree - Distance Learning

SDV 100 .....	College Success Skills (or SDV 108) .....	1 CR
ENG 111-112	College Composition I-II .....	6 CR
ITE 115 .....	Basic Computer Competency .....	3 CR
HLT 110 .....	Concepts of Personal & Community Health ....	2 CR
BIO 101-102	.General Biology I-II <sup>1</sup> .....	8 CR
MTH 151 .....	Mathematics for Liberal Arts I .....	3 CR
MTH 157 .....	Elementary Statistics (or elective) .....	3 CR
ENG 241-242	Survey of American Literature I-II <sup>2</sup> .....	6 CR
HIS 121-122	.U.S. History I-II or HIS 111-112 History of World Civilization I-II .....	6 CR
CST 100 .....	Principles of Public Speaking .....	3 CR

<sup>1</sup> BIO 101-102 students must attend a few on-campus labs on Saturdays.

<sup>2</sup> ENG 243-244 may be substituted for ENG 241-242.

#### Humanities electives ..... 6 CR

ART 101-102	.....History and Appreciation of Art I-II
HUM 201-202	...Survey of Western Culture I-II
MUS 121-122	...Music Appreciation I-II
PHI 101	.....Introduction to Philosophy
REL 200	.....Survey of the Old Testament
REL 210	.....Survey of New Testament
REL 230	.....Religions of the World

#### Social Science electives (any three)..... 6 CR

ECO 201-202	....Principles of Macroeconomics/Microeconomics
PLS 211-212	.....U.S. Government I-II
PSY 200	.....Principles of Psychology
PSY 215	.....Abnormal Psychology
SOC 200	.....Principles of Sociology

#### General transfer electives ..... 9 CR

#### Total credits for AS in General Studies ..... 62 CR

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.



Below is a list of the courses offered via distance learning and/or Weekend College to fulfill the requirements for the AS degree in General Studies and Social Science from Virginia Western. For complete information on degree requirements, refer to the General Studies degree section and the Social Science degree section of this catalog.

## Social Sciences Degree - Distance Learning

SDV 100 .....	College Success Skills (or SDV 108) .....	1 CR
ENG 111-112 .....	College Composition I-II .....	6 CR
ITE 115 .....	Basic Computer Competency .....	3 CR
HLT 110 .....	Concepts of Personal & Community Health .....	2 CR
BIO 101-102 .....	General Biology I-II <sup>1</sup> .....	8 CR
MTH 151 .....	Mathematics for Liberal Arts I .....	3 CR
MTH 157 .....	Elementary Statistics (or elective) .....	3 CR
ENG 241 .....	Survey of American Literature I-II <sup>2</sup> .....	3 CR
HIS 121-122 .....	U.S. History I-II or HIS 111-112 History of World Civilization I-II .....	6 CR
ECO 201 .....	Principles of Macroeconomics.....	3 CR
PSY 200 .....	Principles of Psychology .....	3 CR
SOC 200 .....	Principles of Sociology .....	3 CR
CST 100 .....	Principles of Public Speaking.....	3 CR

<sup>1</sup>BIO 101-102 students must attend a few on-campus labs on Saturdays.

<sup>2</sup> ENG 242, 243, 244 may be substituted for ENG 241.

### Humanities electives ..... 3 CR

ART 101-102 .....	History and Appreciation of Art I-II
ENG 242 .....	Survey of American Literature II
HUM 201-202 .....	Survey of Western Culture I-II
MUS 121-122 .....	Music Appreciation I-II

### Social Science electives (any three) ..... 9 CR

ECO 202 .....	Principles of Microeconomics
GEO 200 .....	Introduction to Physical Geography
PLS 211-212 .....	U.S. Government I-II
PSY 215 .....	Abnormal Psychology (or other PSY electives)
PSY 230 .....	Developmental Psychology (or other PSY electives)

### General transfer electives ..... 3 CR

### Total credits for AS in Social Sciences ..... 62 CR

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

VIRGINIA WESTERN  
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# Top 10 Reasons for Attending Virginia Western Community College

**1. Teaching is a top priority.** Faculty at comprehensive four-year colleges and universities often are heavily involved in research and graduate students teach many classes. However, at Virginia Western all full-time faculty are professional college teachers. Except for some who teach specialized technical courses, all Virginia Western faculty have a master's degree or doctorate in their teaching field. Adjunct (part-time) instructors are also fully qualified, and many adjunct faculty bring a wealth of practical experience to the classroom.

**2. Personal attention and support.** The college's commitment to teaching is also reflected in the average class size of approximately 20 students. At Virginia Western, there are no large classes taught in lecture halls. Students receive personal attention during and outside of class. Graduates consistently give faculty high marks for their attitude toward students and the quality of instruction.

**3. Affordable.** The average cost of attending a public liberal arts college or university in Virginia is more than \$9,500 per year for tuition and fees, plus room and board. (Tuition at private colleges is substantially higher.) By comparison, tuition and fees for a full-time student at Virginia Western is less than \$4,000 per year. Thus, attending Virginia Western for the first two years of college can result in substantial saving.

**4. Convenient location.** Area residents do not have to leave their family and job to go to college. If they choose to, they can live at home and continue working while attending Virginia Western. The campus is easily accessible to residents throughout the Roanoke area.

**5. Flexible class scheduling.** Students in most programs of study at Virginia Western can attend evening or day classes, based on their personal preference, family responsibilities, and work schedule. Students can enroll on a full-time basis and earn an associate degree in two years, or attend part-time and advance at their own pace.

**6. Excellent facilities.** Classrooms and laboratories are well maintained and equipped with state-of-the-art technology. Satellite receivers and fiber optic cable link Virginia Western classrooms and computer labs to a network of resources both within and beyond the campus. The college's library has extensive holdings and is fully automated. Elevators, ramps, and other accommodations provide access to persons with physical disabilities. Abundant, well-lighted parking is provided, and campus security personnel are available around-the-clock for assistance.

**7. Educational support for students.** In order to help students establish and achieve their goals, Advising Specialists provide personal assistance. Individual and group advising is offered to students seeking help with educational or career needs. To provide a well-rounded college experience, the Student Activities Office sponsors a variety of student organizations, co-curricular programs and special events. In addition, the Knisely Learning Technology Center serves as a place for students to obtain individual attention for their academic needs. As a supplement to regular classroom instruction, the Learning Technology Center provides tutoring, computer-aided instruction, audio/visual programs, and other helpful resources. Special assistance for students with disabilities is also available.

**8. Smooth transfer of credits.** Statewide transfer agreements between the Virginia Community College System and four-year colleges and universities, plus individual arrangements with specific institutions, enable Virginia Western students to complete at least the first two years of study toward a bachelor's degree. Feedback from four-year institutions consistently indicates that Virginia Western graduates are well-prepared for transfer: typically over 90% are reported to be in good standing, having experienced little if any drop in their grade point average.

**9. Our graduates get great jobs.** A college education is becoming increasingly valuable to compete in the job market. Graduates of Virginia Western's occupational/technical programs have reported excellent employment success. The most recent alumni survey showed over 90% employed either full-time or part-time and nearly 70% working in a program-related field. Employment rates and starting salaries were especially high in health technology, business, and engineering technology fields.

**10. Open to everyone. We're the community's college.** All persons with the desire and ability to benefit from college are welcome at Virginia Western. Upon admission to the college, each academic program requires a minimum level of proficiency in English and mathematics; however, preparatory courses and academic support services are provided to students who lack the necessary foundation for success. At the other end of the continuum, an honors program is available for academically gifted students. Most classes consist of a broad range of students, reflecting the diverse population of the community.

## Table 5-1A Degree Requirements

### AREA

#### General Education

General education is that portion of the collegiate experience that addresses the knowledge, skills, attitudes, and values characteristic of educated persons. It is unbounded by disciplines and honors the connections among bodies of knowledge. The associate degree programs within the VCCS support a collegiate experience that focuses on seven goal areas: communication; critical thinking; cultural and social understanding; information literacy; personal development; quantitative reasoning; scientific reasoning.) The general education goals areas outlined below are to be introduced in the foundational courses and enhanced in program and elective courses. (**Note:** Some of the categories include two goals areas when a single course may provide foundations in both goal areas.)

- I. Foundations in Communication: Courses designed to enable students to interact with others using all forms of communication, resulting in understanding and being understood.
- II. Foundations in Critical Thinking and Information Literacy: Courses designed to enable students to evaluate evidence carefully and apply reasoning to decide what to believe and how to act, and to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.
- III. Foundations in Cultural and Social Understanding: Courses designed to enable students to have an awareness, understanding, and appreciation of the interconnectedness of the social and cultural dimensions within and across local, regional, state, national, and global communities.
- IV. Foundations in Personal Development: Courses designed to enable students to strive for physical well-being and emotional maturity.
- V. Foundations in Quantitative and Scientific Reasoning: Courses designed to enable students to possess the skills and knowledge necessary to apply the use of logic, numbers, and mathematics to deal effectively with common problems and issues, and to adhere to a self-correcting system of inquiry (the scientific method) and rely on empirical evidence to describe, understand, predict, and control natural phenomena.

#### PROGRAM REQUIREMENTS

Major Field Core	Minimum 15 credits*
Related/Specialization Courses	Maximum 15 credits
Electives	0–15 credits

#### TOTALS

**AA/AS/AA&S: \*\* = 60-63 credits**

**AAA/AAS: = 65-69 credits \*\*\***

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#### Minimum 15 credits

(Students must take at least one course in each of the five areas listed, to total at least 15 credits.)

## Table 5-1B Minimum Requirements for Associate Degrees in the VCCS

General Education	Minimum Number of Semester Hour Credits			
	(1) AA	(2) AS	(3) AA&S	(4) AAA/AAS
Communication <sup>(a)</sup>	6	6	6	3
Humanities/Fine Arts	6	6	6	3
Foreign Language (Intermediate Level)	6	0	0	0
Social/Behavioral Sciences	9	9 <sup>(b)</sup>	9	3 <sup>(c)</sup>
Natural Sciences/ Mathematics	7 6	7 6 <sup>(d)</sup>	7 6 <sup>(d)</sup>	0 0 } 3 <sup>(c)</sup>
Personal Development <sup>(e)</sup>	2	2	2	2
Other requirements for Associate Degree: Major field courses and electives (columns 1-3) Career/technical courses (column 4)	18-21	24-27	24-24	49-53 <sup>(f)</sup>
<b>Total for Degree <sup>(g)</sup></b>	<b>60-63</b>	<b>60-63<sup>(h)</sup></b>	<b>60-63<sup>(h)</sup></b>	<b>65-69<sup>(h)</sup></b>

**Notes:**

The VCCS Policy Manual, Section 2-IV-C, defines general education within the VCCS. Sections 2.7.3, 3.4.10, and 3.5.1 of the Southern Association of Colleges and Schools (SACS) Principles of Accreditation specify general education requirements. Colleges must address all SACS requirements, the SCHEV Core Competencies, and the general education goal areas listed in this VCCS Policy Manual.

- a) Must include at least one course in English composition.
  - b) Only 6 semester hours of social/behavioral sciences are required for engineering majors who plan to transfer to a baccalaureate degree engineering program that requires 6 or fewer hours in this category, provided that the college/ university publishes such requirements in its transfer guide.
  - c) While general education courses other than those designed for transfer may be used to meet portions of these requirements, SACS principles require that general education courses be general in nature and must not "...narrowly focus on those skills, techniques, and procedures peculiar to a particular occupation or profession."
  - d) Only 3 semester hours of mathematics are required for the General Studies major.
  - e) Personal development includes health, physical education, or recreation courses that promote physical and emotional well being and student development courses. Must include at least one student development course.
  - f) AAA/AAS degrees must contain a minimum of 15 semester hours of general education. Students should plan to take at least 30 hours in the major; the remaining hours will be appropriate to the major.
  - g) All college-level course prerequisites must be included in the total credits required for each program.
  - h) Credit range for engineering programs is 60–72 semester hour credits. Credit range for AAA/AAS programs is 65–69, including nursing. For other programs in the Health Technologies, the range is 65–72 semester hour credit.
- \* Language in Section 5.1.0.0.1 of the VCCS Policy Manual states 25% of the courses in the degree program (15–18 credits) must be common across majors within a degree. The shared courses must be major or related/specialization courses.
- \*\* Credit range for engineering programs is 60–72 semester hour credits.
- \*\*\* Credit range for AAA/AAS programs is 65–69, including nursing. For other programs in the Health Technologies, the range is 65–72 semester hour credits.



## Table 5-2 Minimum Requirements for Diplomas, Certificates and Career Studies Certificates

	<b>Diploma*</b>	<b>Certificate</b>	<b>Career Studies Certificate</b>
<b>Definition</b>	A two-year curriculum with an emphasis in a career/technical area	A curriculum that consists of a minimum of 30 semester credit hours	A program of study of not less than 9 nor more than 29 semester credit hours
<b>Course Requirements</b>	May include any appropriate courses numbered 10-299	May include any appropriate courses numbered 10-299	May include any appropriate courses numbered 10-299
<b>General Education Requirements</b>	A minimum of fifteen percent (15%) of credit hour requirements shall be in general education, including 1 three-credit English course.	A minimum of fifteen percent (15%) of credit hour requirements shall be in general education, including 1 three-credit English course.	There are no general education requirements.
<b>Graduation Requirements</b>	See 5.1.2 and 5.1.3 <ul style="list-style-type: none"> <li>• 25% of courses must be taken at home institution.</li> <li>• 2.0 GPA</li> <li>• Graduation honors eligible</li> </ul>	See 5.1.2 and 5.1.3 <ul style="list-style-type: none"> <li>• 25% of courses must be taken at home institution.</li> <li>• 2.0 GPA</li> <li>• Graduation honors eligible</li> </ul>	See 5.1.2 and 5.1.3 <ul style="list-style-type: none"> <li>• 25% of courses must be taken at home institution.</li> <li>• 2.0 GPA</li> <li>• Not eligible for graduation honors</li> </ul>
<b>Approval</b>	State Board for Community Colleges	Chancellor	Local College Board

\*Not offered through Virginia Western Community College

# Approved List of Transfer Courses - List A

The purpose of these lists of courses is to assist students in their selection of required electives. Each program of study specifies the list from which electives must be chosen. Students must review the requirements for their degree program to ensure electives are chosen from the correct list. Electives should be selected carefully in conjunction with a faculty advisor. Students who intend to transfer should verify specific requirements with their four-year institution.

## Humanities/Fine Arts Electives:

- ART 101-102**... History and Appreciation of ART I-II+
- CST 130** ..... Introduction to Theatre
- ENG 241-242** .. Survey of American Literature I-II+
- ENG 243-244** .. Survey of English Literature I-II+
- ENG 251-252** .. Survey of World Literature I-II+
- FRE 201-202**.... Intermediate French I-II
- HUM 201-202**. Survey of Western Culture I-II+
- MUS 121-122**.. Music Appreciation I-II+
- PHI 101** ..... Introduction to Philosophy I
- PHI 220**..... Ethics
- REL 200** ..... Survey of the Old Testament
- REL 230** ..... Religions of the World
- REL 231-232**.... Religions of the World I-II+
- SPA 201-202** ... Intermediate Spanish I-II

## Health and Physical Education Electives:

- HLT 110** ..... Concepts of Personal & Community Health
- HLT 230** ..... Principles of Nutrition & Human Development
- PE courses** <sup>2</sup>

## Mathematics Electives:

- MTH 151-152**.. Mathematics for the Liberal Arts I-II+
- MTH 157** ..... Elementary Statistics
- MTH 163** ..... Pre-Calculus I
- MTH 166** ..... Pre-Calculus with Trigonometry
- MTH 175-176**.. Calculus of One Variable I-II
- MTH 241-242**.. Statistics I-II
- MTH 271-272**.. Applied Calculus I-II

## Science Sequence:<sup>1</sup>

- BIO 101-102**.... General Biology I-II
- BIO 141-142**.... Human Anatomy and Physiology
- CHM 111-112** . College Chemistry I-II
- GOL 105-106** .. Physical/Historical Geology<sup>+</sup>
- NAS 131-132** .. Astronomy I-II+
- PHY 201-202**... General College Physics I-II
- PHY 241-242**... University Physics I-II

## Social Science Electives:

- ECO 201** ..... Principles of Macroeconomics
- ECO 202** ..... Principles of Microeconomics
- GEO 210**..... People & the Land: Intro to Cultural Geography
- GEO 220**..... World Regional Geography
- HIS 111-112** ... History of World Civilization I-II+
- HIS 121-122** .... United States History I-II+
- PLS 211-212** ... United States Government I-II+
- PSY 200**..... Principles of Psychology
- PSY 215**..... Abnormal Psychology
- PSY 230**..... Developmental Psychology
- PSY 235**..... Child Psychology
- PSY 236**..... Adolescent Psychology
- SOC 200** ..... Principles of Sociology
- SOC 215** ..... Sociology of the Family
- SOC 266** ..... Race and Ethnicity

<sup>1</sup> A two semester sequence of the same lab science is required to fulfill a science sequence.

<sup>2</sup> Up to two credits of PE may be used towards completing the Transfer Elective requirement.

<sup>+</sup> (Applies to List A and List B) Either course in this sequence may be taken first.



# Approved List of Transfer Courses - List B

## Business Electives:

- ACC 211-212** ..... Principles of Accounting I-II  
**BUS 221-222** ..... Business Statistics I-II  
**ITE 115** ..... Intro Computer Applications and Concepts

## Computer Science Electives:

- CSC 201-202** ..... Computer Science I-II

## Communication Electives:

- CST 100** ..... Principles of Public Speaking  
**ENG 111-112** ..... College Composition I-II  
**ENG 210** ..... Advanced Composition

## Health and Physical Education Electives:

- HLT 110** ..... Concepts of Personal & Community Health  
**HLT 230** ..... Principles of Nutrition & Human Development  
**PED courses** <sup>2</sup>

## Humanities/Fine Arts Electives:

- ART 101-102** ..... History and Appreciation of ART I-II+  
**ART 121-122** ..... Drawing I-II  
**ART 241-242** ..... Painting I-II  
**ART 243-244** ..... Watercolor I-II  
**ART 131-132** ..... Fundamentals of Design I-II  
**CST 130** ..... Introduction to Theatre  
**ENG 241-242** ..... Survey of American Literature I-II+  
**ENG 243-244** ..... Survey of English Literature I-II+  
**ENG 251-252** ..... Survey of World Literature I-II+  
**FRE 101-102** ..... Beginning French I-II  
**FRE 201-202** ..... Intermediate French I-II  
**HUM 201-202** ..... Survey of Western Culture I-II +  
**MUS 121-122** ..... Music Appreciation I-II+  
**PHI 101** ..... Introduction to Philosophy I  
**PHI 220** ..... Ethics  
**PHT 101** ..... Photography I  
**REL 200** ..... Survey of the Old Testament  
**REL 210** ..... Survey of the New Testament  
**REL 230** ..... Religions of the World  
**REL 231-232** ..... Religions of the World I-II+  
**REL 247** ..... History of Christianity  
**SPA 101-102** ..... Beginning Spanish I-II  
**SPA 201-202** ..... Intermediate Spanish I-II

## Mathematics Electives:

- MTH 151-152** ..... Mathematics for the Liberal Arts I-II+  
**MTH 157** ..... Elementary Statistics  
**MTH 163** ..... Pre-Calculus I  
**MTH 166** ..... Pre-Calculus with Trigonometry  
**MTH 175-176** ..... Calculus of One Variable I-II  
**MTH 177** ..... Introduction to Linear Algebra  
**MTH 178** ..... Topics in Analytic Geometry  
**MTH 241-242** ..... Statistics I-II

- MTH 271-272** .... Applied Calculus I-II  
**MTH 277** ..... Vector Calculus  
**MTH 285** ..... Linear Algebra  
**MTH 287** ..... Mathematical Structures  
**MTH 291** ..... Differential Equations

## Science Electives with Lab:

- BIO 101-102** ..... General Biology I-II  
**BIO 141-142** ..... Human Anatomy and Physiology  
**BIO 205** ..... General Microbiology  
**BIO 206** ..... Cell Biology  
**BIO 215** ..... Plant Life of Virginia  
**BIO 270** ..... General Ecology  
**BIO 271** ..... Introduction to Ecological Systems  
**CHM 111-112** ... College Chemistry I-II  
**CHM 241-242** ... Organic Chemistry I-II  
**CHM 245-246** ... Organic Chemistry Lab I-II  
**GOL 105-106** ..... Physical/Historical Geology+  
**NAS 131-132** ..... Astronomy I-II+  
**PHY 201-202** ..... General College Physics I-II  
**PHY 241-242** ..... University Physics I-II

## Science Electives without Lab:

- BIO 220** ..... Immunology  
**BIO 285** ..... Biological Problems in Contemporary Society  
**ENV 161** ..... Intro to Environmental Compliance  
**ENV 162** ..... Environmental Principles in Public Health

## Social Science Electives:

- ECO 201** ..... Principles of Macroeconomics  
**ECO 202** ..... Principles of Microeconomics  
**GEO 200** ..... Introduction to Physical Geography  
**GEO 210** ..... People & the Land: Intro to Cult Geography  
**GEO 220** ..... World Regional Geography  
**HIS 111-112** ..... History of World Civilization I-II+  
**HIS 121-122** ..... United States History I-II+  
**HIS 205** ..... Local History  
**HIS 267** ..... The Second World War  
**PLS 211-212** ..... United States Government I-II+  
**PSY 200** ..... Principles of Psychology  
**PSY 215** ..... Abnormal Psychology  
**PSY 225** ..... Theories of Personality  
**PSY 230** ..... Developmental Psychology  
**PSY 235** ..... Child Psychology  
**PSY 236** ..... Adolescent Psychology  
**SOC 200** ..... Principles of Sociology  
**SOC 215** ..... Sociology of the Family  
**SOC 266** ..... Race and Ethnicity

<sup>1</sup> A two semester sequence of the same lab science is required to fulfill a science sequence.

<sup>2</sup> Up to two credits of PE may be used towards completing the Transfer Elective requirement.

+ (Applies to List A and List B) Either course in this sequence may be taken first.


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## Alphabetical Listing of Programs

Accounting (AAS) .....	54	Horticulture: Greenhouse Management (CS).....	99
Accounting (CS) .....	55	Horticulture: Landscaping (CS).....	100
Administration of Justice (AAS).....	56	Horticulture: Viticulture (CS).....	101
Administrative Management Technology (AAS).....	57	Human Services (AAS) .....	102
Medical Administrative Management (AAS).....	58	Information Systems Technology (AAS).....	104
AMT: Administrative Professional (Cert) .....	59	IT: Database and Program Developer (CS).....	106
AMT: Executive Assistant (CS) .....	60	IT: Desktop Support Technician (CS).....	107
Advanced Technology in Mechatronics (CS) .....	61	IT: Network and Security Administration (CS).....	108
Advanced Technology in Mechatronics –		IT: Web Designer (CS).....	109
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Business Administration (AS) .....	68	Marketing (AAS).....	117
Cisco™ CCNA™ Networking (CS).....	69	Management: Business Industrial Supervision (CS)..	118
Communication Design (AAS).....	70	Management: Entrepreneurship Plus (CS).....	119
Computed Tomography Imaging (CS).....	71	Management: Human Resource Dev. (CS) .....	120
Computer Aided Drafting Career Exploration (CS) .....	72	Management: Organizational Leadership (CS).....	121
Culinary Arts (AAS).....	74	Mechanical Engineering Technology (AAS).....	122
Culinary Arts (CS) .....	76	Mechatronics Systems Engineering	
Culinary Arts: Baking & Pastry CS) .....	77	Technology (AAS) (pending) .....	123
Dental Hygiene (AAS) .....	78	Microcomputer Systems Technology (CS).....	124
Early Childhood Development (AAS).....	80	Nursing (AAS).....	125
Early Childhood Development (CS) .....	81	Paralegal Studies (AAS) .....	128
Electrical Engineering Technology (AAS).....	82	Phlebotomy.....	129
Electrical Wiring (CS) .....	83	Practical Nursing (Cert).....	130
Energy Management Systems Introduction (CS).....	84	Radiation Oncology (AAS).....	132
Energy Management Systems Technician (CS).....	85	Radiography (AAS).....	134
Energy Management Systems Installer (CS) .....	86	Science (AS) .....	136
Engineering (AS).....	87	Science: Health Sciences (AS) .....	138
Engineering: Computer Science (AS).....	88	Science: Integrated Environmental Studies (AS) ...	140
Engineering (CS).....	89	Science: Mathematics (AS).....	141
Exercise Science and Personal Training (Cert).....	90	Social Sciences (AS) .....	142
General Education (Cert) .....	92	Social Science: Education (AS).....	143
General Studies (AS).....	93	Surgical Technology (Cert) Offered through PVCC .....	144
Geographical Information Systems (Cert) .....	94	Technical Studies: Energy Management (AAS).....	145
Geographical Information Systems: Career Exploration (CS).....	95	Technical Studies: Mechatronics Technology Specialization ..	146
HIM: Electronic Medical Records Management (Cert) ....	96	Veterinary Technology (AAS) Offered through BRCC ....	147
HIM: Health Records Coding (CS) .....	97	Water and Wastewater Technology (CS) .....	148
HIM: Medical Office Specialist (CS).....	98	Welding and Metal Processing (CS) .....	149

# Accounting

## Associate of Applied Science 203

**Purpose:** The curriculum is designed for persons who seek employment in the accounting field.

**Program Objectives:** Employment opportunities include positions as a clerk in accounting, auditing, tax or management.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Accounting program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

CST 105	..... Oral Communication (or CST 100)	.....3
ECO 120	..... Survey of Economics (or ECO 201/202)	.....3
ENG 111*	..... College Composition I	.....3
HLT/PED <sup>1</sup>	..... Health or Physical Education	.....1
ITE 115	..... Intro to Computer Applications and Concepts	.....3
MTH 120*	..... Introduction to Mathematics (or MTH 163)	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A)	.....3

### ACCOUNTING AND RELATED COURSES

CREDITS

ACC 124	..... Payroll Accounting I	.....3
ACC 211*	..... Principles of Accounting I	.....4
ACC 212*	..... Principles of Accounting II	.....4
ACC 215*	..... Computerized Accounting	.....3
ACC 221*	..... Intermediate Accounting I (fall only)	.....4
ACC 231*	..... Cost Accounting I (fall only)	.....3
ACC 261*	..... Principles of Federal Taxation I	.....3
AST 205*	..... Business Communications	.....3
BUS 100	..... Introduction to Business	.....3
BUS 125*	..... Applied Business Mathematics (or MTH 271)	.....3
BUS 225*	..... Applied Business Statistics	.....3
BUS 241	..... Business Law I	.....3
FIN 215*	..... Financial Management	.....3
ITE 140	..... Spreadsheet Software	.....3

### Total Minimum Credits for Degree

65

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ACC 211 BUS 100 ENG 111 ITE 115 MTH 120 SDV 100	ACC 124 ACC 212 BUS 125 CST 105 ECO 120	ACC 221 (FALL ONLY) ACC 231 (FALL ONLY) AST 205 BUS 225 ITE 140	ACC 215 ACC 261 BUS 241 FIN 215 HUMANITIES/FINE ARTS ELECTIVE HLT/PED

# Accounting

Career

Studies

Certificate

221-203-02

**Purpose:** This curriculum is designed for persons who seek employment as a bookkeeper or as an accounting clerk.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ACC 124.....Payroll Accounting.....	3
ACC 211*.....Principles of Accounting I.....	4
ACC 212*.....Principles of Accounting II.....	4
ACC 215*.....Computerized Accounting.....	3
ACC 261*.....Principles of Federal Taxation I.....	3
AST 205*.....Business Communications.....	3
BUS 125*.....Applied Business Math.....	3
ITE 115.....Intro to Computer Applications and Concepts.....	3
ITE 140.....Spreadsheet Software.....	3

**Total Minimum Credits for Certificate .....29**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
ACC 124	ACC 212
ACC 211	ACC 215
AST 205	ACC 261
BUS 125	ITE 140
ITE 115	

# Administration of Justice

## Associate of Applied Science

400

**Purpose:** This curriculum is designed to provide a broad educational foundation which will prepare graduates for employment in numerous criminal justice related occupations. For students already working in the criminal justice field, this curriculum will provide preparation for advancement in the profession.

**Program Objectives:** Employment opportunities exist in a wide variety of areas: uniformed officers for local, county and state police agencies; enforcement/investigative officers for federal government agencies; corrections, retail and industrial security, probation/parole, insurance work and private investigation.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** The Associate of Applied Science degree does not take the place of attendance at a basic academy which most police, corrections, or security agencies require prior to being employed by that agency. However, the Administration of Justice curriculum will help prepare one academically for successful completion of an agency academy.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Administration of Justice program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

CREDITS

CST 100	..... Principles of Public Speaking	.....3
ENG 111*	..... College Composition I	.....3
ENG 112*	..... College Composition II	.....3
HLT/PED <sup>1</sup>	..... Health or Physical Education	.....3
ITE 115	..... Intro Computer Applications and Concepts	.....3
MTH 157*	..... Elementary Statistics	.....3
PHI 220	..... Ethics (or PHI 101)	.....3
PLS 211	..... United States Government I	.....3
PSY 200*	..... Principles of Psychology	.....3
SOC 200	..... Principles of Sociology	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>3</sup>	..... Humanities/Fine Arts Elective (List B)	.....3
E <sup>3</sup>	..... Science Sequence (List A)	.....8

#### ADMINISTRATION OF JUSTICE AND RELATED COURSES

CREDITS

ADJ 100	..... Survey of Criminal Justice	.....3
ADJ 120	..... Introduction to Courts	.....3
ADJ 140	..... Introduction to Corrections	.....3
ADJ 229	..... Law Enforcement and Community	.....3
E <sup>2</sup>	..... Administration of Justice Electives	..... 12

**Total Minimum Credits for Degree** .....66

<sup>1</sup> If a student takes HLT 110 for 2 credits, a physical education course may be used for the one credit hour difference. Three physical education courses will not fulfill this requirement. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Four ADJ electives must be taken from the following list:

- ADJ 105 Juvenile Justice System
- ADJ 107 Survey of Criminology
- ADJ 130 Introduction to Criminal Law
- ADJ 164 Case Studies in Murder and Violent Crimes
- ADJ 186 Forensic Psychology: Criminal Investigative Analysis
- ADJ 227 Constitutional Law for Justice Personnel
- ADJ 232 Domestic Violence
- ADJ 234 Terrorism & Counter Terrorism
- ADJ 236 Principles of Criminal Investigation
- ADJ 237\* Advanced Criminal Investigation

<sup>3</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

#### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ADJ 100	ADJ 120	ADJ 140	ADJ 229
ENG 111	CST 100	PLS 211	PHI 220
HLT/PED	ENG 112	ADJ ELECTIVE	ADJ ELECTIVES
ITE 115	MTH 157	HUMANITIES/FINE ARTS	SCIENCE ELECTIVE
PSY 200	SOC 200	ELECTIVE	
SDV 100	ADJ ELECTIVE	SCIENCE ELECTIVE	



# Administrative Management Technology

## Associate of Applied Science

298

**Purpose:** This curriculum is designed for graduates to be qualified for jobs in administrative office management and administrative support supervision.

A specialization is also available in medical administrative management.

**Program Objectives:** Employment opportunities include: general office manager, billing and/or credit manager, executive assistant, and account managers.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Administrative Management Technology program head as listed on program webpage.

### ADMINISTRATIVE MANAGEMENT MAJOR

#### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES CREDITS

CST 105 .....	Oral Communication .....	3
ENG 111* .....	College Composition I .....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	1
MTH 120* .....	Introduction to Mathematics .....	3
PSY 120.....	Human Relations.....	3
SDV 101 .....	Orientation to AMT/HIM (or SDV 100).....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3

#### ADMINISTRATIVE MANAGEMENT AND RELATED COURSES CREDITS

ACC 211* .....	Principles of Accounting I .....	4
AST 101 .....	Keyboarding I.....	3
AST 102* .....	Keyboarding II .....	3
AST 107 .....	Editing/Proofreading Skills .....	3
AST 113* .....	Keyboarding for Speed & Accuracy.....	1
AST 141* .....	Word Processing I (Microsoft® Word) .....	3
AST 154 .....	Voice Recognition Applications .....	1
AST 205* .....	Business Communications .....	3
AST 232* .....	Microcomputer Office Applications .....	3
AST 236* .....	Specialized Software Applications .....	3
AST 238* .....	Advanced Word Processing .....	3
AST 243* .....	Office Administration I .....	3
AST 244* .....	Office Administration II .....	3
BUS 200 .....	Principles of Management .....	3
BUS 205.....	Human Resource Management.....	3
BUS 241 .....	Business Law .....	3
MKT 100 .....	Principles of Marketing .....	3

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
AST 101	ACC 211	AST 232	AST 205
AST 107	AST 102	AST 238	AST 236
AST 154	AST 113	AST 243	AST 244
ENG 111	AST 141	BUS 200	HLT/PED
MKT 100	BUS 241	BUS 205	PSY 120
MTH 120	CST 105		HUMANITIES/FINE ARTS
SDV 101			ELECTIVE

# Administrative Management Technology

## Associate of Applied Science 298-03

**Purpose:** This curriculum is designed for graduates to be qualified for jobs in medical office management and medical administrative support supervision.

**Program Objectives:** Employment opportunities include: physician practice manager, hospital office manager, and health information office manager.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Administrative Management Technology program head as listed on program webpage.

### MEDICAL ADMINISTRATIVE MANAGEMENT SPECIALIZATION

#### CURRICULUM AND OTHER REQUIREMENTS CREDITS GENERAL EDUCATION CORE COURSES

CST 105	..... Oral Communication .....	3
ENG 111*	..... College Composition I .....	3
HLT/PED <sup>1</sup>	..... Health or Physical Education .....	1
MTH 120*	..... Introduction to Mathematics .....	3
PSY 120	..... Human Relations.....	3
SDV 101	..... Orientation to AMT/HIM (or SDV 100).....	1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A) .....	3

#### MEDICAL ADMINISTRATIVE MANAGEMENT AND RELATED COURSES CREDITS

ACC 211*	..... Principles of Accounting 1 .....	4
AST 101	..... Keyboarding I.....	3
AST 102*	..... Keyboarding II .....	3
AST 113*	..... Keyboarding for Speed & Accuracy.....	1
AST 141*	..... Word Processing I (Microsoft Word).....	3
AST 154	..... Voice Recognition Applications .....	1
AST 205*	..... Business Communications .....	3
AST 232*	..... Microcomputer Office Applications .....	3
AST 238*	..... Advanced Word Processing .....	3
AST 243*	..... Office Administration I .....	3
AST 244*	..... Office Administration II .....	3
BUS 200	..... Principles of Management .....	3
BUS 205	..... Human Resource Management.....	3
BUS 241	..... Business Law .....	3
HLT 143*	..... Medical Terminology I .....	3
HLT 144*	..... Medical Terminology II .....	3
MKT 100	..... Principles of Marketing .....	3

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

#### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
AST 101	AST 102	ACC 211	AST 205
AST 154	AST 113	AST 238	AST 232
ENG 111	AST 141	AST 243	AST 244
HLT 143	CST 105	BUS 205	BUS 200
MKT 100	HLT/PED	BUS 241	PSY 120
MTH 120	HLT 144		
SDV 101	HUMANITIES/FINE ARTS ELECTIVE		

# AMT: Administrative Professional

## Certificate

218

**Purpose:** This curriculum is designed to prepare individuals for employment as an administrative professional to executives and/or managers in business and industry. Administrative professionals may also supervise other office personnel.

**Program Objectives:** Employment opportunities include administrative assistants, medical office personnel, legal assistants, and a variety of administrative support positions.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

CREDITS

CST 105..... Oral Communications .....	3
ENG 111* ..... College Composition I .....	3
SDV 101 ..... Orientation to AMT/HIM (or SDV 100).....	1

#### ADMINISTRATIVE PROFESSIONAL AND RELATED COURSES

CREDITS

AST 101 ..... Keyboarding I.....	3
AST 107 ..... Editing/Proofreading Skills .....	3
AST 113* ..... Keyboarding for Speed & Accuracy .....	1
AST 141* ..... Word Processing I (Microsoft® Word).....	3
AST 205* ..... Business Communications .....	3
AST 232* ..... Microcomputer Office Applications .....	3
AST 236* ..... Specialized Software Applications .....	3
AST 238* ..... Advanced Word Processing .....	3
AST 243* ..... Office Administration I .....	3
AST 244* ..... Office Administration II .....	3

**Total Minimum Credits for Certificate .....35**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
AST 101 AST 107 ENG 111 SDV 101	AST 113 AST 141 AST 205 CST 105	AST 232 AST 238 AST 243	AST 236 AST 244

# AMT: Executive Assistant

Career

Studies

Certificate

221-298-01

**Purpose:** This curriculum is designed to prepare individuals for administrative assistant employment opportunities.

**Program Objectives:** Employment opportunities include executive assistants, administrative specialists, and other office-related positions.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ACC 124.....	Payroll Accounting I.....	3
AST 101 .....	Keyboarding I.....	3
AST 102* .....	Keyboarding II.....	3
AST 107 .....	Editing/Proofreading Skills .....	3
AST 113* .....	Keyboarding for Speed and Accuracy.....	1
AST 141* .....	Word Processing I (Microsoft® Word).....	3
AST 154 .....	Voice Recognition Applications .....	1
AST 205* .....	Business Communications .....	3
AST 232* .....	Microcomputer Office Applications .....	3
AST 238* .....	Advanced Word Processing .....	3

**Total Minimum Credits for Certificate .....26**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
ACC 124	AST 102	AST 232
AST 101	AST 113	AST 238
AST 107	AST 141	
AST 154	AST 205	

# Advanced Technology in Mechatronics

Career

Studies

Certificate

221-706-90

**Purpose:** This curriculum is designed to challenge the student with hands-on instruction in mechanical, electrical and computer systems in preparation for the Siemens Mechatronics Systems Certification. A Siemens Certified Mechatronic Systems Associate will function as a highly skilled technician who can work with modules and components in complex mechatronic systems as well as be able to assess and analyze the system as a whole. A certified Associate can manage, investigate, repair and troubleshoot mechatronic systems, with the aim of operational and cost efficiency, and process control.

**Program Objectives:** Graduates who successfully complete the Siemens Mechatronics Systems Certification may obtain a job as a certified mechatronics technician; designing, installing and commissioning systems, including instrumentation, controls and automation.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Graduates may continue their studies in the AAS Mechatronics Systems Engineering Technology Program. Upon completion of the Advanced Technology in Mechatronics Career Studies Certificate, students will be prepared to take the Siemens Mechatronic Systems Certification Program (SMSCP) Level I exam.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

EGR 105	..... Intro to Problem Solving in Tech	.....1
EGR 123	..... Intro to Engineering Design	.....2
ETR 113*	..... DC and AC Fundamentals I	.....4
ETR 286*	..... Principles and Applications of Robotics	.....3
IND 108	..... Technical Computer Applications (or EGR 216)	.....3
IND 113	..... Materials and Processes in Manufacturing I	.....3
IND 116	..... Applied Technology	.....3
IND 243	..... Principles and Applications of Mechatronics	.....3
MEC 140*	..... Introduction to Mechatronics	.....3
MEC 162	..... Applied Hydraulics & Pneumatics	.....3

**Total Minimum Credits for Certificate .....28**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
EGR 123 ETR 113 IND 108	EGR 105 MEC 162	ETR 286 IND 116 MEC 140	IND 113 IND 243

# Advanced Technology in Mechatronics - Fundamentals

Career  
Studies  
Certificate  
221-706-96

**Purpose:** This curriculum is designed to prepare students for an entry-level position in an industrial or manufacturing setting. It combines the concepts and practices of mechanical and electrical processes in order to manipulate motorized, hydraulic and pneumatic machines to perform complex automated functions.

**Program Objectives:** Employment opportunities include entry-level positions as mechanical, maintenance, electrical, quality, computer, process, and manufacturing technicians.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Students may continue into the Advanced Technology in Mechatronics career studies certificate or Mechatronics Engineering Technology AAS (pending) degree.

**CURRICULUM AND OTHER REQUIREMENTS**

**CREDITS**

ELE 133* .....	Practical Electricity I .....	3
ELE 134* .....	Practical Electricity II .....	3
ETR 123* .....	Electronic Applications I .....	1
ETR 141* .....	Electronics I .....	3
ITE 115 .....	Intro to Computer Applications and Concepts .....	3
MEC 162 .....	Applied Hydraulics and Pneumatics .....	3

**Total Minimum Credits for Certificate ..... 16**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**SUGGESTED SCHEDULE**

FIRST YEAR	
FALL	SPRING
ELE 133 ITE 115	ELE 134 ETR 123 ETR 141 MEC 162

# Air Conditioning and Refrigeration

Career

Studies

Certificate

221-903-10

**Purpose:** This curriculum is designed to meet the short-term training needs of the adult part-time student by presenting the essential technical concepts and practices of the air conditioning and refrigeration field.

**Program Objectives:** Employment opportunities include air conditioning/refrigeration system installer, air conditioning system service technician, and air conditioning sales.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3. It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Completion of the degree meets the educational requirements for taking the journeyman's exam; however, students must have two years of occupational experience to qualify to take the exam.

The program also prepares the student to take the EPA Section 608 Certification test, which is now required of all people employed in the installation, maintenance and repair of air conditioning and refrigeration equipment. This certification test is given on campus during the student's first year of studies.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

AIR 121* .....	Air Conditioning & Refrigeration I .....	3
AIR 122* .....	Air Conditioning & Refrigeration II .....	3
AIR 123* .....	Air Conditioning & Refrigeration III .....	3
AIR 154* .....	Heating Systems I .....	3
AIR 238* .....	Advanced Troubleshooting and Services .....	3
BLD 159 .....	Mechanical Code and Certification Preparation.....	3
ELE 133* .....	Practical Electricity I .....	3
WEL 120 .....	Introduction to Welding.....	3

**Total Minimum Credits for Certificate .....24**

*\* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
AIR 121 ELE 133	AIR 122 AIR 238	AIR 123 WEL 120	AIR 154 BLD 159

# Architectural Civil Engineering Aide

Career

Studies

Certificate

221-895-82

**Purpose:** This program is designed to prepare students for entry-level positions in architectural and civil engineering technology or to expand the knowledge and skills of individuals presently employed in these field .

**Program Objectives:** Graduates may seek employment as an architectural or civil engineering technology aide.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Students must possess computer literacy in order to be successful in this program. All of the courses offered through this program may be applied towards the AAS degree in Architectural/ Civil Technology.

**CURRICULUM AND OTHER REQUIREMENTS**

**CREDITS**

ARC 133.....	Construction Methodology and Procedures I.....	3
ARC 221*.....	Architectural CAD Applications Software I.....	3
CIV 135.....	Construction Management and Estimating .....	3
CIV 171*.....	Surveying I.....	3
DRF 128*.....	Geometric Dimensioning and Tolerancing .....	3
DRF 201.....	Computer Aided Drafting and Design I.....	3
DRF 202*.....	Computer Aided Drafting and Design II.....	3
MTH 115*.....	Technical Mathematics I.....	3

**Total Minimum Credits for Certificate .....24**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**SUGGESTED SCHEDULE**

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
DRF 201 MTH 115	ARC 133 DRF 128 DRF 202	ARC 221	CIV 135 CIV 171



# Architectural Civil Engineering Technology

## Associate of Applied Science 895

**Purpose:** This curriculum is designed to prepare qualified technicians for career opportunities in the architecture and civil engineering technology.

A specialization is also available in geographic information systems.

**Program Objectives:** The architectural/civil technician serves as a liaison between the craftsman and the technologist or engineer. Opportunities include employment with architects, consulting engineers, general contractors, land surveyors, and government organizations such as the Virginia Department of Transportation (VDOT), Western Virginia Water Authority, and the Department of Environmental Quality (DEQ). Opportunities also exist in construction-related manufacturing fields such as prefabricated buildings, steel fabrication, and precast/prestressed concrete production.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Architectural/Civil Engineering program head as listed on program webpage.

### ARCHITECTURAL/CIVIL ENGINEERING MAJOR

#### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 100	..... Prin of Public Speaking (or CST 105)	.....3
ENG 111*	..... College Composition I	.....3
GEO 200	..... Intro to Physical Geography	.....3
HLT/PED <sup>1</sup>	..... Health or Physical Education	.....2
MTH 115*	..... Technical Mathematics I	.....3
MTH 116*	..... Technical Mathematics II	.....3
PHY 201*	..... General College Physics I	.....4
SDV 101	..... Orientation to EGR (or SDV 100)	.....1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A)	.....3
E <sup>2</sup>	..... Social Science Elective (List B)	.....3

#### ARCHITECTURAL/CIVIL ENGINEERING AND RELATED COURSES

#### CREDITS

ARC 100	..... Introduction to Architecture	.....3
ARC 133	..... Construction Method & Procedures I	.....3
ARC 221*	..... Architectural CAD Applica Software I	.....3
CIV 135	..... Construction Management & Estimating	.....3
CIV 171*	..... Surveying I	.....3
DRF 128*	..... Geometric Dimensioning and Tolerancing	.....3
DRF 201*	..... Computer Aided Drafting Design I	.....3
DRF 202*	..... Computer Aided Drafting Design II	.....3
EGR 216*	..... Computer Methods in Engineering/Technology	....3
GIS 200*	..... Geographical Information Systems I	.....3
GIS 201*	..... Geographical Information Systems II	.....3
MEC 131*	..... Mechanics I – Statics for Engineering Technology	..3
MEC 132*	..... Mechanics II – Strength of Materials for Engin. Tech	..3

#### Total Minimum Credits for Degree .....66

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

#### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ARC 100	ARC 133	ARC 221	CIV 135
DRF 201	DRF 128	GIS 200	CIV 171
EGR 216	DRF 202	HLT/PED	CST 100
GEO 200	ENG 111	MEC 132	GIS 201
MTH 115	MEC 131	PHY 201	HUMANITIES/FINE ARTS
SDV 101	MTH 116		ELECTIVE
			SOCIAL SCIENCE
			ELECTIVE

# Architectural Civil Engineering Technology

## Associate of Applied Science

895-01

**Purpose:** This curriculum is designed to prepare qualified technicians for career opportunities in the geospatial areas of architectural and civil engineering.

**Program Objectives:** The geospatial engineering technician serves as a liaison between the craftsperson and the technologist or engineer. Opportunities include employment with architects, consulting engineers, general contractors, land surveyors, and government organizations such as the Virginia Department of Transportation (VDOT), Western Virginia Water Authority, and the Department of Environmental Quality (DEQ).

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist.

Contact the Architectural/Civil Engineering program head as listed on program webpage.

### ARCHITECTURAL/CIVIL ENGINEERING MAJOR GEOGRAPHIC INFORMATION SYSTEMS SPECIALIZATION

#### CURRICULUM AND OTHER REQUIREMENTS

##### GENERAL EDUCATION CORE COURSES

CREDITS

CST 100	.....Principles of Public Speaking (or CST 105)	.....3
ENG 111*	.....College Composition I	.....3
GEO 200	.....Intro to Physical Geography	.....3
HLT/PED <sup>1</sup>	.....Health or Physical Education	.....2
MTH 115*	.....Technical Mathematics I	.....3
MTH 116*	.....Technical Mathematics II	.....3
PHY 201*	.....General College Physics I	.....4
SDV 101	.....Orientation to EGR (or SDV 100)	.....1
E <sup>2</sup>	.....Humanities/Fine Arts Elective (List A)	.....3
E <sup>2</sup>	.....Social Science Elective (List B)	.....3

##### GIS AND RELATED COURSES

CREDITS

ARC 221*	.....Architectural CAD Applica Software I	.....3
CIV 171*	.....Surveying I	.....3
DRF 201*	.....Computer Aided Drafting Design I	.....3
DRF 202*	.....Computer Aided Drafting Design II	.....3
EGR 216*	.....Computer Methods in Engineering & Technology	.....3
GIS 200	.....Geographical Information Systems I	.....3
GIS 201*	.....Geographical Information Systems II	.....3
GIS 205*	.....Three Dimensional Analysis	.....3
GIS 210*	.....Understanding Geographic Data	.....3
ITP 136	.....C# Programming	.....4
MEC 131*	.....Mechanics I – Statics for Engineering Tech	.....3
MEC 132*	.....Mechanics II – Strength of Materials	.....3

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

#### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
DRF 201	DRF 202	ARC 221	CIV 171
EGR 216	HLT/PED	GIS 200	CST 100
ENG 111	ITP 136	GIS 210	GIS 201
GEO 200	MEC 131	MEC 132	GIS 205
MTH 115	MTH 116	PHY 201	SOCIAL SCIENCE
SDV 101	HUMANITIES/FINE ARTS		ELECTIVE
	ELECTIVE		

# Automotive Analysis and Repair

Career

Studies

Certificate

221-909-01

**Purpose:** This curriculum is designed to train graduates in automotive systems theory, service, and repair.

**Program Objectives:** Employment opportunities include automotive technician, parts sales and service representative, repair service salesperson, repair service writer, repair technician, tune-up specialist.

This program is competency based to include specific classroom and shop exercises to prepare a student for ASE certification.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

AUT 126* .....	Automotive Fuel and Ignition .....	5
AUT 241 .....	Automotive Electrical Skills .....	4
AUT 265 <sup>1</sup> .....	Automotive Braking Systems .....	4
AUT 266 <sup>1</sup> .....	Automotive Alignment.....	4

**Total Minimum Credits for Certificate ..... 17**

*\*This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

<sup>1</sup> AUT 265 and 266 are taught in alternate years.

**Note:** Dual-enrolled high school students must graduate from high school before officially declaring and/or graduating from this program.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
AUT 241 AUT 265or AUT 266	AUT 126	AUT 266 or AUT 265

# Associate Of Science 213

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in a business-related field.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8, and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

## Business Administration

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 100	..... Principles of Public Speaking	.....3
ECO 201	..... Principles of Macroeconomics	.....3
ECO 202	..... Principles of Microeconomics	.....3
ENG 111*	..... College Composition I	.....3
ENG 112*	..... College Composition II	.....3
ENG 241*	..... Survey of American Lit I (or ENG 243)	.....3
HIS 111	..... History of World Civilization I	.....3
HLT/PED <sup>2</sup>	..... Health or Physical Education	.....2
ITE 115	..... Intro to Computer Applications & Concepts	.....3
MTH 163*	..... Pre-Calculus I	.....3
MTH 241* <sup>3</sup>	..... Statistics I	.....3
MTH 242* <sup>1</sup>	..... Statistics II	.....3
MTH 271*	..... Applied Calculus I	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>1</sup>	..... Humanities/Fine Arts Elective (List B)	.....3
E <sup>1</sup>	..... Science Sequence (List A)	.....8

### BUSINESS ADMINISTRATION COURSES

#### CREDITS

ACC 211*	..... Principles of Accounting I	.....4
ACC 212*	..... Principles of Accounting II	.....4
BUS 100	..... Introduction to Business	.....3

**Total Minimum Credits for Degree .....61**

<sup>1</sup> BUS 222 or an elective from List B based on the requirements of their college of choice may be taken in place of MTH 242. Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>3</sup> BUS 221 or BUS 225 may be taken in place of MTH 241.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111 HIS 111 MTH 163 SDV 100 SCIENCE ELECTIVE	BUS 100 ENG 112 MTH 271 SCIENCE ELECTIVE	ACC 211 ECO 202 ENG 241 HLT/PED ITE 115 MTH 241	ACC 212 CST 100 ECO 201 MTH 242 HUMANITIES/FINE ARTS ELECTIVE

# Cisco™ CCNA™ Networking

Career

Studies

Certificate

221-732-12

**Purpose:** This curriculum is designed to teach students the skills needed to design, build, and maintain small to medium-size networks.

**Program Objectives:** This program provides students with the opportunity to master the material necessary to earn the Cisco™ Certified Network Associate (CCNA™) certification, enter the workforce, and/or further their education and training in the computer networking field. Employment opportunities include telecommunications technician, LAN/WAN technician/cable installer, technical representative/salesperson.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Notes:** Students must possess computer literacy in order to be successful in this program.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

TEL 150	.....Cisco Internetworking I (1st 8 weeks)	.....4
TEL 151*	.....Cisco Internetworking II (2nd 8 weeks)	.....4
TEL 250*	.....Cisco Internetworking III (1st 8 weeks)	.....4
TEL 251*	.....Cisco Internetworking IV (2nd 8 weeks)	.....4

**Total Minimum Credits for Certificate .....16**

*\*This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
TEL 150 (1 <sup>ST</sup> 8 WEEKS)	TEL 250 (1 <sup>ST</sup> 8 WEEKS)
TEL 151 (2 <sup>ND</sup> 8 WEEKS)	TEL 251 (2 <sup>ND</sup> 8 WEEKS)

# Communication Design

Associate of

Applied

Science

511

**Purpose:** This curriculum is designed to educate and prepare those wanting to work in the visual communications disciplines, such as graphic design and advertising, as well as the areas of digital prepress and web publishing.

**Program Objectives:** Employment opportunities include advertising design, printing, illustration, photography, digital illustration, digital prepress, graphic design, and Web page design.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** A satisfactory aptitude for drawing is not required. Students must possess computer literacy in order to be successful in this program.

Students will prepare portfolios for their job search.

Due to prerequisite requirements, ART classes should be taken in a **specific** order. Students should work with a counselor or faculty advisor to determine their course plan if the suggested schedule is not followed.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Accounting program head as listed on program webpage.

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

ART 250	..... History of Design .....	3
CST 105	..... Oral Communication .....	3
ENG 111*	..... College Composition I .....	3
HLT/PED <sup>1</sup>	..... Health or Physical Education .....	2
MTH 120*	..... Introduction to Mathematics .....	3
SDV 100	..... College Success Skills .....	1
E <sup>2</sup>	..... Social Science Elective (List A) .....	3

### COMMUNICATION DESIGN AND RELATED COURSES CREDITS

ART 121	..... Drawing I .....	3
ART 122*	..... Drawing II .....	3
ART 131	..... Fundamentals of Design I .....	3
ART 132*	..... Fundamentals of Design II .....	3
ART 140	..... Introduction to Graphic Skills .....	3
ART 141*	..... Typography I .....	3
ART 221*	..... Drawing III (Figure Drawing) .....	3
ART 243*	..... Watercolor I.....	3
ART 247*	..... Painting Technique for Illustrators .....	3
ART 251*	..... Communication Design I .....	3
ART 252*	..... Communication Design II .....	3
ART 282*	..... Graphic Techniques .....	3
ART 283*	..... Computer Graphics I (PhotoShop®) .....	3
ART 284*	..... Computer Graphics II (Digital Illus) .....	3
ART 287*	..... Portfolio and Resume Preparation .....	3
PHT 101	..... Photography I .....	3

**Total Minimum Credits for Certificate ..... 66**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR			SECOND YEAR	
FALL	SPRING	SUMMER	FALL	SPRING
ART 121	ART 122	HLT/PED	ART 221	ART 247
ART 131	ART 132	MTH 120	ART 243	ART 252
ART 140	ART 141	SOCIAL SCIENCE	ART 251	ART 284
ART 250	ENG 111	ELECTIVE	ART 282	ART 287
SDV 100	PHT 101		ART 283	CST 105

# Computed Tomography Imaging

Career

Studies

Certificate

PENDING APPROVAL 221-172-02

**Purpose :** The Computed Tomography Imaging Career Studies Program is designed to prepare selected students to qualify as contributing members of the allied health interdisciplinary team which has need for highly skilled CT technologists. Upon completion of the curriculum, and successful completion and documentation of all required clinical competencies as set for by the American Registry of Radiologic Technologists (ARRT). The student is eligible to apply to take the National Registry examination leading to advanced certification as a Registered Radiographer in CT by the ARRT

**Occupational Objectives:** The student is eligible to apply to take the National Registry examination leading to advanced certification as a Registered Radiographer in CT by the ARRT.

**Retention Policies:** Students who receive a final grade lower than "C" in any course will not receive the certificate until a grade of "C" or better is obtained. Students can petition to retake courses.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

RAD 196* .....	On-Site Computed Tomography Training.....	1
RAD 242* .....	Computed Tomography Procedures and Instrumentation .....	2
RAD 243* .....	Clinical Internship in Computed Tomography .....	1
RAD 244* .....	Case Studies in Computed Tomography.....	1
RAD 247* .....	Cross-Sectional Anatomy.....	3
E <sup>1</sup> .....	RAD Elective.....	3

**Total Minimum Credits for Certificate ..... 11**

*<sup>1</sup>Students should consult the Radiology Program Head prior to selecting this course.*

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
RAD 242 RAD 247 RAD 196	RAD 244 RAD 243 RAD ELECTIVE

**Admission Requirements and Procedures:** The student in Computed Tomography must have completed an approved program in radiography, radiation oncology or nuclear medicine technology .The student must be registered or registry eligible by the appropriate certification agency. All students must have a current CPR Healthcare Provider certification and must maintain that certification throughout the program. Applicants must have maintained a "C" average in past program courses in the discipline of certification.

Applicants must complete an application to VWCC, provide official transcripts of all other colleges attended, provide a minimum of 2 letters of reference and have an interview with a member of the Radiography program faculty prior to formal admission. The student in Computed Tomography must abide by all community college policies as well as hospital policies while enrolled in the program.

Students are responsible for Internet access for distance courses, clinical uniforms if participating in the clinical option, and transportation to and from clinical sites.

# Computer Aided Drafting Career Exploration

Career

Studies

Certificate

221-729-95

**Purpose:** This curriculum is designed to introduce students to entry-level job requirements of positions in technologies using computer aided drafting or CAD. The courses provide training in the use of AutoDesk's computer aided design software, AutoCAD, Inventor or Architectural Desktop. This program also provides an excellent foundation for continued study in engineering technology programs.

**Program Objectives:** Employment opportunities include CAD drafter.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Students must possess computer literacy in order to be successful in this program.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

DRF 201* .....	Computer Aided Drafting & Design I .....	3
DRF 202* .....	Computer Aided Drafting & Design II .....	3
DRF 203* .....	Computer Aided Drafting & Design III (or ARC 221) ...	3

**Total Minimum Credits for Certificate .....9**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**Note:** Dual-enrolled high school students must graduate from high school before officially declaring and/or graduating from this program.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
DRF 201	DRF 202	DRF 203





# Associate of Applied Science

242

**Purpose:** This curriculum is designed to provide students with the knowledge and basic skills required to be successful in the culinary industry.

**Program Objectives:** Graduates satisfy the American Culinary Federation eligibility requirements to test for both the Certified Culinarian (CC) and Certified Pastry Culinarian (CPC) designations.

This curriculum prepares graduates to enter the workforce at differing levels in the following positions: baker, broiler cook, expeditor, fry/sauté cook, pantry cook, pastry cook, soup and sauce cook, sous chef, and vegetable cook. With successful work experience, students will be able to become head cooks and chefs.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Culinary program head as listed on program webpage.

## Culinary Arts

### Program Requirements

To successfully complete the laboratory components of the program, the student must be able to perform all of the essential functions of a culinarian:

1. Communicate satisfactorily with clients, supervisors, peers, and the culinary team, which includes a diverse group of people.
2. See and hear adequately to be able to react to the varied culinary environments, such as receive and interpret various equipment signals.
3. See adequately to read equipment gauges in order to correctly interpret displayed data.
4. Be prepared to attend and stand/walk during class and/or labs during day and/or evenings lasting from 3 to 9 hours in length.
5. Walk rapidly for a prolonged period from one area to another. Work with sense of urgency.
6. Bend or squat frequently.
7. Assist in lifting or moving equipment, cooking pots and pans and food ingredients.
8. Demonstrate adequate eye/hand coordination for dexterity in manipulation of equipment and utensils.
9. Use hands for grasping, pushing, pulling and fine manipulation.
10. Work with arms fully extended overhead for short periods
11. Differentiate the color spectrum for proper preparation and presentation of prepared dishes.
12. Possess the visual acuity to correctly read handwritten requisitions, orders, receiving reports, recipes, and provide safety for clients.
13. Must be able to lift a minimum of 50 pounds.
14. Be able to multi-task, as well as, keep a "level head" when exposed to highly stressful and demanding situations in lab and internship settings.
15. Work in close quarters in close proximity to a diverse group of people.
16. Withstand high-temperature environment for prolonged periods of time.
17. Work as a member of a cohesive team.

Despite the foregoing, a qualified person with a disability who can perform these essential functions with reasonable accommodations will be considered for admission along with other qualified applicants.

### Program Notes

Dual enrollment opportunities with secondary school programs in the college's service area are available.

# Culinary Arts

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

ACC 110	.....Intro to Computerized Accounting.....	1
BUS 165*	.....Small Business Management .....	3
ENG 111*	.....College Composition I .....	3
ITE 115	.....Intro to Computer Applications and Concepts .....	3
MTH 120*	.....Introduction to Math .....	3
SDV 100	.....College Success Skills.....	1
E <sup>1</sup>	.....Social Science Elective (List A).....	3
E <sup>1</sup>	.....Humanities/Fine Arts Elective (List A).....	3

### CULINARY ARTS AND RELATED COURSES

### CREDITS

HRI 106	.....Principles of Culinary Arts I .....	3
HRI 107*	.....Principles of Culinary Arts II .....	3
HRI 119 <sup>3</sup>	.....Application of Nutrition for Food Service .....	3
HRI 128*	.....Principles of Baking .....	3
HRI 145*	.....Garde Manger .....	3
HRI 154	.....Prin. of Hospitality Management .....	3
HRI 158	.....Sanitation and Safety .....	3
HRI 206*	.....International Cuisine .....	3
HRI 207*	.....American Regional Cuisine .....	3
HRI 215	.....Food Purchasing .....	3
HRI 219*	.....Stock, Soups and Sauce Preparation .....	3
HRI 220*	.....Meat, Seafood, Poultry Preparation .....	3
HRI 225	.....Menu Planning & Dining Room Service.....	3
HRI 251*	.....Food and Beverage Cost Control .....	3
HRI 290 <sup>2,*</sup>	.....Coord Internship in Culinary Arts .....	2
SDV 106 <sup>2</sup>	.....Preparation for Employment .....	1

**Total Minimum Credits for Certificate.....65**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> HRI 290 and SDV 106 must be taken during the same semester.

<sup>3</sup> Health and wellness are emphasized throughout the culinary program, but specifically in HRI 119 Application of Nutrition for Food Service.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR			SECOND YEAR	
FALL	SPRING	SUMMER	FALL	SPRING
ENG 111	HRI 128	ITE 115	HRI 107	ACC 110
HRI 106	HRI 145	SOCIAL SCIENCE	HRI 119	BUS 165
HRI 154	HRI 215	ELECTIVE	HRI 207	HRI 206
HRI 158	HRI 219		HRI 220	HRI 251
MTH 120	HUMANITIES/FINE		HRI 225	HRI 290
SDV 100	ARTS ELECTIVE			SDV 106

# Culinary Arts

Career

Studies

Certificate

221-242-03

**Purpose:** This curriculum is designed to provide students with the basic skills necessary to obtain an entry-level position in the culinary industry.

**Program Objectives:** This curriculum prepares graduates to enter the workforce at entry level in the following positions: line cook, pantry cook, prep and/or production cook and vegetable cook. With successful work experience, students will be able to become lead cooks.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Requirements:** To successfully complete the laboratory components of the program, the student must be able to perform the essential functions of a culinarian #1 - 17 as listed under the Associate of Applied Science Degree.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

HRI 106	.....Principles of Culinary Arts I .....	3
HRI 119	.....Application of Nutrition for Food Service .....	3
HRI 128*	.....Principles of Baking .....	3
HRI 145*	.....Garde Manger .....	3
HRI 154	.....Prin. of Hospitality Management .....	3
HRI 158	.....Sanitation and Safety .....	3
HRI 206*	.....International Cuisine .....	3
HRI 207*	.....American Regional Cuisine .....	3
HRI 219*	.....Stock, Soups and Sauce Preparation .....	3

**Total Minimum Credits for Certificate .....27**

*\*This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
HRI 106 HRI 154 HRI 158	HRI 145 HRI 219	HRI 119 HRI 207	HRI 128 HRI 206

# Culinary Arts: Baking and Pastry

Career

Studies

Certificate

221-242-05

**Purpose:** This curriculum is designed to provide students with the basic skills necessary to obtain entry-level baker positions.

**Program Objectives:** This curriculum prepares graduates to enter the workforce at differing levels in the following positions: baker, bread baker, cake maker and decorator, dessert maker, personal baker and wholesale baker.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Requirements:** To successfully complete the laboratory components of the program, the student must be able to perform the essential functions of a culinarian #1 - 17 as listed under the Associate of Applied Science Degree.

**Program Notes:** Dual enrollment opportunities with secondary school programs in the college's service area are available.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

HRI 128 <sup>1,*</sup> .....	Principles of Baking .....	3
HRI 158 .....	Sanitation and Safety .....	3
HRI 280 <sup>1,*</sup> .....	Principles of Advanced Baking and Pastry .....	3
HRI 281* .....	Artisan Breads .....	3
HRI 282* .....	European Torts and Cakes .....	3
HRI 283* .....	Custards and Cremes .....	3
HRI 284* .....	Specialty, Spa & Plated Desserts .....	3
HRI 285* .....	Chocolate and Sugar Arts .....	3
HRI 286* .....	Wedding and Specialty Cakes .....	3
SDV 101* .....	Orientation to Baking and Pastry .....	2

**Total Minimum Credits for Certificate.....29**

<sup>1</sup> HRI 128 will be scheduled during the first 8 weeks and HRI 280 will be scheduled during the second 8 weeks in order to satisfy requisite requirement.

*\*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		
FALL	SPRING	SUMMER
HRI 128 HRI 158 HRI 280 SDV 101	HRI 281 HRI 282 HRI 283 HRI 285	HRI 284 HRI 286

## Associate of Applied Science

118

**Purpose:** The curriculum is designed to prepare students as primary preventive oral health professionals licensed to practice dental hygiene. Upon successful completion of the program, graduates will be eligible to take national, regional, and state board examinations leading to licensure as a registered dental hygienist (RDH).

**Program Objectives:** A dental hygienist may practice in dental offices and dental clinics; federal, state, and local health departments; hospitals and nursing homes/home health organizations; school districts or departments of education; educational programs for dental, dental hygiene, and dental assisting students; correctional facilities; private and public facilities for pediatric, geriatric, and other individuals/groups with special needs; or health maintenance organizations/managed care organizations.

**Developmental Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

Applicants must receive an English 111 placement test recommendation or have successfully completed all developmental English requirements.

Applicants who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Dental Hygiene program head as listed on program webpage.

## Dental Hygiene

**Admissions Requirements:** Applicants to the Dental Hygiene program must hold a high school diploma or GED and meet the developmental requirements listed to the left. Additionally, applicants must complete the prerequisites listed below with a grade of "C" or higher by the end of the spring semester prior to beginning the program:

1. One unit of high school or college biology
2. One unit of high school or college chemistry
3. Completion of BIO 141-142, Anatomy and Physiology I-II
4. Completion of Algebra I-II or MTE 1-9

The applicant's high school or college (if applicable) cumulative grade point average (GPA) must be at least 2.5. College GPA is based on at least 12 credit hours in a 12-month time frame. The GPA is determined at the end of the fall semester prior to admission. Priority consideration will be given to applicants with a cumulative high school and/or college grade point average of 3.0 or above.

All qualified applicants must take the HOBET.

**Admission Procedures:** Admission to the dental hygiene program is offered to qualified applicants on an annual basis at the Roanoke campus. Admission to the VWCC-DCC joint venture distance program site in Danville is offered to qualified applicants on a biennial basis during odd-numbered years. Admission to the VWCC-Lord Fairfax joint venture distance program site in Middletown is offered on a biennial basis during even-numbered years. Deadline for submitting complete application materials is **February 15** for the upcoming academic year. Applicants should be aware that meeting the curriculum admission standards does not guarantee program admission. Applicants will be notified in writing of the action taken by the Dental Hygiene Admissions Committee in May. Students interested in this program should consult the VWCC Dental Hygiene Program page, VWCC policy on Infectious Disease Status, Essential Dental Hygiene Functions, Clinical Environment, Student Responsibilities, Student Retention and Readmission Policy. The page can be accessed through the VWCC website (<http://www.virginiawestern.edu/academics/programs/aasdegrees.php>).

**Program Notes:** This program has been accredited by the Commission on Dental Accreditation of the American Dental Association, a specialized accrediting body recognized by the United States Department of Education.

Individuals who have a felony or misdemeanor conviction may not be allowed to take the licensing exam. This decision is made by the Virginia Board of Dentistry. For questions regarding this issue, call Virginia Board of Dentistry (804) 367-4538.

Students who have begun a dental hygiene program at an accredited institution other than Virginia Western may be considered for admission by transfer if there is class availability and if certain conditions are met. Student interested in transfer should consult the VWCC Dental Hygiene program page for transfer criteria.

**Retention Policy:** Satisfactory progress is demonstrated by achieving a grade of "C" or better in required Dental Hygiene and Natural Science courses. Students must satisfactorily complete NAS 185 with a grade of "C" or above before progressing to the second year of the program. Because curricular components build upon each other over the five semesters, students must complete required Dental Hygiene courses in sequence.

# Dental Hygiene

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

BIO 141* .....	Human Anatomy & Physiology I .....	4
BIO 142* .....	Human Anatomy & Physiology II .....	4
BIO 205* .....	General Microbiology .....	4
ENG 111* .....	College Composition I .....	3
PSY 230 .....	Developmental Psychology .....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3

### DENTAL HYGIENE COURSES

### CREDITS

DNH 111 .....	Oral Anatomy .....	2
DNH 115 .....	Histology/Head and Neck Anatomy .....	3
DNH 120 .....	Management of Emergencies .....	2
DNH 130 .....	Oral Radiography for Dental Hygienist .....	2
DNH 141 .....	Dental Hygiene I .....	5
DNH 142* .....	Dental Hygiene II .....	5
DNH 145* .....	General and Oral Pathology .....	2
DNH 146 .....	Periodontics for the Dental Hygienist .....	2
DNH 150 <sup>1</sup> .....	Nutrition .....	2
DNH 190* .....	Coordinated Practice .....	3
DNH 214 .....	Practical Materials for Dental Hygiene .....	2
DNH 216 .....	Pharmacology .....	2
DNH 226 .....	Public Health Dental Hygiene I .....	3
DNH 227* .....	Public Health Dental Hygiene II .....	3
DNH 230 .....	Office Practice and Ethics .....	1
DNH 235* .....	Manage of Dental Pain & Anxiety .....	2
DNH 244 .....	Dental Hygiene IV .....	5
DNH 245* .....	Dental Hygiene V .....	5

**Total Minimum Credits for Degree .....**70

<sup>1</sup> Health and wellness are emphasized throughout the dental hygiene program, but specifically in DNH 150 Nutrition.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR			SECOND YEAR	
FALL	SPRING	SUMMER	FALL	SPRING
DNH 111 DNH 115 DNH 120 DNH 130 DNH 141 SDV 100	DNH 142 DNH 145 DNH 146 DNH 216 NAS 185	DNH 150 DNH 190 DNH 235 ENG 111	DNH 214 DNH 226 DNH 244 PSY 230	DNH 227 DNH 230 DNH 245 HUMANITIES/FINE ARTS ELECTIVE

# Associate of Applied Science

636

**Purpose:** This curriculum is designed to enable graduates to qualify as directors, assistant directors, teachers, assistant teachers, or as classroom aides in programs for young children. The curriculum has been established to provide competency in areas documented by Virginia's Competencies for Early Childhood Professionals: health, safety and nutrition, understanding child growth and development, appropriate child observation and assessment, partnering with families and community, learning environment, effective interactions, program management, teacher qualifications and professional development. Students who are interested in working with special needs children should consult with the Early Childhood Development faculty.

**Program Objectives:** Employment opportunities include positions in independent childcare centers and kindergartens, family day care homes, preschool programs, centers for children with special needs, residential childcare facilities and industry associated centers. In addition, this program qualifies graduates for positions as elementary school or head start teacher assistants.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Admission to CHD 165 is selective and must be approved by the program head. Eligibility is based on the following criteria: a 2.0 minimum GPA, completion of course prerequisites, any relevant internship site requirements and current documentation of a negative tuberculosis screening.

Each student is responsible for transportation to and from field sites used for laboratory experience. Students are also responsible for any fees or costs associated with background checks in field site placements.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Early Childhood Development program head as listed on program webpage.

## Early Childhood Development

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

CREDITS

CST 100	Public Speaking	3
ENG 111*	College Composition I	3
ENG 112*	College Composition II	3
HLT 105 <sup>1</sup>	Cardiopulmonary Resuscitation (or HLT 106)	1
MTH 151*	Math for Liberal Arts or lab science	3
PSY 235*	Child Psychology	3
SDV 100	College Success Skills (or SDV 101)	1
SOC 215 <sup>2</sup>	Sociology of the Family [or Social Science Elective (List B)]	3
E <sup>2</sup>	Humanities/Fine Arts Elective (List A)	3

#### EARLY CHILDHOOD DEVELOPMENT AND RELATED COURSES CREDITS

CHD 118	Language Arts for Young Children	3
CHD 119*	Introduction to Reading Methods	3
CHD 120	Intro to Early Childhood Education	3
CHD 145	Teaching Art, Music and Movement to Children	3
CHD 146	Math, Science, and Social Studies for Children	3
CHD 165*	Observation and Participation in Early Childhood/Primary Settings	3
CHD 166	Infant and Toddler Programs	3
CHD 205	Guiding the Behavior of Children	3
CHD 210	Intro to Exceptional Children	3
CHD 215	Models of Early Childhood Education Programs	3
CHD 216	Early Childhood Programs, Schools & Social Change	3
CHD 265*	Adv Observation & Participation in Early Childhood/Primary Settings	3
CHD 270	Administration of Early Childhood Programs	3
CHD 298*	Project in Portfolio Development	1
HLT 135	Child, Health and Nutrition (or EDU 235)	3

**Total Minimum Credits for Degree ..... 66**

<sup>1</sup> The requirement for first aid training may be met by a Red Cross Certificate in basic first aid and infant/child and adult CPR.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

#### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
CHD 120 CHD 145 CHD 210 ENG 111 PSY 235 SDV 100	CHD 166 CHD 215 CHD 216 ENG 112 HLT 105/106 HLT 135	CHD 118 CHD 146 CHD 165 CHD 270 MTH 151 HUMANITIES/FINE ARTS ELECTIVE	CHD 119 CHD 205 CHD 265 CHD 298 CST 100 SOC 215



# Early Childhood Development

Career

Studies

Certificate

221-636-04

**Purpose:** This curriculum is an introduction to the field, designed to provide entry-level competencies documented by Virginia's Competencies for Early Childhood Professionals. These competencies include health, safety and nutrition, understanding child growth and development, appropriate child observation and assessment, partnering with families and community, learning environment, effective interactions, program management, teacher qualifications and professional development curriculum.

**Program Objectives:** This certificate also meets the requirements for the Virginia Early Childhood Development Certificate (VECD); an alternative credential to the CDA designed to meet Head Start credentialing requirements. Students wishing to earn the VECD should speak with the Program Head in Early Childhood Development, as additional components and documentation are required, including completion of CHD 167: Resource File.

Employment opportunities include positions in childcare centers, family day care homes, preschool programs, centers for children with special needs, residential childcare facilities and industry associated centers.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Notes:** All required courses also apply towards the AAS degree in Early Childhood Development.

Each student is responsible for transportation to and from field sites used for laboratory experience. Students are also responsible for any fees or costs associated with background checks in field site placements.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

CHD 120 .....	Intro to Early Childhood Education .....	3
CHD 145 .....	Teaching Art, Music and Movement to Children .....	3
CHD 165* .....	Observation and Participation .....	3
CHD 205 .....	Guiding the Behavior of Children .....	3
HLT 135 .....	Child, Health and Nutrition (or EDU 235) .....	3
SDV 100 .....	College Success Skills (or SDV 101) .....	1

**Total Minimum Credits for Certificate.....16**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
CHD 120	CHD 205
CHD 145	HLT 135
CHD 165	SDV 100

# Electrical Engineering Technology

## Associate of Applied Science

731

**Purpose:** This curriculum is designed to provide graduates with the theoretical foundation and hands-on practice in a wide range of subjects, including electronic circuits and devices, computer hardware and software, power and machines, programmable logic controllers, computer networks, and telecommunications.

**Program Objectives:** Employment opportunities include positions as electrical engineering technicians who assist in identifying and solving problems with electrical equipment and systems found in industrial or commercial plants and laboratories. Job tasks may include evaluating performance of developmental parts; electrical component assembly; calibrating, maintaining and repair of electrical instruments; preparing technical reports; and analyzing test information to resolve design-related problems.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Electrical Engineering program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

CREDITS

ENG 111* .....	College Composition I .....	3
HLT/PED <sup>3</sup> .....	Health or Physical Education .....	2
MTH 115* .....	Technical Mathematics I .....	3
PHY 201* .....	General College Physics I .....	4
SDV 101 .....	Orientation to EGR (or SDV 100).....	1
E <sup>1</sup> .....	Humanities/Fine Arts Elective (List A) .....	3
E <sup>1</sup> .....	Social Science Elective (List A).....	3

#### ELECTRICAL ENGINEERING TECHNOLOGY AND RELATED COURSES

CREDITS

EGR 216* .....	Computer Methods in Engineering /Technology ...	3
ELE 239* .....	Programmable Controllers .....	3
ELE 298 .....	Seminar & Project in Electrical Engineer.....	3
ETR 111 .....	Electronic Mathematics .....	3
ETR 113* .....	DC and AC Fundamentals I .....	4
ETR 114* .....	DC and AC Fundamentals II .....	4
ETR 250* .....	Solid State Circuits .....	4
ETR 280* .....	Intro to Digital Logic Circuits and Computers .....	4
ETR 285 .....	Fundamentals of Microcomputer Repair .....	4
TEL 150 .....	Internetworking I .....	4
TEL 151* .....	Internetworking II .....	4
E <sup>2</sup> .....	Technical Elective .....	3
E <sup>4</sup> .....	ELE Elective .....	3

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> Students should choose from DRF 201, GIS 200, PHY 202, or TEL 250.

<sup>3</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>4</sup> Students should enroll in ELE 293: Studies in Electrical Power and Control Systems to meet this requirement.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111	EGR 216	ETR 250	ELE 239
ETR 113	ETR 111	HLT/PED	ELE 298
MTH 115	ETR 114	PHY 201	ETR 285
SDV 101	ETR 280	ELE ELECTIVE	HUMANITEIS/FINE ARTS
TEL 150	TEL 151	SOCIAL SCIENCE ELECTIVE	ELECTIVE
			TECHNICAL ELECTIVE

# Electrical Wiring

Career

Studies

Certificate

221-706-01

**Purpose:** This curriculum is designed to provide students with the basic skills necessary to obtain an entry-level electrician position.

**Program Objectives:** Employment opportunities include plant electrician, electrician, estimator and entrance positions in the electrical construction and maintenance field as an app entice.

This certifi c te meets the 240 clock hours of formal training required to take the Journeyman Electrician Exam. In addition to successful completion of the Journeyman Exam, four years of practical experience are required to become a Licensed Journeyman.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficien y on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

BLD 111	.....Blueprint Reading & Building Code	.....3
ELE 110*	.....Home Electric Power	.....3
ELE 133*	.....Practical Electricity I	.....3
ELE 134*	.....Practical Electricity II	.....3
ELE 138*	.....National Electrical Code	.....2
SAF 127	.....Industrial Safety	.....2

**Total Minimum Credits for Certificate .....16**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
BLD 111	ELE 134
ELE 110	ELE 138
ELE 133	SAF 127

# Energy Management Systems Introduction

Career

Studies

Certificate

221-820-02

**Purpose:** This curriculum is designed to introduce students to the fundamentals and safety requirements for alternative energy systems.

**Program Objectives:** Entry-level employment opportunities include alternative energy installer and technician assistant.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** All courses in this program are included in the EMS Technician career studies certificate program.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ELE 130* .....Electricity .....	4
ELE 176* .....Introduction to Alternative Energy .....	3
SAF 127 .....Industrial Safety.....	2

**Total Minimum Credits for Certificate .....9**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR
<b>FALL</b>
ELE 130 ELE 176 SAF 127

# Energy Management Systems Technician

Career

Studies

Certificate

221-820-03

**Purpose:** This curriculum is designed for individuals who are interested in alternative energy. This program begins with the introduction of the fundamentals and safety requirements for alternative energy systems and then proceeds with the application and study of alternative energy systems. The certificate is designed to enhance the awareness of different designs, layouts, wirings, and installations for alternative energy systems.

**Program Objectives:** Employment opportunities include positions as an alternative energy technician and installation assistant.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

BLD 110 .....	Introduction to Construction .....	3
BLD 111 .....	Blueprint Reading and Building Code.....	3
ELE 130* .....	Electricity .....	4
ELE 176* .....	Introduction to Alternative Energy .....	3
ENE 100 * .....	Conventional & Alternative Energy Applications.....	4
SAF 127 .....	Industrial Safety.....	2

**Total Minimum Credits for Certificate ..... 19**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
ELE 130	BLD 110
ELE 176	BLD 111
SAF 127	ENE 100

# Energy Management Systems Installer

Career

Studies

Certificate

221-820-04

**Purpose:** This curriculum is designed to prepare students for managing, implementing and commissioning energy systems in today's society of rapidly changing, energy related industries and residential structures. Energy management students study conventional energy generation and distribution, as well as alternative energy with wind, solar (PV), solar (thermal), geothermal, energy efficiency, and energy production systems to develop an understanding of the challenges and opportunities in developing a renewable energy economy.

**Program Objectives:** Students will gain the knowledge to obtain entry level positions as alternative energy system installers and technicians.

The coursework prepares students for further study in energy management systems and advanced technology. Upon successful completion of a specific concentration, students will be prepared for the corresponding North American Board of Certified Energy Practitioners (NABCEP) installer certification exam.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

BLD 110.....Introduction to Construction.....	3
BLD 111.....Blueprint Reading and Building Code.....	3
ELE 130*.....Electricity.....	4
ELE 176*.....Intro to Alternative Energy.....	3
MEC 155.....Mechanisms.....	2
MTH 115*.....Technical Mathematics.....	3
SAF 127.....Industrial Safety.....	2
E <sup>1</sup> .....Energy Management Tech Concentration.....	
7.....	

**Total Minimum Credits for Certificate .....27**

<sup>1</sup> An Energy Management Concentration must be selected from the following options:

**• Photovoltaic Installer must take**

*ELE 147\* Electrical & Power Systems*

*ELE 177 Photovoltaic Energy Systems*

-or-

**• Wind Energy Installer must take**

*ELE 147\* Electrical & Power Systems*

*ELE 178 Wind Turbine Technology*

-or-

**• Solar and Geo Thermal Installer must take**

*ENE 105 Solar Thermal Active & Passive Technology*

*MEC 205 Piping and Auxiliary Systems*

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
ELE 130 ELE 176 MTH 115 SAF 127	BLD 110 BLD 111 MEC 155	ENERGY MANAGEMENT ELECTIVE ENERGY MANAGEMENT ELECTIVE

# Engineering

## Associate Of Science 831

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree. The following engineering fields are supported by this program: aerospace and ocean, biological systems, chemical, civil and environmental, electrical and computer, engineering science and mechanics, industrial and systems engineering, material science, mechanical, mining and minerals.

A specialization is also available in computer science.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 175.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### ENGINEERING MAJOR

#### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES CREDITS

CHM 111* .....	College Chemistry I .....	4
ENG 111* .....	College Composition I .....	3
ENG 112* .....	College Composition II .....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	1
MTH 175* .....	Calculus of One Variable I .....	3
MTH 176* .....	Calculus of One Variable II .....	3
MTH 177* .....	Introductory Linear Algebra .....	2
MTH 178* .....	Topics in Analytic Geometry .....	2
MTH 277* .....	Vector Calculus .....	4
MTH 291* .....	Differential Equations .....	3
PHY 241* .....	University Physics I .....	4
PHY 242* .....	University Physics II .....	4
SDV 101 .....	Orientation to EGR (or SDV 100).....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	6
E <sup>2</sup> .....	Social Science Elective (List A).....	6

#### ENGINEERING COURSES CREDITS

EGR 120* .....	Introduction to Engineering .....	2
EGR 124* .....	Intro to Engineering & Engineering Methods .....	3
EGR 126* .....	Computer Programming for Engineers [C++] .....	3
EGR 140* .....	Engineering Mechanics–Statics .....	3
E <sup>3</sup> .....	Engineering/Science Elective .....	6

#### Total Minimum Credits for Degree .....66

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> The following are suggested Engineering/Science electives for specific engineering majors: Mechanical Engineering: EGR 245/246, Civil Engineering: EGR 206/246, Electrical Engineering: EGR 206/251/255, MTH 285, or MTH 287, Chemical Engineering: CHM 112/EGR 246 or CHM112/ 241/245.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

#### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
CHM 111 EGR 124 ENG 111 HLT/PED MTH 175 MTH 177 SDV 101	EGR 120 EGR 126 EGR 140 ENG 112 MTH 176 MTH 178	MTH 277 PHY 241 EGR/SCIENCE ELECTIVE HUMANITIES/FINE ARTS ELECTIVE SOCIAL SCIENCE ELECTIVE	MTH 291 PHY 242 EGR/SCIENCE ELECTIVE HUMANITIES/FINE ARTS ELECTIVE SOCIAL SCIENCE ELECTIVE

# Engineering - Computer Science Specialization

## Associate Of Science 831-01

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in computer science or information technology.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 175.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### COMPUTER SCIENCE SPECIALIZATION

#### CURRICULUM AND OTHER REQUIREMENTS

##### GENERAL EDUCATION CORE COURSES

##### CREDITS

ENG 111*	..... College Composition I .....	3
ENG 112*	..... College Composition II .....	3
HLT/PED <sup>1</sup>	..... Health or Physical Education .....	1
MTH 175*	..... Calculus of One Variable I .....	3
MTH 176*	..... Calculus of One Variable II .....	3
MTH 177*	..... Introductory Linear Algebra .....	2
MTH 178*	..... Topics in Analytic Geometry .....	2
MTH 277*	..... Vector Calculus .....	4
MTH 287*	..... Mathematical Structures .....	3
MTH 291*	..... Differential Equations .....	3
PHY 241*	..... University Physics I (or CHM 111-112)* .....	4
PHY 242*	..... University Physics II (or CHM 111-112)* .....	4
SDV 101	..... Orientation to EGR (or SDV 100) .....	1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A) .....	6
E <sup>2</sup>	..... Social Science Elective (List A) .....	6

##### ENGINEERING AND COMPUTER SCIENCE COURSES CREDITS

CSC 201*	..... Computer Science I .....	4
CSC 202*	..... Computer Science II .....	4
CSC 205	..... Computer Organization .....	4
EGR 120*	..... Introduction to Engineering .....	2
EGR 124*	..... Intro to Engineering & Engineering Methods .....	3
E <sup>3</sup>	..... Engineering/Science Elective .....	3

##### Total Minimum Credits for Degree .....68

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> Engineering/Science Elective - students transferring to Virginia Tech should take CHM 111 or PHY 241 (whichever they did not choose above). Those transferring to other four year institutions should take EGR 126 or contact their advisor for approval on choice for this elective.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
CSC 201 EGR 124 ENG 111 MTH 175 MTH 177 SDV 101	CSC 202 EGR 120 ENG 112 MTH 176 MTH 178 MTH 287	CSC 205 MTH 277 PHY 241 HUMANITIES/FINE ARTS ELECTIVE SOCIAL SCIENCE ELECTIVE	HLT/PED PHY 242 HUMANITIES/FINE ARTS ELECTIVE SOCIAL SCIENCE ELECTIVE



# Engineering

Career

Studies

Certificate

221-831-01

**Purpose:** This curriculum is designed for persons who want to explore engineering as a potential major.

**Program Objectives:** This program allows students to experience the exciting opportunities in engineering and prepare themselves for an associate of science degree in engineering, which is transferable to a four-year college or university to complete a baccalaureate degree.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 175.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

EGR 120*	..... Introduction to Engineering .....	2
EGR 124*	..... Intro to Engineering & Engineering Methods .....	3
EGR 126*	..... Computer Programming for Engineers [C++] .....	3
EGR 140*	..... Engineering Mechanics–Statics .....	3
EGR 198	..... Seminar & Project in Robotics .....	1
EGR 206*	..... Engineering Economy .....	3
EGR 216	..... Computer Methods in Engineering & Tech .....	3
MTH 175*	..... Calculus of One Variable I .....	3
MTH 176*	..... Calculus of One Variable II .....	3
MTH 177*	..... Introductory Linear Algebra .....	2
MTH 178*	..... Topics in Analytic Geometry .....	2
SDV 101	..... Orientation to EGR (or SDV 100).....	1

**Total Minimum Credits for Certificate .....29**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**The Career Studies Certificate program in Engineering is only available to students taking Dual Enrollment classes through the Virginia Western Regional Academy for Advanced Technology.**

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
EGR 198 EGR 216	EGR 124 MTH 175 MTH 177 SDV 101	EGR 120 MTH 176 MTH 178	EGR 126 EGR 140 EGR 206

# Exercise Science and Personal Training

## Certificate

196

**Purpose:** This curriculum is designed for the student interested in exercise science and/or the fitness industry.

**Program Objectives:** Upon completion of the certificate, students wishing to become Certified Personal Trainers may sit for the national certification exam through the American College of Exercise (ACE).

Employment opportunities include positions in commercial fitness club, city and county recreation programs, private sector businesses providing on-site fitness, privately-owned personal training businesses, or advancing employment opportunities. Individuals are also prepared to work independently as personal trainers.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1 and 2.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** The curriculum can be completed in three semesters or with planning in two semesters and a summer.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

CREDITS

CST 100	..... Principles of Public Speaking	.....3
ENG 111*	..... College Composition I	.....3

#### EXERCISE SCIENCE AND RELATED COURSES

CREDITS

HIM 249 <sup>2,*</sup>	... Supervision & Management Practices	.....3
HLT 100 <sup>4</sup>	..... First Aid, CPR, AED	.....3
HLT 125 <sup>1</sup>	..... Anatomy and Physiology for Exercise Science	.....3
HLT 206 <sup>1,*</sup>	..... Exercise Science	.....3
HLT 208*	..... Fitness & Exercise Training **	.....3
HLT 217	..... Exercise and Nutrition for Behavioral Change	.....3
HLT 230	..... Principles of Nutrition	.....3
HLT 290 <sup>3,*</sup>	... Coordinated Internship	.....3
PED 105	..... Aerobic Dance I (or PED 106)	.....1
PED 107	..... Exercise and Nutrition	.....2
PED 109	..... Yoga	.....1
PED 111	..... Weight Training	.....1

**Total Minimum Credits for Certificate ..... 35**

<sup>1</sup> Students are required to successfully complete HLT 125 prior to taking HLT 206. *Only offered in the fall semester.*

<sup>2</sup> Students must have successfully completed HLT 100 & HLT 125 prior to taking HIM 249. *Only offered in the spring semester.*

<sup>3</sup> Students are required to take HLT 125, HLT 206, HIM 249 and HLT 100 prior to taking HLT 290 (internship).

<sup>4</sup> HLT 105 and HLT 106 may be substituted for HLT 100.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

\*\*Prep course for ACE certification

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
ENG 111 HLT 100 HLT 125 CST 100 PED 109 PED 111	HIM 249 HLT 206 HLT 217 HLT 230 PED 107	PED 105 OR 106 HLT 208 HLT 290



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# General Education

## Certificate

695

**Purpose:** The General Education Certificate is designed for students who plan to transfer to a four-year college or university following their studies at Virginia Western. This curriculum provides students with a strong foundation in the general education core competency areas of Communication (oral and written), Critical Thinking, Cultural and Social Understanding, Information Literacy, Personal Development, Quantitative Reasoning, and Scientific Reasoning. The General Education Certificate also provides students with evidence that they have made significant progress toward completing an associate's degree, which gives them a competitive advantage in transferring to a four-year institution.

**Program Objectives:** To prepare students for transfer to a four-year college or university.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

### CREDITS

ENG 111* .....College Composition I.....	3
ENG 112* .....College Composition II.....	3
HIS 121 .....U.S. History I (or HIS 111).....	3
HIS 122 .....U.S. History II (or HIS 112).....	3
MTH 151* .....Mathematics for the Liberal Arts I (or MTH 163* or MTH 157*).....	3
SDV 100.....College Success Skills.....	1
E <sup>1</sup> .....Humanities/Fine Arts Elective (List A).....	6
E <sup>1</sup> .....Science Elective (List A).....	8
E <sup>1</sup> .....Social Science Elective (List A).....	3

**Total Minimum Credits for Certificate ..... 33**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

**Federal Financial Aid is not available to students enrolled in the General Education Certificate Program.**

### SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
ENG 111	ENG 112
HIS 121	HIS 122
MTH 151	HUMANITIES/FINE ARTS ELECTIVE
SDV 100	SCIENCE ELECTIVE
HUMANITIES/FINE ARTS ELECTIVE	SOCIAL SCIENCE ELECTIVE
SCIENCE ELECTIVE	

# General Studies

## Associate Of Science 699

**Purpose:** This curriculum is designed to satisfy the general education component of a baccalaureate degree for students who intend to transfer to a four-year institution.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 100	..... Principles of Public Speaking (or CST 105)	.....3
ENG 111*	..... College Composition I	.....3
ENG 112*	..... College Composition II	.....3
ENG 241*	..... Survey of American Literature I (or ENG 243-244*)	...3
ENG 242*	..... Survey of American Literature II (or ENG 243-244*)	.3
HIS 111	..... History of World Civilization I (or HIS 121-122)	.....3
HIS 112	..... History of World Civilization II (or HIS 121-122)	.....3
HLT/PED <sup>2</sup>	..... Health or Physical Education	.....3
ITE 115	..... Intro Computer Applications and Concepts	.....3
MTH 151*	..... Mathematics for the Liberal Arts I (or MTH 163*)	....3
MTH 152 <sup>3,*</sup>	... Mathematics for the Liberal Arts II (or MTH 157* or MTH 271*)	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>1</sup>	..... Humanities/Fine Arts Electives (List B)	.....6
E <sup>1</sup>	..... Science Sequence (List A)	.....8
E <sup>1</sup>	..... Social Science Electives (List B)	.....6
E <sup>1,4</sup>	..... Transfer Electives (List B)	.....6

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>3</sup> At least one semester of math must be completed for the degree. If only one semester of math is taken, an elective must be selected from List B of the Approved List of Transfer Electives – excluding PE courses.

<sup>4</sup> Up to two credits of PE may be used towards completing the Transfer Elective Requirement.

\* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111 ITE 115 MTH 151 SDV 100 SOCIAL SCIENCE ELECTIVE SCIENCE ELECTIVE	ENG 112 MTH 152 SOCIAL SCIENCE ELECTIVE SCIENCE ELECTIVE TRANSFER ELECTIVE	CST 100 ENG 241 HIS 111 HUMANITIES/FINE ARTS ELECTIVE TRANSFER ELECTIVE	ENG 242 HIS 112 HLT/PED HUMANITIES/FINE ARTS ELECTIVE

# Geographical Information Systems

## Certificate

719

**Purpose:** This program is designed to prepare students for entry-level positions in technologies using Geographic Information Systems (GIS) or to expand the knowledge and skills of individuals presently employed in these field .

**Program Objectives:** Graduates may seek employment as GIS operators.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** The use of current ArcGIS® software is emphasized along with exposure to AutoCAD®.

Students must possess computer literacy in order to be successful in this program.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

CREDITS

ENG 111* .....	College Composition I .....	3
MTH 115* .....	Technical Mathematics .....	3
SDV 101 .....	Orientation to Engineering (or SDV 100).....	1

#### GIS AND RELATED COURSES

CREDITS

DRF 201* .....	Computer Aided Drafting and Design I .....	3
DRF 202* .....	Computer Aided Drafting and Design II .....	3
EGR 216* .....	Computer Methods in Engineering & Technology ...	3
GEO 200 .....	Introduction to Physical Geography .....	3
GIS 200* .....	Geographical Information Systems I .....	3
GIS 201* .....	Geographical Information Systems II .....	3
GIS 205* .....	GIS 3-Dimensional Analysis .....	3
GIS 210* .....	Understanding Geographic Data .....	3

**Total Minimum Credits for Certificate .....31**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
DRF 201 EGR 216 MTH 115 SDV 101	DRF 202 GEO 200 ENG 111	GIS 200 GIS 210	GIS 201 GIS 205

# Geographical Information Systems: Career Exploration

## Career Studies Certificate 221-719-93

**Purpose:** This program is designed to prepare students for entry-level positions in technologies using Geographic Information Systems (GIS). This program also provides an excellent foundation for continued study of GIS.

**Program Objectives:** Graduates may seek employment as GIS data editors.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** The use of current ArcGIS® software is emphasized along with exposure to AutoCAD®.

Students must possess computer literacy in order to be successful in this program.

CURRICULUM AND OTHER REQUIREMENTS	CREDITS
DRF 201* .....Computer Aided Drafting and Design I .....	3
ITE 115 .....Intro to Computer Applications and Concepts (or EGR 216).....	3
GEO 200 .....Introduction to Physical Geography .....	3
GIS 200* .....Geographical Information Systems I .....	3
<b>Total Minimum Credits for Certificate .....</b>	<b>12</b>

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

**Note:** Dual-enrolled high school students must graduate from high school before officially declaring and/or graduating from this program.

### SUGGESTED SCHEDULE

FIRST YEAR		
SUMMER	FALL	SPRING
DRF 201	ITE 115 GIS 200	GEO 200

# HIM: Electronic Medical Records Management

## Certificate

285

**Purpose:** This curriculum is designed to prepare graduates to perform essential medical office management functions.

**Program Objectives:** Employment opportunities for medical office managers are plentiful throughout the country in physicians' offices, HMOs, urgent care centers, managed care practices, and other types of health agencies as practice managers.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

ENG 111* .....College Composition I .....	3
PSY 120..... Human Relations.....	3
SDV 101 .....Orientation to AMT/HIM (or SDV 100) .....	1

### ELECTRONIC MEDICAL RECORDS MANAGEMENT AND RELATED COURSES

CREDITS

AST 101 .....Keyboarding I.....	3
AST 141* ..... Word Processing I (Microsoft® Word).....	3
AST 154 ..... Voice Recognition Applications.....	1
AST 205* ..... Business Communications .....	3
AST 232* ..... Microcomputer Office Applications.....	3
HIM 130.....Healthcare Information Systems .....	3
HIM 226..... Legal Aspects of Health Records Documentation ...	2
HIM 230.....Information Systems & Technology in Health Care.	3
HIM 233* .....Electronic Health Records Management .....	3
HLT 143* .....Medical Terminology I .....	3

**Total Minimum Credits for Certificate .....34**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
AST 101 ENG 111 HIM 130 HIM 230 SDV 101	AST 141 AST 154 HIM 233 HLT 143 PSY 120	AST 205 AST 232 HIM 226



# HIM: Health Records Coding

Career

Studies

Certificate

221-152-06

**Purpose:** This curriculum is designed to provide the technical knowledge and practical experience needed for employment as a health records coding technician.

Health Records Coding technicians analyze and interpret a patient's record to determine the proper standardized code that represents the patient's diagnosis and treatment which is used mainly for billing purposes.

**Program Objectives:** Coding professionals have many employment opportunities which include diagnostic outpatient coding in a medical facility, positions in physicians' offices, and inpatient coding positions.

Graduates of the program are eligible to take the national certifying examinations administered by the American Health Information Management Association of American Academy of Professional Coder.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Notes:** Students are strongly encouraged to sit for the CPC exam after completing HIM 254.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

AST 101 .....	Keyboarding I .....	3
AST 243* .....	Office Administration I .....	3
HIM 226 .....	Legal Aspects of Health Records Documentation ..	2
HIM 253* .....	Health Records Coding .....	4
HIM 254* .....	Advanced Coding and Reimbursements .....	4
HIM 290 <sup>1</sup> .....	Coordinated Internship .....	3
HLT 143* .....	Medical Terminology I .....	3
HLT 144* .....	Medical Terminology II .....	3
PSY 120 .....	Human Relations .....	3

**Total Minimum Credits for Certificate .....28**

<sup>1</sup> Must be taken in the final term of the program or with instructor's permission.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
AST 101 HIM 226 HLT 143	HLT 144 HIM 253 PSY 120	AST 243 HIM 254	HIM 290

# HIM: Medical Office Specialist

Career

Studies

Certificate

221-285-87

**Purpose:** This curriculum is designed to prepare graduates to perform a variety of medical office functions. Examples include scheduling of appointments, maintaining health records, coding clinical data, completing health insurance forms, and carrying out billing and collections functions.

**Program Objectives:** Employment opportunities include positions in physicians' offices, HMOs, managed care practices, urgent care centers, and in other health related agencies.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

AST 101 .....	Keyboarding I.....	3
AST 107 .....	Editing/Proofreading Skills.....	3
AST 141* .....	Word Processing I (Microsoft Word).....	3
HIM 149.....	Intro to Medical Practice Management (fall only)....	2
HIM 190 <sup>1,*</sup> .....	Coordinated internship for HIM .....	2
HIM 226.....	Legal Aspects of Health Records Documentation ...	2
HIM 253*.....	Health Records Coding .....	4
HIM 254*.....	Advanced Coding and Reimbursements .....	4
HLT 143*.....	Medical Terminology I .....	3
HLT 144*.....	Medical Terminology II.....	3

**Total Minimum Credits for Certificate .....29**

<sup>1</sup> Must be taken in the final term of the program or with instructor's permission.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
AST 101 AST 107 HIM 149 HIM 226 HLT 143	AST 141 HIM 253 HLT 144	HIM 190 HIM 254

# Horticulture: Greenhouse Management

Career

Studies

Certificate

221-335-03

**Purpose:** This curriculum is designed to prepare students for entry-level positions in greenhouse, nursery, and garden center businesses, and to upgrade the skills of those currently employed in the industry.

**Program Objectives:** Employment opportunities include assistant growers, wholesale and retail salespersons, and production technicians.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

HRT 110.....Principles of Horticulture .....	3
HRT 115 .....Plant Propagation (fall only) .....	3
HRT 117.....Tools and Equipment (spring only) .....	2
HRT 205.....Soils (spring only) .....	3
HRT 207.....Plant Pest Management (fall only).....	3
HRT 246.....Herbaceous Plant (fall only) .....	3
HRT 285.....Management of a Horticultural Business (spring only).	3
HRT 296.....Training in Arboretum Internship.....	2

**Total Minimum Credits for Certificate .....22**

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
HRT 110	HRT 117 (SPRING ONLY)
HRT 115 (FALL ONLY)	HRT 205 (SPRING ONLY)
HRT 207 (FALL ONLY)	HRT 285 (SPRING ONLY)
HRT 246 (FALL ONLY)	HRT 296

# Horticulture: Landscaping

Career

Studies

Certificate

221-335-14

**Purpose:** This curriculum is designed to prepare students for entry-level positions in landscaping design businesses and to upgrade the skills of those currently employed in the industry.

**Program Objectives:** Employment opportunities include landscape designers and landscape technicians.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

HRT 110.....Principles of Horticulture (fall only) .....	3
HRT 117.....Tools and Equipment (spring only) .....	2
HRT 201.....Landscape Plants I (fall only) .....	3
HRT 207.....Plant Pest Management (fall only) .....	3
HRT 227.....Professional Landscape Management (spring only) ...	3
HRT 231*.....Planting Design I (spring only).....	3
HRT 246.....Herbaceous Plant (fall only) .....	3
HRT 269.....Professional Turf Care (spring only) .....	3
HRT 296.....Training in Arboretum Internship (spring only).....	2

**Total Minimum Credits for Certificate .....25**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
HRT 110 (FALL ONLY)	HRT 117 (SPRING ONLY)
HRT 201 (FALL ONLY)	HRT 227 (SPRING ONLY)
HRT 207 (FALL ONLY)	HRT 231 (SPRING ONLY)
HRT 246 (FALL ONLY)	HRT 269 (SPRING ONLY)
	HRT 296 (SPRING ONLY)

# Horticulture: Viticulture

Career

Studies

Certificate

221-335-20

**Purpose:** This curriculum is designed to prepare students for entry-level positions in the grape cultivation industry and to upgrade the skills of those currently employed in viticulture.

**Program Objectives:** Employment opportunities include positions in vineyards and related areas of sales and services.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

HRT 110..... Principles of Horticulture .....	3
HRT 117..... Tools and Equipment (spring only) .....	2
HRT 205..... Soils (spring only) .....	3
HRT 207..... Plant Pest Management (fall only) .....	3
VEN 100..... Introduction to Viticulture (fall only) .....	3
VEN 110..... Vineyard Establishment (fall only) .....	3
VEN 125..... Vineyard Management (spring only).....	3

**Total Minimum Credits for Certificate .....20**

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
HRT 110	HRT 117 (SPRING ONLY)
HRT 207 (FALL ONLY)	HRT 205 (SPRING ONLY)
VEN 100 (FALL ONLY)	VEN 125 (SPRING ONLY)
VEN 110 (FALL ONLY)	

# Associate of Applied Science

480

**Purpose:** This curriculum prepares students for entry-level positions in the helping field. Through courses and a field placement in agencies, students develop skills in working with people with physical and psychiatric disabilities, adolescents, the aged, the substance abuser, and the child or adult in crisis.

**Program Objectives:** Employment opportunities for graduates in Human Services include staff positions in hospitals, mental health clinics, residential facilities and community service agencies. Graduates may transfer to a four-year college or university for bachelor degrees in fields such as social work, psychology, and gerontology.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** MEN 101 is only offered in the fall semester and is a prerequisite for many classes. Students entering the Human Services Program should make this their first class selection.

**Admission to Internship:** Admission to MEN 290 (Coordinated Internship) is selective and must be approved by the Internship Coordinator. Eligibility is based upon the following criteria: minimum GPA of 2.0, completion of course prerequisites, faculty recommendations, expected graduation date, and any relevant internship site requirements. Internship students that do not meet the professional standards of the Human Services Program, and/or the participating clinical agency may be withdrawn from the internship.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Human Services program head as listed on program webpage.

## Human Services

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

BIO 101	..... General Biology I	.....4
BIO 102*	..... General Biology II	.....4
CST 100	..... Principles of Public Speaking	.....3
ENG 111*	..... College Composition I	.....3
ENG 112*	..... College Composition II	.....3
HLT/PED <sup>1</sup>	..... Health or Physical Education	.....1
ITE 115	..... Intro Computer Applications and Concepts	.....3
MTH 157*	..... Elementary Statistics	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>3</sup>	..... Humanities/Fine Arts Elective (List A)	.....3

### HUMAN SERVICES AND RELATED COURSES

CREDITS

MEN 100*	..... Introduction to Mental Health	.....3
MEN 101*	..... Mental Health Skill Training I	.....3
MEN 102*	..... Mental Health Skill Training II	.....3
MEN 221*	..... Group Process I	.....3
MEN 225*	..... Counseling Therapy	.....3
MEN 290*	..... Coordinated Internship	.....5
PSY 200*	..... Principles of Psychology	.....3
PSY 215*	..... Abnormal Psychology	.....3
PSY 220*	..... Intro to Behavior Modification	.....3
SOC 200	..... Principles of Sociology	.....3
E <sup>5</sup>	..... Human Services Elective	.....3
E <sup>4</sup>	..... Psychology Elective	.....3

**Total Minimum Credits for Degree .....66**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>3</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>4</sup> Select one of the following: PSY 230 or PSY 235.

<sup>5</sup> Select one of the following: HMS 236, HMS 251 or HMS 280.

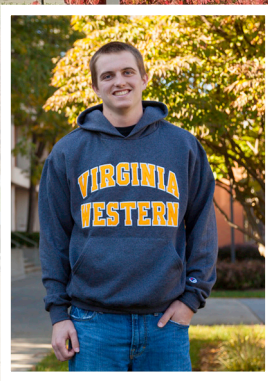
\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111	ENG 112	BIO 101	BIO 102
MEN 100 (FALL ONLY)	HLT/PED	MEN 221 (FALL ONLY)	CST 100
MEN 101 (FALL ONLY)	MEN 102 (SPRING ONLY)	MTH 157	ITE 115
PSY 200	MEN 225 (SPRING ONLY)	SOC 200	MEN 290
PSY 220 (FALL ONLY)	PSY 215	HUMANITIES/FINE ARTS	HUMAN SERVICES
SDV 100	PSYCHOLOGY ELECTIVE	ELECTIVE	ELECTIVE

# VIRGINIA WESTERN

WE'LL TAKE YOU  THERE



# Information Systems Technology

Associate of

Applied

Science

299

**Purpose:** This curriculum is designed to prepare students for entry-level positions in Information Technology field , and to update the technical knowledge of returning professionals.

**Program Objectives:** Employment opportunities include Database and Program Developer, Network Security Administration, Smartphone and Tablet with GIS Developer or Web Programmer.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs (ACBSP).

Students are required to select one of the following concentrations: Database and Program Developer, Network & Security Administration, Smartphone and Tablet with GIS Developer, or Web Programmer. Students should coordinate their concentration course selections with their faculty advisors.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Information Technology program head as listed on program webpage.

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

CREDITS

CST 100 ...Public Speaking .....	3
ECO 120 ...Survey of Economics (or ECO 201/202).....	3
ENG 111* College Composition I .....	3
HLT/PED <sup>1</sup> .Health or Physical Education .....	1
ITE 115 .....Intro to Computer Applications and Concepts .....	3
MTH 120*.Introduction to Mathematics.....	3
SDV 100 ...College Success Skills (or SDV 101) .....	1
E <sup>2</sup> .....Humanities/Fine Arts Elective (List A).....	3

### INFORMATION SYSTEMS TECHNOLOGY

#### AND RELATED COURSES

CREDITS

ACC 211* .Principles of Accounting I .....	4
BUS 100 ...Introduction to Business .....	3
BUS 116....Entrepreneurship .....	3
ITD 110 ....Web Page Design I .....	3
ITD 130 ....Database Fundamentals .....	3
ITN 109 ....Internet and Network Foundation .....	3
ITP 100.....Software Design .....	3
ITP 170*....Project Management .....	3
E <sup>3</sup> .....Information System Technology Concentration.....	21

**Total Minimum Credits for Degree ..... 66**

<sup>1</sup> Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup>An IT Concentration must be selected from the following four options:

**Database and Program Developer** must take ITD 250, ITP 140\*, ITP 225\*, (ITP 136\* ITP 137, ITP 226\*) or (ITP 120\*, ITP 220\*, ITP 246\*)

**Network & Security Administration** must take ITN 110\*, ITN 111\*, ITN 112\*, ITN 113\*, ITN 260, TEL 250\*

**Smartphone and Tablet with GIS Developer** must take GIS 200\*, GIS 201\*, ITP 137, ITP 140\*, ITP 226\*, ITP 240\*

**Web Programmer** must take ITD 112\*, ITD 120\*, ITD 210\*, ITD 212\*, ITD 220\*, ITP 140\*, ITP 225\*

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.



**Program Note:** Students are required to select one of the following concentrations: Database and Program Developer, Network & Security Administration, Smartphone and Tablet with GIS Developer, or Web Programmer. Students should coordinate their concentration course selections with their faculty advisors.

## DATABASE AND PROGRAM DEVELOPER

### FIRST YEAR

#### FALL

ENG 111 College Composition I  
ITD 110 Web Page Design I  
ITE 115 Intro to Computer Appl and Concepts  
ITN 109 Internet and Network Foundation  
ITP 100 Software Design  
SDV 100 College Success Skills (or SDV 101)

#### SPRING

ACC 211 Principles of Accounting I  
HLT/PED Health or Physical Education  
Humanities/Fine Arts Elective  
ITD 130 Database Fundamentals  
ITP 120 Java Programming (or ITP 136)  
MTH 120 Introduction to Mathematics

### SECOND YEAR

#### FALL

BUS 116 Entrepreneurship  
ITD 250 Database Architecture & Admin  
ITP 140 Client Side Scripting  
ITP 170 Project Management  
ITP 220 Java Programming II (or ITP 137)

#### SPRING

BUS 100 Intro to Business  
CST 100 Public Speaking  
ECO 120 Survey of Economics (or ECO 201/202)  
ITP 225 Web Scripting Languages  
ITP 246 Java Server-Side Programming (or ITP 226)

## NETWORK AND SECURITY ADMINISTRATION

### FIRST YEAR

#### FALL

ENG 111 College Composition I  
ITD 110 Web Page Design I  
ITN 109 Internet and Network Foundation  
ITN 110 Client Operating System (Windows 8)  
ITP 100 Software Design  
SDV 100 College Success Skills (or SDV 101)

#### SPRING

CST 100 Public Speaking  
Humanities/Fine Arts Elective (List A)  
ITD 130 Database Fundamentals  
ITE 115 Intro to Computer Appl and Concepts  
ITN 111 Server Administration (Windows 2012)  
MTH 120 Introduction to Mathematics

### SECOND YEAR

#### FALL

BUS 100 Introduction to Business  
BUS 116 Entrepreneurship  
HLT/PED Health or Physical Education  
ITN 112 Network Infrastructure (Windows Server 2012)  
ITN 260 Network Security Basics  
ITP 170 Project Management

#### SPRING

ACC 211 Principles of Accounting I  
ECO 120 Survey of Economics (or ECO 201/202)  
ITN 113 Active Directory (Windows Server 2012)  
TEL 250 Internetworking I

## SMARTPHONE AND TABLET WITH GIS DEVELOPER

### FIRST YEAR

#### FALL

ENG 111 College Composition I  
ITD 110 Web Page Design I  
ITE 115 Intro to Computer Appl and Concepts  
ITN 109 Internet and Network Foundation  
ITP 100 Software Design  
SDV 100 College Success Skills (or SDV 101)

#### SPRING

BUS 100 Intro to Business  
CST 100 Public Speaking  
ITD 130 Database Fundamentals  
MTH 120 Introduction to Mathematics  
ITP 240 Server-Side Programming

### SECOND YEAR

#### FALL

BUS 116 Entrepreneurship  
GIS 200 Geographical Information Systems I  
ITP 140 Client Side Scripting  
ITP 170 Project Management  
ITP 137 Programming iOS Device

#### SPRING

ACC 211 Principles of Accounting I  
ECO 120 Survey of Economics (or ECO 201/202)  
GIS 201 Geographical Info Systems II  
HLT/PED Health or Physical Education  
Humanities/Fine Arts Elective (List A)  
ITP 226 Mobile Java Android

## WEB PROGRAMMER

### FIRST YEAR

#### FALL

ITD 110 Web Page Design I  
ITD 112 Designing Webpage Graphics  
ITE 115 Intro to Computer Appl and Concepts  
ITN 109 Internet and Network Foundation  
ITP 100 Software Design  
SDV 100 College Success Skills (or SDV 101)

#### SPRING

CST 100 Public Speaking  
ECO 120 Survey of Economics (or ECO 201/202)  
ENG 111 College Composition I  
ITD 130 Database Fundamentals  
ITD 210 Web Page Design II  
MTH 120 Introduction to Mathematics

### SECOND YEAR

#### FALL

BUS 100 Introduction to Business  
BUS 116 Entrepreneurship  
Humanities/Fine Arts Elective (List A)  
ITD 212 Interactive Web Design  
ITP 140 Client Side Scripting  
ITP 170 Project Management

#### SPRING

ACC 211 Principles of Accounting I  
HLT/PED Health or Physical Education  
ITD 120 Design Concepts for Mobile Applications  
ITD 220 E-Commerce Applications  
ITP 225 Web Scripting Language

# IT: Database and Program Developer

Career

Studies

Certificate

221-299-12

**Purpose:** This curriculum is designed to provide students with skills in the aspects of database and programming development necessary for medium to large size companies.

**Program Objectives:** Employment opportunities include entry-level positions in fields including Programmer, Database Developer, or Software Architect.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Notes:** Students enrolling in the program will choose whether to specialize in Java or Smartphone and Tablet programming. Electives must be approved by their faculty advisor.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ITD 130 .....	Database Fundamentals .....	3
ITD 250* .....	Database Architecture and Administration .....	3
ITP 100 .....	Software Design .....	3
ITP ### .....	Java Programming Sequence <sup>1</sup> or Smartphone and Tablet Programming Sequence <sup>2</sup> .....	12

**Total Minimum Credits for Certificate .....21**

<sup>1</sup> *Java Programming Sequence: ITP 120\* Java Programming I, ITP 220\* Java Programming II, and ITP 246\* Java Server Side Programming.*

<sup>2</sup> *Smartphone and Tablet Programming Sequence: ITP 136\* C# Programming I, ITP 137 Programming iOS Devices, ITP 226\* Mobile Java Android Development.\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ITP 100	ITD 130 ITP 120 or ITP 136	ITD 250 ITP 220 or ITP 137	ITP 246 or ITP 226

# IT: Desktop Support Technician

Career

Studies

Certificate

221-299-04

**Purpose:** This curriculum is designed to give students the knowledge and skills to meet industry needs for hardware repair, desktop software support, and basic networking skills.

**Program Objectives:** Employment opportunities include entry-level positions as hardware repair personnel, software installers, and basic network trouble shooting. Occupational job titles would include: Help Desk Support Technician, Desktop Support Technician, and Hardware Repair Technician.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ETR 285.....	Fundamentals of Microcomputer Repair .....	4
ITN 107 <sup>1</sup> .....	Personal Computer Hardware and Troubleshooting..	3
ITN 109 .....	Internet and Network Foundation .....	3
ITN 110* .....	Client Operating System (Windows 8).....	3
ITN 111* .....	Server Administration (Windows Server 2012).....	4

**Total Minimum Credits for Certificate .....** 17

<sup>1</sup> ETR 113 may be used as a substitution for ITN 107.

\* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FALL	SPRING
ITN 107	ETR 285
ITN 109	ITN 111
ITN 110	

# IT: Network and Security Administration

Career

Studies

Certificate

221-732-02

**Purpose:** This curriculum is designed to give students the knowledge and skills to meet industry need for administration and support of computer systems.

**Program Objectives:** Employment opportunities include entry level positions as a Network or Security Administrator. Occupational job titles would include: Network Administrator, Security Administrator, Systems Administrator, Network Technician and Security Analyst.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ITD 130 .....	Database Fundamentals .....	3
ITN 109 .....	Internet and Network Foundation .....	3
ITN 110* .....	Client Operating System (Windows 8) .....	3
ITN 111* .....	Server Administration (Windows Server 2012) .....	4
ITN 112* .....	Network Infrastructure (Windows Server 2012) .....	3
ITN 113* .....	Active Directory (Windows Server 2012) .....	4
ITN 260 .....	Network Security Basics .....	3

**Total Minimum Credits for Certificate .....23**

*\* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ITN 109 ITN 110	ITD 130 ITN 111	ITN 112 ITN 260	ITN 113

# IT: Web Designer

Career

Studies

Certificate

221-352-02

**Purpose:** This curriculum is designed to assist students in gaining the knowledge necessary to be employed in, or start a business that specializes in Web Design and Web Development. It will prepare students for the spectrum of demands associated with applying the latest technology for Web Design and development, as well as introduce them to the day to day requirements of running a small business.

**Program Objectives:** Employment opportunities include positions in the areas of Web Design, Web Developing, New & Social Media and Interactive Design.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHRE REQUIREMENTS

## CREDITS

ACC 110.....	Intro to Computerized Accounting .....	1
BUS 116.....	Entrepreneurship.....	3
BUS 165* .....	Small Business Management.....	3
ITD 110 .....	Web Page Design I .....	3
ITD 112* .....	Designing Web Page Graphics.....	3
ITD 210* .....	Web Page Design II.....	3
ITD 212* .....	Interactive Web Design.....	3
MKT 100 .....	Principles of Marketing.....	3

**Total Minimum Credits for Certificate .....22**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
BUS 116	ACC 110
ITD 110	BUS 165
ITD 112	ITD 210
ITD 212	MKT 100

# IT: Web Programmer

Career

Studies

Certificate

221-352-03

**Purpose:** This curriculum is designed to provide students with the necessary skills to design web pages and use graphical software.

**Program Objectives:** Employment opportunities include entry level positions as Internet Application Developers, Web Programmers, and Web Designers.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ITD 110	..... Web Page Design I	.....3
ITD 112*	..... Designing Web Page Graphics	.....3
ITD 120*	..... Design Concepts for Mobile Apps	.....3
ITD 210*	..... Web Page Design II	.....3
ITD 212*	..... Interactive Web Design	.....3
ITP 100	..... Software Design	.....3
ITP 140*	..... Client Side Scripting	.....3
ITP 225*	..... Web Scripting Languages	.....3

**Total Minimum Credits for Certificate .....24**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ITD 110 ITD 112 ITP 100	ITD 210	ITD 212 ITP 140	ITD 120 ITP 225



# Associate of Applied Science

113

**Purpose:** This curriculum is designed to prepare selected students to perform the responsibilities of an entry-level radiation therapist. The Associate of Applied Science will be required of all applicants who do not hold a degree. Upon completion graduates will be eligible to apply to take the American Registry of Radiologic Technologists (ARRT) examination leading to certification as a registered Radiation Therapist, RT-T.

**Program Objectives:** Graduates may apply for employment in hospitals, cancer centers, education, management, government agencies, and marketing and research.

**Developmental Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**English:** Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

**Math:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

The Radiation Oncology Program is a selective admissions program requiring an application to the college as well as a separate application to the program. For details about the Admission Requirements go to: <http://www.virginiawestern.edu/academics/smh/health/oncology/index.php>.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Radiation Oncology program head as listed on program webpage.

## Radiation Oncology

**Admission Requirements:** Applicants to the Radiation Oncology program must hold a high-school diploma or GED and meet the developmental requirements listed to the left. Additionally, applicants must complete prerequisites listed below with a grade of "C" or higher by the end of Spring Semester prior to the beginning of the program:

- Algebra I, Algebra II, Geometry or Developmental Mathematic Units 1-9
- Two units of high school or college biology, chemistry, or physics

**Admission Procedures:** The Radiation Oncology applicant is responsible for making certain that the following have been submitted in addition to a current college application by the **March 15** deadline:

- Completed program application form
- Official high school transcript
- Copy of GED scores is applicable
- Official transcripts from all colleges attended (VWCC and other Virginia community college transcripts are not necessary)
- Two (2) letters of recommendation, such as, employers or professors
- Copy of any professional licensure or certification

**Note:** If applying for the joint venture site at Northern Virginia Community College, applicants must complete a college application for NOVA, in addition to VWCC.

The Radiation Oncology application form and additional program information can be accessed from our website at <http://www.virginiawestern.edu/academics/smh/health/oncology/index.php>. Application packets are also available in the Health Professions and College Admissions Office. Early application is encouraged for advising purposes.

Applicants must also take the math placement test at Virginia Western. Additional information regarding the math evaluation procedures will be mailed to applicants upon receipt of the above completed academic file.

Qualified applicants will be contacted for an interview appointment during the spring semester. Applicants considered by the Radiation Oncology Admissions Committee will be notified by mail in May regarding fall admission. If the number of qualified applicants is below the maximum enrollment for VWCC or NOVA, the application deadline may be extended for that site.

Students interested in this program should consult the VWCC Radiation Oncology Program page, VWCC Policy on Infections Disease Status, Essential Radiation Oncology Functions, Clinical Environment, Student Responsibilities, and Student Retention and Readmission Policy. The page can be accessed through the VWCC Website.

**Program Notes:** The program has been accredited by the authority of the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901. **Telephone (312) 704-5300.**

Individuals who have a felony or misdemeanor conviction may not be allowed to take the national certification exam. This decision is made by the the America Registry of Radiologic Technology (ARRT). For questions regarding this issue call the ARRT or visit their website at [ARRT.org](http://www.rrt.org).

Clinical agencies may require that students have periodic background checks and drug screenings completed at the student's expense before beginning clinical rotations. A positive background check, drug screen, and/or felony conviction may dismiss the student from the program.

This program will be available for fall 2013 enrollment pending approval from the State Council for Higher Education. For program specific information please go to the program website.

**Retention Policy:** Successful completion of the program requires students to maintain a "C" or better in all Radiation Oncology courses and MTH 163. MTH 163 must be successfully completed by the end of the first spring semester. A complete statement of the above policies is outlined in the Radiation Oncology Student Handbook.



# Radiation Oncology

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

ENG 111* .....	College Composition I.....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	2
MTH 163* .....	Pre-Calculus I.....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
BIO 145 .....	Human Anatomy and Physiology for the Health Sciences .....	4
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3
E <sup>2</sup> .....	Social Science Elective (List A).....	3

### RADIATION ONCOLOGY COURSES

### CREDITS

HLT 143.....	Medical Terminology .....	3
ROC 110* .....	Introduction to Radiation Oncology .....	2
ROC 115 .....	Therapeutic Radiation Safety .....	1
ROC 120 .....	Radiation Oncology/Pathology I.....	3
ROC 121* .....	Radiation Oncology/Pathology II .....	3
ROC 125 .....	Pre-Clinical Techniques (2,0) .....	2
ROC 131 .....	Clinical Clerkship I .....	4
ROC 132* .....	Clinical Clerkship II .....	5
ROC 141* .....	Therapy Physics I .....	2
ROC 142 .....	Patient Care in Oncology .....	1
ROC 145* .....	Quality Improvement .....	2
ROC 151* .....	Cross-Sectional Anatomy .....	2
ROC 225 .....	Emerging Technology in Radiation Oncology .....	1
ROC 231* .....	Clinical Clerkship III .....	5
ROC 232* .....	Clinical Clerkship IV .....	5
ROC 241* .....	Therapy Physics II .....	2
ROC 242* .....	Clinical Radiobiology .....	2
ROC 243* .....	Dosimetry .....	2
ROC 244* .....	Professional Seminar .....	2

**Total Minimum Credits for Degree .....68**

<sup>1</sup> HLT 105 or CPR certification can be used to satisfy this requirement.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> Students should enroll in BIO 193: Human Anatomy & Physiology or have completed BIO 141-142 within five years prior to the date of admission into the program.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

**Note:** Support courses (non-ROC courses) may be taken prior to entry.

### SUGGESTED SCHEDULE

FIRST YEAR			SECOND YEAR	
FALL	SPRING	SUMMER	FALL	SPRING
BIO 145 HLT/LPED HLT 143 ROC 110 ROC 115 ROC 125 ROC 142 SDV 100	ENG 111 MTH 163 ROC 120 ROC 131 ROC 145 ROC 151	ROC 132	ROC 121 ROC 141 ROC 231 ROC 242 HUMANITIES/FINE ARTS ELECTIVE (LIST A)	ROC 225 ROC 232 ROC 241 ROC 243 ROC 244 SOCIAL SCIENCE ELECTIVE (LIST A)

For program specific information please go to the program website.

# Liberal Arts

Associate

Of

Arts

648

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in English, foreign language, humanities, journalism, liberal arts, philosophy, pre-law, or speech/drama.

A specialization is also available in fine arts.

**Program Objectives:** To prepare students for transfer to a four-year college or university.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

## LIBERAL ARTS MAJOR

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 100	Principles of Public Speaking	3
ENG 111*	College Composition I	3
ENG 112*	College Composition II	3
ENG 241*	Survey of American Literature I (or ENG 243-244)	3
ENG 242*	Survey of American Literature II (or ENG 243-244)	3
HIS 111	History of World Civilization I (or HIS 121)	3
HIS 112	History of World Civilization II (or HIS 121-122)	3
HLT/PED <sup>3</sup>	Health or Physical Education	2
ITE 115	Intro to Computer Applications and Concepts	3
MTH 151*	Mathematics for the Liberal Arts I	3
MTH 152*	Mathematics for the Liberal Arts II (or MTH 157)	3
SDV 100	College Success Skills (or SDV 108)	1
E <sup>1,2</sup>	Beginning Foreign Language Electives or Humanities/Fine Arts Electives (List B)	7
E <sup>2,*</sup>	Intermediate Foreign Language Electives (List A)	6
E <sup>1</sup>	Science Sequence (List A)	8
E <sup>1</sup>	Social Science Electives (List B)	6

**Total Minimum Credits for Certificate ..... 60**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> French and Spanish are guaranteed to be offered at the beginning and intermediate level each year. Completion of an intermediate level foreign language sequence is required for graduation. Students may take the intermediate level foreign language sequence (201-202) their first year if they have completed two years of a high school foreign language with at least a "B" average. If not, students must complete a beginning level sequence (101-102) their first year and the intermediate level sequence (201-202) during their second year.

<sup>3</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111 SDV 100 FOREIGN LANGUAGE ELECTIVE	ENG 112 ITE 115 FOREIGN LANGUAGE ELECTIVE	CST 100 ENG 241 HIS 111 MTH 151 HUMANITIES/FINE ARTS ELECTIVE	ENG 242 HIS 112 HLT/PED MTH 152 HUMANITIES/FINE ARTS ELECTIVE
SOCIAL SCIENCE ELECTIVE	SOCIAL SCIENCE ELECTIVE		
SCIENCE ELECTIVE	SCIENCE ELECTIVE		

# Liberal Arts Fine Arts Specialization

## Associate Of Arts 648-01

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year program in a professional art school or to a four-year program in fine arts.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college. A satisfactory aptitude in visual art is preferred for entry into the art program.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 100	..... Principles of Public Speaking (or CST 105)	.....3
ENG 111*	..... College Composition I	.....3
ENG 112*	..... College Composition II	.....3
ENG 241 <sup>3,*</sup>	... Survey of American Literature I (or ENG 243 or Foreign Language Elective)	.....3
HIS 111	..... History of World Civilization I (or HIS 121)	.....3
HIS 112	..... History of World Civilization I (or HIS 122)	.....3
HLT/PED <sup>4</sup>	..... Health or Physical Education	.....3
MTH 151*	..... Mathematics for the Liberal Arts I	.....3
MTH 152*	..... Mathematics for the Liberal Arts II (or MTH 157)	.....3
SDV 100	..... College Success Skills (or SDV 101)	.....1
E <sup>1*</sup>	..... Interm Foreign Language Electives	.....6
E <sup>2</sup>	..... Social Science Elective (List B)	.....6
E <sup>2</sup>	..... Science Sequence (List A)	.....8

#### FINE ARTS SPECIALIZATION COURSES

#### CREDITS

ART 121	..... Drawing I	.....3
ART 122*	..... Drawing II	.....3
ART 131	..... Fundamentals of Design I	.....3
ART 132	..... Fundamentals of Design II (or Foreign Language Elective)	.....3

**Total Minimum Credits for Degree .....60**

<sup>1</sup> French and Spanish are guaranteed to be offered at the beginning and intermediate level each year. Completion of an intermediate level foreign language sequence is required for graduation. Students may take the intermediate level foreign language sequence (201-202) their first year if they have completed two years of a high school foreign language with at least a "B" average. If not, students must complete a beginning level sequence (101-102) their first year and the intermediate level sequence (201-202) during their second year.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> Students completing the intermediate level of foreign language during the first year will take ENG 241 and ART 132 during their second year.

<sup>4</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ART 121	ART 122	ART 131	ART 132
ENG 111	ENG 112	ENG 241	HIS 112
SDV 100	CST 100	HIS 111	HLT/PED
FOREIGN LANGUAGE	FOREIGN LANGUAGE	MTH 151	MTH 152
ELECTIVE	ELECTIVE	SCIENCE ELECTIVE	SCIENCE ELECTIVE
SOCIAL SCIENCE	SOCIAL SCIENCE		
ELECTIVE	ELECTIVE		

# Maintenance Technology

Career

Studies

Certificate

221-731-98

**Purpose:** This curriculum is designed to prepare students for careers in facilities maintenance.

**Program Objectives:** Employment opportunities include positions in the maintenance department of small industry, health care facilities, and other heavy industry organizations.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** The program also prepares the student to take the EPA Section 608 Certification test, which is now required of all people employed in the installation, maintenance and repair of air conditioning and refrigeration equipment. This certification test is given on campus during the student's first year of studies.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

AIR 121* .....	Air Conditioning & Refrigeration I .....	3
AIR 122* .....	Air Conditioning & Refrigeration II .....	3
AIR 238* .....	Advanced Troubleshooting and Services .....	3
BLD 111 .....	Blueprint Reading and the Building Code .....	3
ELE 133* .....	Practical Electricity I .....	3
MEC 162 .....	Fluid Mechanics Hydraulics/Pneumatics .....	3
WEL 120 .....	Introduction to Welding .....	3

**Total Minimum Credits for Certificate .....21**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
AIR 121 ELE 133 WEL 120	AIR 122 AIR 238 BLD 111 MEC 162

# Management

## Associate of

## Applied

## Science

212

**Purpose:** This curriculum is designed for individuals who seek management positions in business and industry.

Specializations are available in marketing and human resource management.

**Program Objectives:** Employment opportunities include management trainee, supervisor, real estate sales, banking, finance, retail merchandising, production operations, purchasing agent, sales management, and other related business and industry occupations.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Management program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

CST 105	..... Oral Communication (or CST 100)	.....3
ECO 120	..... Survey of Economics (or ECO 201/202)	.....3
ENG 111*	..... College Composition I	.....3
HLT/PED <sup>1</sup>	..... Health or Physical Education	.....2
ITE 115	..... Intro to Computer Applications and Concepts	.....3
MTH 120*	..... Intro to Mathematics (or MTH 163)	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A)	.....3

### MANAGEMENT AND RELATED COURSES

CREDITS

ACC 211*	..... Principles of Accounting I	.....4
ACC 212*	..... Principles of Accounting II	.....4
AST 205*	..... Business Communications	.....3
BUS 100	..... Introduction to Business	.....3
BUS 125*	..... Applied Business Mathematics (or MTH 271)	.....3
BUS 165*	..... Small Business Management (or BUS 111)	.....3
BUS 200	..... Principles of Management	.....3
BUS 202*	..... Applied Management Principles	.....3
BUS 205	..... Human Resource Management	.....3
BUS 225*	..... Applied Business Statistics	.....3
BUS 241	..... Business Law I	.....3
FIN 215*	..... Financial Management	.....3
ITE 140	..... Spreadsheet Software	.....3
MKT 100	..... Principles of Marketing	.....3

**Total Minimum Credits for Degree ..... 65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ACC 211	ACC 212	BUS 200	AST 205
BUS 100	BUS 125	BUS 205	BUS 202
ENG 111	BUS 165	BUS 225	ECO 120
ITE 115	CST 105	BUS 241	FIN 215
MTH 120	HLT/PED	ITE 140	HUMANITIES/FINE ARTS
SDV 100	MKT 100		ELECTIVE

# Management: Human Resource Management Specialization

Associate of

Applied

Science

212-07

**Purpose:** This curriculum is designed for individuals who are seeking initial employment in an entry-level human resource position and those presently in business who are seeking promotions.

**Program Objectives:** Employment opportunities include entry-level human resource assistant, management trainee and supervisor.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Management program head as listed on program webpage.

## CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

CST 105	..... Oral Communication (or CST 100)	.....3
ECO 120	..... Survey of Economics (or ECO 201/202)	.....3
ENG 111*	..... College Composition I	.....3
HLT/PED <sup>1</sup>	..... Health or Physical Education	.....1
ITE 115	..... Intro to Computer Applications and Concepts	.....3
MTH 120*	..... Intro to Mathematics (or MTH 163)	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A)	.....3

## HUMAN RESOURCE MANAGEMENT AND RELATED COURSES

CREDITS

ACC 110	..... Intro to Computerized Accounting	.....1
ACC 211*	..... Principles of Accounting I	.....4
ACC 212*	..... Principles of Accounting II	.....4
ACC 124	..... Payroll Accounting	.....3
AST 205*	..... Business Communications	.....3
BUS 100	..... Introduction to Business	.....3
BUS 111	..... Principles of Supervision	.....3
BUS 125*	..... Applied Business Mathematics (or MTH 271)	.....3
BUS 202*	..... Applied Management Principles	.....3
BUS 205	..... Human Resource Management	.....3
BUS 225*	..... Applied Business Statistics	.....3
BUS 241	..... Business Law I	.....3
BUS 285*	..... Current Issues in Management	.....3
FIN 215*	..... Financial Management	.....3
MKT 100	..... Principles of Marketing	.....3

**Total Minimum Credits for Degree ..... 65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ACC 211 BUS 100 ENG 111 HLT/PED ITE 115 SDV 100	ACC 110 ACC 212 BUS 111 BUS 125 MKT 100 MTH 120	ACC 124 BUS 205 BUS 225 BUS 241 ECO 120	AST 205 BUS 202 BUS 285 CST 105 FIN 215 HUMANITIES/FINE ARTS ELECTIVE

# Management: Marketing Specialization

## Associate of Applied Science 212-05

**Purpose:** This curriculum is designed for students who are seeking employment in merchandising and marketing occupations upon graduation.

**Program Objectives:** Employment opportunities include positions in the marketing field as: manager/ trainee, assistant manager, department manager, sales supervisor, customer service representatives, display apprentice/trainee, advertising trainee, retail store owner/manager and media buyer.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** This program is accredited by the Association of Collegiate Business Schools and Programs.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Management program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 105 .....	Oral Communication (or CST 100) .....	3
ECO 120 .....	Survey of Economics (or ECO 201/202) .....	3
ENG 111* .....	College Composition I .....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	2
ITE 115 .....	Intro to Computer Applications and Concepts .....	3
MTH 120* .....	Intro to Mathematics (or MTH 163) .....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3

### MARKETING AND RELATED COURSES

#### CREDITS

ACC 211* .....	Principles of Accounting I .....	4
ACC 212* .....	Principles of Accounting II .....	4
AST 205* .....	Business Communications .....	3
BUS 100 .....	Introduction to Business .....	3
BUS 125* .....	Applied Business Mathematics (or MTH 271) .....	3
BUS 165* .....	Small Business Management (or BUS 111) .....	3
BUS 202* .....	Applied Management Principles .....	3
BUS 225* .....	Applied Business Statistics .....	3
BUS 241 .....	Business Law I .....	3
FIN 215* .....	Financial Management .....	3
MKT 100 .....	Principles of Marketing .....	3
MKT 110 .....	Principles of Selling .....	3
MKT 216 .....	Retail Organization & Management (or BUS 200) .....	3
MKT 220 .....	Principles of Advertising .....	3

**Total Minimum Credits for Degree ..... 65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ACC 211 BUS 100 ENG 111 HLT/PED ITE 115 MTH 120 SDV 100	ACC 212 AST 205 BUS 125 BUS 165 HLT/PED MKT 100	BUS 225 BUS 241 CST 105 MKT 110 MKT 216	BUS 202 ECO 120 FIN 215 MKT 220 HUMANITIES/FINE ARTS ELECTIVE

# Management: Business Industrial Supervision

Career

Studies

Certificate

221-212-04

**Purpose:** The curriculum is designed to prepare individuals to operate in business and industry on the supervisory level by providing a broad foundation of general business, management, technology, industrial safety and human relations.

**Program Objectives:** Employment opportunities include entry-level supervisory positions including: manager, supervisor, foreman, team leader, or management trainee. Additionally, this program is designed to serve those who may be seeking a promotion to either an entry level management position or higher levels of management responsibility.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

BUS 100 .....	Introduction to Business .....	3
BUS 111 .....	Principles of Supervision I.....	3
BUS 205 .....	Human Resource Management.....	3
ENG 111* .....	College Composition I.....	3
ITE 115 .....	Intro to Computer Applications and Concepts.....	3
PSY 200.....	Principles of Psychology.....	3
SAF 127 .....	Industrial Safety.....	2

**Total Minimum Credits for Certificate .....20**

*\*This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR
FALL	SPRING	FALL
BUS 100 ENG 111	BUS 111 ITE 115	BUS 205 PSY 200 SAF 127



# Management: Entrepreneurship Plus

Career

Studies

Certificate

221-212-10

**Purpose:** This curriculum is designed for individuals who are interested in learning the fundamentals of starting and operating a business.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Objectives:** Employment opportunities include entrepreneurship in a variety of occupational field .

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ACC 110.....	Intro to Computerized Accounting .....	1
BUS 116.....	Entrepreneurship.....	3
BUS 165* .....	Small Business Management.....	3
MKT 100 .....	Principles of Marketing .....	3
E <sup>1</sup> .....	Approved Core Elective Sequence .....	6

**Total Minimum Credits for Certificate ..... 16**

<sup>1</sup> Students must consult with one of the Management faculty advisors prior to selecting these courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
BUS 116 MKT 100 CORE ELECTIVE	ACC 110 BUS 165 CORE ELECTIVE

# Management: Human Resource Development

Career

Studies

Certificate

221-212-08

**Purpose:** This curriculum is designed to prepare students for employment in the human resource management function of business and industry.

Emphasis will be placed on improving workplace readiness skills such as communications, critical analysis, problem-solving, teamwork, and work ethic.

**Program Objectives:** Employment opportunities include entry level positions within the field of Human Resource Management.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ACC 124 .....	Payroll Accounting .....	3
BUS 100 .....	Introduction to Business .....	3
BUS 111 .....	Principles of Supervision .....	3
BUS 200 .....	Principles of Management .....	3
BUS 205 .....	Human Resource Management .....	3
BUS 285* .....	Current Issues in Management.....	3

**Total Minimum Credits for Certificate ..... 18**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
ACC 124	BUS 111
BUS 100	BUS 205
BUS 200	BUS 285

# Management: Organizational Leadership

Career

Studies

Certificate

221-212-19

**Purpose:** This curriculum is designed for students seeking initial employment in leadership, as well as those seeking to advance their careers into management. Emphasis will be placed on improving workplace readiness skills such as communications, critical analysis, problem-solving, teamwork, and work ethic.

**Program Objectives:** Students will be prepared to enter into leadership roles while developing people skills and exercising the decision making process.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ACC 110.....	Introduction to Computerized Accounting .....	1
BUS 100 .....	Introduction to Business .....	3
BUS 111 .....	Principles of Supervision (or BUS 200) .....	3
BUS 165* .....	Small Business Management (or BUS 202) .....	3
BUS 205 .....	Human Resource Management .....	3
MKT 100 .....	Principles of Marketing .....	3
MKT 110 .....	Principles of Selling .....	3

**Total Minimum Credits for Certificate ..... 19**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		
FALL	SPRING	SUMMER
ACC 110 BUS 100 BUS 111	BUS 205 MKT 100	BUS 165 MKT 110

# Mechanical Engineering Technology

## Associate of Applied Science

956

**Purpose:** This curriculum is designed to prepare students for entry-level positions as mechanical engineering technicians.

**Program Objectives:** Graduates may seek employment as mechanical engineering technicians.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Mechanical Engineering program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

CST 100	..... Prin of Public Speaking (or CST 105)	.....3
ENG 111*	.....College Composition I	.....3
HLT/PED <sup>2</sup>	..... Health or Physical Education	.....2
MTH 115 <sup>4,*</sup>	.....Technical Mathematics I	.....3
MTH 116 <sup>4,*</sup>	..... Technical Mathematics II	.....3
PHY 201*	.....General College Physics I	.....4
SDV 101	.....Orientation to EGR (or SDV 100)	.....1
E <sup>1</sup>	..... Humanities/Fine Arts Elective (List A)	.....3
E <sup>1</sup>	.....Social Science Elective (List A)	.....3
E <sup>1</sup>	..... Social Science Elective (List B)	.....3

### MECHANICAL ENGINEERING AND RELATED COURSES

CREDITS

DRF 128*	..... Geometric Dimensioning and Tolerancing	.....3
DRF201*	.....Computer Aided Drafting and Design I	.....3
DRF202*	..... Computer Aided Drafting and Design II	.....3
DRF203*	.....Computer Aided Drafting and Design III	.....3
DRF 226*	..... Computer Aided Machining	.....3
EGR 216*	.....Computer Methods in Engineering/Technology	...3
ETR 113*	.....DC and AC Fundamentals I	.....4
MEC 113	..... Materials and Processes of Industry	.....3
MEC 119	.....Introduction to Basic CNC and CAM	.....3
MEC 131*	..... Mechanics I-Statics for Engineering Technology	.....3
MEC 132*	.....Mechanics II-Strength of Materials for Engineering Technology	.....3
E <sup>3</sup>	..... Technical Elective	.....3

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>3</sup> A technical elective should be selected from EGR 126, EGR 206, MTH 157, PHY 202, or see advisor for additional options.

<sup>4</sup> Students may substitute MTH 166 and MTH 175. See advisor for details.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
DRF 201	DRF 202	DRF 203	CST 100
EGR 216	DRF 226	ETR 113	DRF 128
ENG 111	MEC 113	HLT/PED	HLT/PED
MEC 119	MEC 131	MEC 132	SOCIAL SCIENCE
MTH 115	MTH 116	PHY 201	ELECTIVE
SDV 100	HUMANITIES FINE ARTS ELECTIVE	SOCIAL SCIENCE ELECTIVE	TECHNICAL ELECTIVE

# Mechatronics Systems Engineering Technology

## Associate of Applied Science PENDING APPROVAL

**Purpose:** This curriculum combines the concepts and practices of mechanical and electrical processes in order to manipulate motorized, hydraulic, and pneumatic machines to perform complex automated functions in an industrial or manufacturing setting. Students develop the skills to assemble, install, test and troubleshoot, calibrate, and service a variety of devices, products and electronic instruments. Coursework also includes collaborative projects in which students form teams with another program area to build a factory, enabling them to apply their skills and knowledge to a simulated work experience.

**Program Objectives:** Entry-level or advanced opportunities at automated manufacturing and computer aided industrial sites. Positions include mechanical, maintenance, electrical, quality, computer, process, and manufacturing technicians. Other job titles may include electronic service technician or industrial electrician.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Upon completion of the AAS in Mechatronics Systems Engineering Technology, students will be prepared to take the Siemens Mechatronic Systems Certification Program (SMSCP) Level II exam.

### ADVANCED TECHNOLOGY AND RELATED COURSES CURRICULUM AND OTHER REQUIREMENTS

GENERAL EDUCATION COURSES	CREDITS
ENG 111* ..... College Composition I.....	3
HLT/PED <sup>1</sup> ..... Health or Physical Education.....	1
MTH 115* ..... Technical Mathematics.....	3
PHY 201* ..... General College Physics I.....	4
SDV 101 ..... Orientation to Engineering.....	1
E <sup>2</sup> ..... Humanities/Fine Arts Elective (List A).....	3
E <sup>2</sup> ..... Social Science Elective (List A).....	3

### MECHATRONICS SYSTEMS ENGINEERING TECHNOLOGY RELATED COURSES

	CREDITS
EGR 105 ..... Intro to Problem Solving in Technology.....	1
EGR 123 ..... Intro to Engineering Design.....	2
EGR 216* ..... Computer Methods in Engineering/Technology ....	3
ETR 113* ..... DC and AC Fundamentals I.....	4
ETR 237 ..... Industrial Electronics I.....	4
ETR 238 ..... Industrial Electronics II.....	4
IND 230 ..... Applied Quality Control.....	3
IND 250* ..... Intro to Basic Computer Integrated Manufacturing ....	3
IND 251* ..... Automated Manufacturing Systems I.....	4
IND 290 ..... Coordinated Internship II.....	3
MEC 113 ..... Materials and Processes of Industry.....	3
MEC 131* ..... Mechanics I – Statics for Engin Tech.....	3
MEC 132* ..... Mechanics II – Strength of Materials.....	3
MEC 162 ..... Applied Hydraulics & Pneumatics.....	3
MTH 163* ..... Pre-Calculus I (or MTH 166).....	3
SAF 127 ..... Industrial Safety.....	2

**Total Minimum Credits for Degree .....66**

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
EGR 123	EGR 105	ETR 238	HLT/PED
EGR 216	ETR 237	IND 250	IND 230
ENG 111	MEC 113	MEC 132	IND 251
ETR 113	MEC 131	PHY 201	IND 290
MTH 115	MEC 162	SOCIAL SCIENCE	SAF 127
SDV 101	MTH 163	ELECTIVE	HUMANITIES/FINE ARTS ELECTIVE

# Microcomputer Systems Technology

Career

Studies

Certificate

221-731-68

**Purpose:** This curriculum is designed to prepare a student for employment in the microcomputer-based telecommunications industry ranging from video and display systems to computer systems and networks.

**Program Objectives:** Employment opportunities include computer technician, LAN/WAN technician, and technical representative/salesperson.

Note: Courses on A+<sup>®</sup> certification and Cisco<sup>™</sup> CCNA<sup>™</sup> are included in this curriculum.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ETR 113* .....	DC and AC Fundamentals I .....	4
ETR 123* .....	Electronic Applications I .....	1
ETR 124* .....	Electronic Applications II .....	1
ETR 141* .....	Electronics I .....	3
ETR 142* .....	Electronics II .....	3
ETR 285 .....	Fundamentals of Microcomputer Repair .....	4
TEL 150 .....	Internetworking I .....	4
TEL 151* .....	Internetworking II .....	4

**Total Minimum Credits for Certificate .....24**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR		
FALL	SPRING	SUMMER
ETR 113 TEL 150	ETR 123 ETR 141 ETR 285 TEL 151	ETR 124 ETR 142

# Nursing

## Associate of Applied Science

156

**Purpose:** The curriculum is designed to prepare selected students to qualify as contributing members of the health team implementing direct patient care as beginning practitioners in a variety of health service facilities. At the successful completion of the program, students will be eligible to take the National Council Licensure Exam (NCLEX-RN) leading to the designation of registered nurse.

**Program Objectives:** Employment opportunities for the registered nurse include staff positions in hospitals, nursing homes, health departments, physicians' offices, clinics, day care centers, and home health agencies.

**Developmental Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

Applicants must meet the developmental requirements listed above prior to applying for admission to the AAS Nursing Program.

Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Nursing program head as listed on program webpage.

**Admission Requirements:** Applicants to the Nursing Program must hold a high school diploma or GED and meet the developmental requirements listed.

1. Completion of one unit of high school Biology and Chemistry with a grade of "C" or better is required before applying to this program.
2. The applicant's cumulative high school grade point average (GPA) must be at least 2.5.
3. If the applicant has been to college, the applicant's cumulative college GPA must also be at least 2.5 based on at least 12 credit hours of college credit in a 12-month time frame. The GPA is determined at the end of the fall semester prior to admission. High school graduates and GED holders who earned less than a 2.5 GPA during high school will be considered for admission if they have generated a college GPA of 2.5 or above based on at least 12-semester college credit hours within a 12-month period.
4. Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses MTE: 1, 2, 3, 4, 5 and 6.
5. Students interested in this program should consult the VWCC Nursing Program page, VWCC policy on Infectious Disease Status, Essential Nursing Functions, Clinical Environment, Student Responsibilities, Student Retention and Readmission Policy. The page can be accessed through the VWCC website. For application materials and additional program information, please see our website at <http://www.virginiawestern.edu/academics/smh/health/nursing/index.php>.
6. Successfully complete a CPR (cardiopulmonary resuscitation) course approved by the nursing program.
  - a. American Heart Association "CPR for the healthcare provider"
  - b. American Red Cross "CPR for the Professional Rescuer"
  - c. HLT 105: Cardiopulmonary Resuscitation
7. Complete the required annual criminal background check (Certified Background Check) with drug screen.

## Nursing

**Admission Procedures:** Applicants to the nursing program are strongly encouraged to meet with the Health Careers Information Specialist prior to enrollment in any course included in the nursing program or in any course to correct an academic deficiency. Please note: Receipt of completed academic transcripts and results of placement evaluations are required prior to this meeting.

2. The nursing program accepts new students each fall. Applications must be completed no later than **March 1**. The complete application includes: an application to the college, official transcripts from all colleges attended (transcripts from VWCC or other Virginia community colleges are not required), official transcripts showing completion of a high school diploma or records showing completion of GED with scores, results of the nursing entrance test, TEAS V, which is taken at the student's expense (nonrefundable), and a current Nursing Application form. Nursing Application forms are available in the Admissions Office, The Health Professions Information Office, and on our previous page.

3. BIO 141 must be completed with a grade of "C" or better by the end of the spring semester preceding enrollment in NUR 121. BIO 142 must be completed with a "C" or better by the end of the summer session preceding enrollment in NUR 121. NAS 185 must be completed prior to entering NUR 238. (BIO 141, BIO 142 and BIO 205 must be repeated if they were completed more than 5 years prior to the date of admission into the program.)

4. Applicants should be aware that meeting the curriculum admission standards does not guarantee program admission. In May, all applicants will receive a letter to notify them of their status with the program.

5. If admitted, all students must attend a mandatory nursing program orientation the summer before beginning the program.

**Program Notes:** This program is approved by the Virginia Board of Nursing.

Board of Nursing Perimeter Center 9960 Mayland Drive, Suite 300  
Henrico, Virginia 23233-1463

Clinical agencies require that students have periodic background checks and drug screenings completed at the student's expense before beginning clinical rotations in the agency. A positive background check may include fingerprinting and drug screening and may deny a nursing student access to clinical agencies. Clinical facilities have the right to use a different background check than Virginia Western Community College that could affect a student's ability to participate in clinical experiences. Inability to participate in clinical rotations will disqualify the student from completing the nursing program.

Conviction of a felony, misdemeanor or any offense substantially related to the qualifications, functions and duties of a registered nurse may constitute grounds for not allowing a candidate to take the licensing exam. This decision is made by the State Board of Nursing. For questions regarding this issue, call The Virginia Board of Nursing (804) 367-4515.

Although this program is not designed for transfer, articulation agreements with four year institutions may be available. Contact the Virginia Western program head for details.

All Students must maintain a grade of "C" or better in all program required courses to remain in the program.

Students accepted into the A.A.S. Nursing Program will receive a program handbook during their mandatory orientation prior to beginning the program.



# Nursing

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

BIO 141 .....	Human Anatomy and Physiology I .....	4
BIO 142 .....	Human Anatomy and Physiology II .....	4
BIO 205* .....	General Microbiology .....	4
ENG 111* .....	College Composition I .....	3
HLT/PED <sup>6</sup> .....	Health or Physical Education .....	1
PSY 200 .....	Principles of Psychology .....	3
PSY 230 .....	Developmental Psychology .....	3
SDV 100 .....	College Success Skills (or SDV 101 or SDV 108) .....	1
E <sup>3</sup> .....	Humanities/Fine Arts Elective (List A) .....	3

### NURSING AND RELATED COURSES

### CREDITS

HLT 141 <sup>4</sup> .....	Intro to Medical Terminology .....	1
NUR 121 .....	Nursing Fundamentals I .....	10
NUR 122 <sup>1</sup> .....	Nursing Fundamentals II .....	10
NUR 135 <sup>2</sup> .....	Drug Dosage Calculation .....	2
NUR 238 .....	Integrated Nursing Principles I .....	10
NUR 239 <sup>1</sup> .....	Integrated Nursing Principles II .....	10

**Total Minimum Credits for Degree..... 69**

<sup>1</sup> Includes instruction in fundamental mathematical skills and drug dosage calculations.

<sup>2</sup> NUR 135 is a prerequisite for NUR 122. It is strongly recommended that the student take NUR 135 the summer semester prior to NUR 121.

<sup>3</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>4</sup> HLT 143 cannot substitute for HLT 141 unless the sequence is completed; both HLT 143 and HLT 144.

<sup>5</sup> Must be completed by the end of summer session preceding NUR 121.

<sup>6</sup> HLT 105 or CPR certification can be used to satisfy this requirement.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
HLT 141 HLT/PED NUR 121 NUR 135-RN SDV 100	BIO 205 NUR 122	ENG 111 NUR 238 PSY 200	NUR 239 PSY 230 HUMANITIES/FINE ARTS ELECTIVE

\* Support courses (non-NUR courses) and NUR 135 may be taken prior to entry into the program.

# Paralegal Studies

## Associate of Applied Science 260

**Purpose:** This curriculum is designed to provide an individual working under the direct supervision of an attorney with a sufficient level of knowledge and proficiency to perform tasks in meeting the needs of clients.

A paralegal will have a basic understanding of the general process of civil and criminal american law.

**Program Objectives:** Graduates may seek employment as a paralegal or legal assistant.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2 and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**Program Notes:** Due to prerequisite requirements, LGL classes should be taken in a specific order as shown in the section titled "Suggested Schedule."

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES

#### CREDITS

CST 105.....	Oral Communications .....	3
ENG 111* .....	College Composition I .....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	1
ITE 115 .....	Intro to Computer Applications and Concepts .....	3
MTH 120* .....	Introduction to Mathematics .....	3
PSY 120.....	Human Relations.....	3
SDV 100.....	College Success Skills (or SDV 108).....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3

#### PARALEGAL AND RELATED COURSES

#### CREDITS

AST 205* .....	Business Communications .....	3
LGL 110.....	Intro to Law and the Legal Assistant .....	3
LGL 115.....	Real Estate Law for Legal Assistants .....	3
LGL 117.....	Family Law .....	3
LGL 125 <sup>3,*</sup> .....	Legal Research .....	3
LGL 126 <sup>3,*</sup> .....	Legal Writing .....	3
LGL130.....	Law Office Administration and Management .....	3
LGL 210* .....	Virginia and Federal Procedures.....	3
LGL 215* .....	Torts .....	3
LGL 216* .....	Trial Preparation and Discovery Practice.....	3
LGL 218* .....	Criminal Law .....	3
LGL 225* .....	Estate Planning and Probate .....	3
LGL 230* .....	Legal Transactions .....	3
LGL 235* .....	Legal Aspects of Business Organizations .....	3
LGL 238* .....	Bankruptcy .....	3

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> LGL 125 and LGL 126 must be taken during the same semester.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111	AST 205	HLT/PED	LGL 215
ITE 115	CST 105	LGL 130	LGL 216
LGL 110	LGL 125	LGL 210	LGL 218
LGL 115	LGL 126	LGL 225	LGL 238
LGL 117	MTH 120	LGL 230	HUMANITIES/FINE ARTS
SDV 100	PSY 120	LGL 235	ELECTIVE

# Phlebotomy

Career

Studies

Certificate

221-151-02

**Purpose:** This curriculum is designed to prepare students to perform the responsibilities of an entry-level phlebotomy technician.

**Program Objectives:** Graduates may apply for employment in a variety of healthcare settings, including hospitals, laboratories, healthcare clinics, and blood donation banks.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college. Applicants must submit a program and college application for admission into this program.

For details about the admission requirements go to <http://www.viriniawestern.edu/academics/smh/index>.

## CURRICULUM AND OTHER REQUIREMENTS PHLEBOTOMOY AND RELATED COURSES

### CREDITS

HIM 111 .....	Medical Terminology I.....	3
HLT 105.....	Cardiopulmonary Resuscitation.....	1
HLT 145.....	Ethics for Health Care Personnel .....	2
MDL 105.....	Phlebotomy .....	3
MDL 106.....	Clinical Phlebotomy.....	4
MDL 190.....	Coordinated Internship .....	3

**Total Minimum Credits for Certificate ..... 16**

## SUGGESTED SCHEDULE

**PROGRAM WILL BE OFFERED ONCE EACH SEMESTER (FALL & SPRING)**

FALL/SPRING
MDL 105 (1 <sup>ST</sup> 8 WEEKS)
MDL 106 (2 <sup>ND</sup> 8 WEEKS)
HLT 145 (1 <sup>ST</sup> 8 WEEKS)
HIM 111
HLT 105
MDL 190 (2 <sup>ND</sup> 8 WEEKS)

## Certificate

157

### Also See Nursing

**Purpose:** This curriculum is designed to prepare students for a career as a Licensed Practical Nurse (LPN). The program will provide instruction to prepare qualified students to meet the health care needs of the community within the scope of practice of practical nursing, as defined by the Virginia Board of Nursing. Graduates of this program earn a Certificate in Practical Nursing and will be academically eligible to take the NCLEX-PN examination.

**Program Objectives:** Employment opportunities include nursing homes, hospices, public health and community nursing, medical offices and clinics, and acute and long-term care facilities.

### Developmental Requirements:

**ENGLISH** - Applicants must receive an ENF 3 or ENG 111 placement test recommendation. If this placement is not achieved, applicants must have successfully completed all developmental English requirements.

**MATH** – Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, and 4.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Practical Nursing program head as listed on program webpage.

## Practical Nursing

**Admission Requirements:** Applicants to the Practical Nursing program must hold a high school diploma or GED. Applicants must meet the requirements for admission to credit-level coursework established by the college.

1. Applicants must have completed one unit of high school or college-level Biology with a grade of "C" or better.
2. Applicants must have a cumulative high school or college-level GPA of 2.0. College GPA is based on at least 12 credit hours of college credit in a 12-month time frame. The GPA is determined at the end of fall semester prior to admission.
3. Applicants must complete required evaluative tests administered at Virginia Western.
4. Applicants must complete required evaluative test administered at Virginia Western Community College.

**Admission Procedures:** Admission to the program is competitive. Students are admitted once a year in August. Prospective applicants who are accepted into the program must attend an information session. While applications are accepted at any time, to be eligible for admission the application packet must be submitted by April 1st of the admission year. Applications may be accepted after this date on a space available basis. The criteria for admission to the practical nursing program are outlined in the Practical Nursing Admissions Packet. Additional information related to entrance testing requirements will be given to qualified applicants in the spring semester.

Letters are mailed in May regarding fall admission. All application materials must be submitted to the attention of the Health Careers Information Specialist prior to April 1. The applicant is responsible for making certain that the following have been submitted in addition to the college application: completed practical nursing application form, written essay (criteria listed on back of application), official high school transcript, copy of GED scores (if applicable), official transcripts from all colleges attended (VWCC and other Virginia community colleges are not required). Applicants being considered for admission will be required to take a nursing entrance test during the spring semester (nonrefundable fee is the responsibility of the applicant). Applicants must attend a personal interview demonstrating satisfactory oral and written communication skills. Qualified applicants are considered without regard to race, color, gender, age, religion, disability, national origin, or other non-merit factors.

Applicants should be aware that meeting the curriculum admission standards does not guarantee program admission. All applicants should review and sign the Essential Functions for Practical Nursing. Applicants will be notified in writing of the action taken by the Practical Nursing Admissions Committee in May. Students interested in this program should consult the Practical Nursing Program page for additional information and responsibilities. The page can be accessed through the Virginia Western website <http://www.virginiawestern.edu/academics/smh/health/programs.php>.

# Practical Nursing

**Program Note:** The certificate program in Practical Nursing requires four full-time semesters of study and is approved by the Virginia Board of Nursing. The Board of Nursing can deny licensure to any applicant who has filed false credentials, who has falsely represented facts on the application for licensure, and/or has committed a felony or misdemeanor. Some health care facilities may not employ individuals who have committed certain criminal acts and may conduct criminal background checks before hiring. Criminal background checks and urine drug screens are required for entrance into some clinical agencies. Students who have convictions may be prohibited from clinical agencies and may not complete the certificate program.

**Retention Policy:** Students must pass each theoretical and clinical nursing course in order to proceed to the next course. Students must maintain a minimum GPA of 2.0 to continue in the program.

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

ENG 111 * .... College Composition I .....	3
HLT/PED <sup>3</sup> ..... Health or Physical Education .....	2
PSY 200..... Principles of Psychology.....	3
SDV 100 <sup>2</sup> ..... College Success Skills (or SDV 108) .....	1

### PRACTICAL NURSING COURSES

### CREDITS

NUR 135-PN. Drug Dosage Calculation.....	2
PNE 110 ..... Practical Nursing Health and Disease I .....	5
PNE 111 ..... Practical Nursing Health and Disease II .....	5
PNE 120 ..... Introduction to Nursing Process .....	1
PNE 135 ..... Maternal and Child Health .....	5
PNE 141 ..... Nursing Skills I .....	3
PNE 142 ..... Nursing Skills II .....	3
PNE 145 ..... Trends in Practical Nursing .....	1
PNE 155 ..... Body Structure and Function .....	4
PNE 156 <sup>1</sup> ..... Nursing Across the Life Span .....	4
PNE 158 ..... Mental Health & Psychiatric Nursing .....	2
PNE 174 ..... Applied Pharmacology for Practical Nurses .....	2
PNE 181 ..... Clinical Experience I .....	5
PNE 182 ..... Clinical Experience II .....	5

**Total Minimum Credits for Degree .....56**

<sup>1</sup> Includes gerontological nursing.

<sup>2</sup> Students who have not previously completed SDV 100 or SDV 108 must enroll in SDV 100 or SDV 108 during the first semester of the practical nursing program.

<sup>3</sup> HLT 105 or CPR certification can be used to satisfy this requirement.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111 NUR 135-PN (FALL ONLY) PNE 120 PNE 141 PNE 155 SDV 100	PNE 110 PNE 142 PNE 156 PNE 174	PNE 111 PNE 158 PNE 181 PSY 200	HLT/PED PNE 135 PNE 145 PNE 182

# Associate of Applied Science

113

**Purpose:** This curriculum is designed to prepare selected students to perform the responsibilities of an entry-level radiation therapist. The Associate of Applied Science will be required of all applicants who do not hold a degree. Upon completion graduates will be eligible to apply to take the American Registry of Radiologic Technologists (ARRT) examination leading to certification as a registered Radiation Therapist, RT-T.

**Program Objectives:** Graduates may apply for employment in hospitals, cancer centers, education, management, government agencies, and marketing and research.

**Developmental Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**English:** Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

**Math:** Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

The Radiation Oncology Program is a selective admissions program requiring an application to the college as well as a separate application to the program. For details about the Admission Requirements go to: <http://www.virginiawestern.edu/academics/smh/health/oncology/index.php>.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Radiation Oncology program head as listed on program webpage.

## Radiation Oncology

**Admission Requirements:** Applicants to the Radiation Oncology program must hold a high-school diploma or GED and meet the developmental requirements listed to the left. Additionally, applicants must complete prerequisites listed below with a grade of "C" or higher by the end of Spring Semester prior to the beginning of the program:

- Algebra I, Algebra II, Geometry or Developmental Mathematic Units 1-9
- Two units of high school or college biology, chemistry, or physics

**Admission Procedures:** The Radiation Oncology applicant is responsible for making certain that the following have been submitted in addition to a current college application by the **March 15** deadline:

- Completed program application form
- Official high school transcript
- Copy of GED scores is applicable
- Official transcripts from all colleges attended (VWCC and other Virginia community college transcripts are not necessary)
- Two (2) letters of recommendation, such as, employers or professors
- Copy of any professional licensure or certification

**Note:** If applying for the joint venture site at Northern Virginia Community College, applicants must complete a college application for NOVA, in addition to VWCC.

The Radiation Oncology application form and additional program information can be accessed from our website at <http://www.virginiawestern.edu/academics/smh/health/oncology/index.php>. Application packets are also available in the Health Professions and College Admissions Office. Early application is encouraged for advising purposes.

Applicants must also take the math placement test at Virginia Western. Additional information regarding the math evaluation procedures will be mailed to applicants upon receipt of the above completed academic file.

Qualified applicants will be contacted for an interview appointment during the spring semester. Applicants considered by the Radiation Oncology Admissions Committee will be notified by mail in May regarding fall admission. If the number of qualified applicants is below the maximum enrollment for VWCC or NOVA, the application deadline may be extended for that site.

Students interested in this program should consult the VWCC Radiation Oncology Program page, VWCC Policy on Infectious Disease Status, Essential Radiation Oncology Functions, Clinical Environment, Student Responsibilities, and Student Retention and Readmission Policy. The page can be accessed through the VWCC Website.

**Program Notes:** The program has been accredited, with the revisions pending approval, by the authority of the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901. **Telephone (312) 704-5300.**

Individuals who have a felony or misdemeanor conviction may not be allowed to take the national certification exam. This decision is made by the American Registry of Radiologic Technology (ARRT). For questions regarding this issue call the ARRT or visit their website at [AART.org](http://AART.org).

Clinical agencies may require that students have periodic background checks and drug screenings completed at the student's expense before beginning clinical rotations. A positive background check, drug screen, and/or felony conviction may dismiss the student from the program.

**Retention Policy:** Successful completion of the program requires students to maintain a "C" or better in all Radiation Oncology courses and MTH 163. MTH 163 must be successfully completed by the end of the first spring semester. A complete statement of the above policies is outlined in the Radiation Oncology Student Handbook.

# Radiation Oncology

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES

### CREDITS

ENG 111* .....	College Composition I.....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	2
MTH 163* .....	Pre-Calculus I.....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
BIO 145 .....	Human Anatomy and Physiology for the Health Sciences .....	4
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3
E <sup>2</sup> .....	Social Science Elective (List A).....	3

### RADIATION ONCOLOGY COURSES

### CREDITS

HLT 143.....	Medical Terminology .....	3
ROC 110* .....	Introduction to Radiation Oncology .....	2
ROC 115 .....	Therapeutic Radiation Safety .....	1
ROC 120 .....	Radiation Oncology/Pathology I.....	3
ROC 121* .....	Radiation Oncology/Pathology II .....	3
ROC 125 .....	Pre-Clinical Techniques (2,0) .....	2
ROC 131 .....	Clinical Clerkship I .....	4
ROC 132* .....	Clinical Clerkship II .....	5
ROC 141* .....	Therapy Physics I .....	2
ROC 142 .....	Patient Care in Oncology .....	1
ROC 145* .....	Quality Improvement .....	2
ROC 151* .....	Cross-Sectional Anatomy .....	2
ROC 225 .....	Emerging Technology in Radiation Oncology .....	1
ROC 231* .....	Clinical Clerkship III .....	5
ROC 232* .....	Clinical Clerkship IV .....	5
ROC 241* .....	Therapy Physics II .....	2
ROC 242* .....	Clinical Radiobiology .....	2
ROC 243* .....	Dosimetry .....	2
ROC 244* .....	Professional Seminar .....	2

**Total Minimum Credits for Degree .....68**

<sup>1</sup> HLT 105 or CPR certification can be used to satisfy this requirement.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> Students should enroll in BIO 193: Human Anatomy & Physiology or have completed BIO 141-142 within five years prior to the date of admission into the program.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

**Note:** Support courses (non-ROC courses) may be taken prior to entry.

### SUGGESTED SCHEDULE

FIRST YEAR			SECOND YEAR	
FALL	SPRING	SUMMER	FALL	SPRING
BIO 145 HLT/LPED HLT 143 ROC 110 ROC 115 ROC 125 ROC 142 SDV 100	ENG 111 MTH 163 ROC 120 ROC 131 ROC 145 ROC 151	ROC 132	ROC 121 ROC 141 ROC 231 ROC 242 HUMANITIES/FINE ARTS ELECTIVE (LIST A)	ROC 225 ROC 232 ROC 241 ROC 243 ROC 244 SOCIAL SCIENCE ELECTIVE (LIST A)

For program specific information please go to the program website.

# Associate of Applied Science

172

**Purpose:** This curriculum is designed to prepare selected students to perform the responsibilities of an entry-level radiographer. Upon completion of the curriculum, graduates are eligible to apply to take the National Registry examination leading to certification as a Registered Technologist in Radiography: RT(R)

**Program Objectives:** Graduates may apply for employment in hospitals, education, industry, clinics, government agencies, physician's offices, emergency care centers and apply to modality programs.

**Developmental Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**English:** Applicants must receive an ENG 111 placement test recommendation or have successfully completed all developmental English requirements.

**Math:** Students who do not demonstrate proficiency in the following mathematical units will be required to complete developmental requirements: MTE 1, 2, 3, 4, 5, 6, 7, 8, and 9.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Radiography program head as listed on program webpage.

## Radiography

**Admission Requirements:** Applicants to the Radiography program must hold a high-school diploma or GED and meet the developmental requirements listed to the left. Additionally, applicants must complete prerequisites listed below with a grade of "C" or higher by the end of Spring Semester prior to the beginning of the program:

- Algebra I - II
- 2 Lab Sciences

**Admission Procedures:** The Radiography program applicant is responsible for making certain that the following have been submitted in addition to a current college application by the **February 1st** deadline:

- Completed program application form
- Official high school transcript or copy of GED scores, if applicable
- Official transcripts from all colleges attended (Virginia Western and other Virginia community college transcripts are not necessary)

The Radiography Program is a selective admissions program requiring an application to the college as well as a separate application to the program. For details about the Admission Requirements go to the radiography website under Curriculum Information: <http://www.virginiawestern.edu/academics/smh/health/radiography/index.php>. Application packets are also available in the Health Professions and college Admissions offices. Early application is encouraged for advising purposes. Once the above documentation has been evaluated, applicants are encouraged to contact the Health Careers Specialist for any additional questions and advising.

Qualified applicants will be contacted for interviews which are usually held in February and March. The admissions process also includes a hospital tour, interview with a radiography instructor, and a writing sample. Students will be required to take an entrance test at the student's expense.

**Program Notes:** Individuals who have a felony or misdemeanor conviction may not be allowed to take the national certification exam. This decision is made by The American Registry of Radiologic Technologies (ARRT). For questions regarding this issue, call the ARRT at (651) 687-0048 or visit their website at [www.arrt.org](http://www.arrt.org).

Clinical agencies may require that students have periodic background checks and drug screenings completed at the student's expense before beginning clinical rotations. A positive background check, drug screen, and/or felony conviction may dismiss the student from the program.

The program is accredited by the authority of the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901; **(312) 704-5300**.

**Retention Policy:** Successful completion of the program requires the student maintain a "C" or better grade in all Radiography courses, BIO elective and HLT 143. A complete statement of all of the above policies is outlined in the Radiography Handbook, which is available upon admissions into the program.



# Radiography

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES CREDITS

BIO 141	..... Human Anatomy and Physiology I	.....4
ENG 111*	..... College Composition I	.....3
HLT/PED <sup>2</sup>	..... Health or Physical Education	.....1
MTH 120	..... Introduction to Mathematics	.....3
SDV 100	..... College Success Skills (or SDV 108)	.....1
E <sup>1</sup>	..... Humanities/Fine Arts Elective (List A)	.....3
E <sup>1</sup>	..... Social Science Elective (List A)	.....3

### RADIOGRAPHY AND RELATED COURSES CREDITS

HLT 143*	..... Medical Terminology I	.....3
RAD 106	..... Introduction to Radiologic Science	.....2
RAD 111	..... Radiologic Science I	.....4
RAD 112	..... Radiologic Science II	.....4
RAD 121	..... Radiographic Procedures I	.....4
RAD 125	..... Patient Care Procedures	.....3
RAD 131	..... Elementary Clinical Procedures I	.....3
RAD 132	..... Elementary Clinical Procedures II	.....3
RAD 190*	..... Coordinated Internship	.....3
RAD 205	..... Radiation Protection & Radiobiology	.....3
RAD 215	..... Correlated Radiographic Theory	.....2
RAD 221*	..... Radiographic Procedures II	.....4
RAD 231	..... Advanced Clinical Procedures I	.....5
RAD 232	..... Advanced Clinical Procedures II	.....5
RAD 240	..... Radiographic Pathology	.....3
RAD 290*	..... Coordinated Internship	.....3

**Total Minimum Credits for Degree .....72**

<sup>1</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>2</sup> Health (HLT 105) or a PE class that may fulfill this general education requirement however, the required CPR certification for Radiography is Healthcare Provider CPR which includes infant, child, adult and AED.

<sup>3</sup> Students should enroll in BIO 193: Human Anatomy & Physiology or have completed BIO 141-142 within five years prior to the date of admission into the program.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR			SECOND YEAR		
FALL	SPRING	SUMMER	FALL	SPRING	SUMMER
BIO 141 HLT 143 MTH 120 RAD 121 RAD 131 SDV 100	RAD 106 RAD 125 RAD 132 RAD 221	HLT/PED RAD 190 RAD 205	ENG 111 RAD 111 RAD 231 RAD 240	RAD 112 RAD 232 HUMANITIES/FINE ARTS ELECTIVE (LIST A) SOCIAL SCIENCE ELECTIVE (LIST A)	RAD 215 RAD 290

# Science

## Associate Of Science 880

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in a science discipline or pre-professional program.

Students may elect to specialize in Health Sciences, Integrated Environmental Studies and Mathematics.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses prior to enrollment in this program.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

**Program Notes:** Students preparing for a major in **pre-medicine, pre-dentistry, pre-pharmacy, pre-physician's assistant or pre-veterinary** should complete the curricular program in Science and select BIO 101-102 and CHM 111-112 to fulfill the required 16 credits of Science Elective with Lab. It is strongly recommended that PHY 201-202 General College Physics be taken to fulfill the science Elective and Transfer Elective requirements. Many pre-professional programs also require Organic Chemistry; which is offered every other year in even years.

Students preparing for a **major in biology** should complete in their science electives BIO 101-102, BIO 206, BIO 220, as well as CHM 111-112.

Students preparing for a **major in chemistry** should complete in their science electives CHM 111-112, CHM 241/245, CHM 242/244, as well as BIO 101-102.

Students preparing for a **major in earth sciences** should complete in their science electives GOL 105-106, as well as selecting from BIO 101-102 or CHM 111-112, depending on the demands of the transfer institution.

Students preparing for a **major in environmental science, ecology, or forestry** should pursue the Integrated Environmental Studies Specialization.

Students preparing for a **major in mathematics, mathematics education, or statistics** should pursue the Specialization in Mathematics.

Students preparing for a **major in a health field such as Nursing or other allied health field** and who desire a BS degree, should pursue the Specialization in Health Sciences.

# Science

## CURRICULUM AND OTHER REQUIREMENTS

### GENERAL EDUCATION CORE COURSES CREDITS

ENG 111* .....	College Composition I.....	3
ENG 112* .....	College Composition II .....	3
HIS 121 .....	US History (or HIS 111) .....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	1
ITE 115 .....	Intro to Computer Applications and Concepts (or CSC 201) .....	3
MTH 163* .....	Pre-Calculus I (or MTH 166) .....	3
MTH 271* .....	Applied Calculus I (or MTH 175) .....	3
MTH 272* .....	Applied Calculus II (or MTH 176) .....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	6
E <sup>2</sup> .....	Social Science Elective (List B).....	6
E <sup>2,4</sup> .....	Transfer Elective (List B) .....	6

### SCIENCE COURSES CREDITS

E <sup>2</sup> .....	Science Sequence (List A) .....	8
E <sup>2,3</sup> .....	Science Elective without Lab (List B) .....	3
E <sup>2</sup> .....	Science Electives with Lab (List B) .....	8

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> A science elective with lab (List B) may also be used to satisfy this requirement.

<sup>4</sup> Up to two credits of PE may be used towards completing the Transfer Elective Requirement.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111 HLT/PED ITE 115 MTH 163 SDV 100 SCIENCE ELECTIVE LAB	ENG 112 MTH 271 HUMANITIES/FINE ARTS ELECTIVE SCIENCE ELECTIVE/LAB TRANSFER ELECTIVE	HIS 121 MTH 272 SCIENCE ELECTIVE/LAB SOCIAL SCIENCE ELECTIVE	HUMANITIES/FINE ARTS ELECTIVE SCIENCE ELECTIVE SCIENCE ELECTIVE/ LAB SOCIAL SCIENCE ELECTIVE

# Science - Health Sciences Specialization

## Associate Of Science 880-02

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in a health field such as nursing, nutrition, health education, or allied health programs including physical or occupational therapy.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses prior to enrollment in this program.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

ENG 111*	..... College Composition I .....	3
ENG 112*	..... College Composition II .....	3
HIS 121	..... United States History I (or HIS 111) .....	3
ITE 115	..... Intro Computer Applications and Concepts .....	3
MTH 151*	..... Liberal Arts Mathematics I .....	3
MTH 157*	..... Statistics (or MTH 152) .....	3
PLS 211	..... U.S. Government I (or ECO 201) .....	3
PSY 200	..... Principles of Psychology .....	3
PSY 230	..... Developmental Psychology .....	3
SDV 100	..... College Success Skills (or SDV 108) .....	1
SOC 200	..... Principles of Sociology .....	3
E <sup>1</sup>	..... Humanities/Fine Arts Electives (List A) .....	6

### HEALTH SCIENCES AND RELATED COURSES

CREDITS

BIO 141*	..... Human Anatomy & Physiology I .....	4
BIO 142*	..... Human Anatomy & Physiology II .....	4
BIO 205	..... General Microbiology.....	4
CHM 111*	..... College Chemistry I.....	4
CHM 112*	..... College Chemistry II .....	4
HLT 230	..... Principles of Nutrition and Human Development ..	3

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> A science elective with lab (List B) may also be used to satisfy this requirement.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
CHM 111	CHM 112	BIO 141	BIO 142
ENG 111	ENG 112	PLS 211	BIO 205
HIS 121	HLT 230	SOC 200	PSY 230
MTH 151	ITE 115	HUMANITIES/FINE ARTS	HUMANITIES/FINE ARTS
PSY 200	MTH 157	ELECTIVE	ELECTIVE
SDV 100			

**Program Note:** Students pursuing admission to Dental Hygiene, Nursing, Practical Nursing, Radiography, Radiation Oncology, Surgical Technology or Veterinary Technology should follow the suggested schedule listed below.

Students completing admissions requirements prior to applying to the **AAS Dental Hygiene** program:

Developmental Math Requirements: MTE 1,2,3,4,5,6,7,8,9

**FALL**

BIO 141\* ..... Human Anatomy & Physiology I  
 ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

BIO 142\* ..... Human Anatomy & Physiology II  
 BIO 205\* ..... General Microbiology  
 PSY 230 ..... Developmental Psychology  
 E ..... Humanities/Fine Arts Electives

Students completing admissions requirements prior to applying to the **AAS Nursing** program:

Developmental Math Requirements: MTE 1, 2, 3, 4, 5, 6

**FALL**

BIO 141\* ..... Human Anatomy & Physiology I  
 ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 PSY 200 ..... Principles of Psychology  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

BIO 142\* ..... Human Anatomy & Physiology II  
 BIO 205\* ..... General Microbiology  
 PSY 230 ..... Developmental Psychology  
 E ..... Humanities/Fine Arts Electives

Students completing admissions requirements prior to applying to the **Certificate Practical Nursing** program:

Developmental Math Requirements: MTE 1, 2, 3, 4

**FALL**

ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

PSY 200 ..... Principles of Psychology

Students completing admissions requirements prior to applying to the **AAS Veterinary Technology** program (through BRCC):

Developmental Math Requirements: MTE 1,2,3,4,5,6,7,8,9

**FALL**

ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

CHM 111\* ..... College Chemistry I  
 E ..... Humanities/Fine Arts Elective  
 E ..... Social Science Elective

Students completing admissions requirements prior to applying to the **AAS Radiography** program:

*\*BIO 193 will satisfy the admissions requirement.*

Developmental Math Requirements: MTE 1,2,3,4,5,6,7,8,9

**FALL**

BIO 141\* ..... Human Anatomy & Physiology I  
 ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

BIO 142\* ..... Human Anatomy & Physiology II  
 MTH 163\* ..... Pre Calculus I  
 E ..... Humanities/Fine Arts Electives  
 E ..... Social Science Elective

Students completing admissions requirements prior to applying to the **Certificate Radiation Oncology** program:

Developmental Math Requirements: MTE 1,2,3,4,5,6,7,8,9

**FALL**

BIO 141\* ..... Human Anatomy & Physiology I  
 ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

BIO 142\* ..... Human Anatomy & Physiology II  
 MTH 163\* ..... Pre Calculus I  
 ITE 115 ..... Intro to Computer Applications and Concepts

Students completing admissions requirements prior to applying to the **Certificate Surgical Technology** program (through PVCC):

Developmental Math Requirements: MTE 1, 2, 3, 4, 5

**FALL**

BIO 141\* ..... Human Anatomy & Physiology I  
 ENG 111\* ..... College Composition I  
 HLT/PED ..... Health or Physical Education  
 SDV 100 ..... College Success Skills (or SDV 108)

**SPRING**

BIO 142\* ..... Human Anatomy & Physiology II  
 BIO 205\* ..... General Microbiology  
 HLT/PED ..... Health or Physical Education

# Science - Integrated Environmental Studies Specialization

## Associate Of Science 880-05

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to complete a baccalaureate degree in environmental science, environmental biology, natural resource management, forestry or wildlife science.

**Program Objectives:** Graduates who do not plan to transfer may pursue employment at the technical level as environmental science and protection technicians working with natural resources, agriculture, water resources, or waste water management.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### CURRICULUM AND OTHER REQUIREMENTS

GENERAL EDUCATION CORE COURSES	CREDITS
BIO 101* ..... General Biology I .....	4
BIO 102* ..... General Biology II .....	4
ENG 111* ..... College Composition I .....	3
ENG 112* ..... College Composition II .....	3
GEO 210 ..... Cultural Geography .....	3
HLT/PED <sup>2</sup> ..... Health or Physical Education .....	3
HUM 202 ..... Survey of Western Culture II .....	3
PHI 220 ..... Ethics .....	3
PLS 211 <sup>1</sup> ..... U.S. Government I .....	3
PLS 212 <sup>1</sup> ..... U.S. Government II .....	3
SDV 100 ..... College Success Skills (or SDV 108) .....	1

IES AND RELATED COURSES	CREDITS
BIO 285 ..... Biological Problems in Contemporary Society .....	3
ENV 161 ..... Intro to Environmental Compliance .....	3
ENV 162 ..... Environmental Principles in Public Health .....	3
MTH 157* ..... Elementary Statistics .....	3
MTH 163* ..... Applied Calculus I (or MTH 271) .....	3
E <sup>3</sup> ..... IES Elective .....	12

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> ECO 201-202 may be taken in place of PLS 211-212.

<sup>2</sup> Consult approved Transfer Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>3</sup> Choose three IES electives from the following 4-credit courses: BIO 270\* General Ecology, BIO 271\* Introduction to Ecological Systems, CHM 111\* College Chemistry I, CHM 112\* College Chemistry II, or GOL 105 Physical Geology

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
BIO 101 ENG 111 ENV 161 MTH 157 PLS 211 SDV 100	BIO 102 ENG 112 ENV 162 PHI 220 PLS 212	GEO 210 HLT/LPED MTH 163 IES ELECTIVE IES ELECTIVE	BIO 285 HUM 202 IES ELECTIVE

# Science - Mathematics Specialization

## Associate Of Science 880-04

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution and major in mathematics, mathematics education, or statistics. This program is suitable for students pursuing baccalaureate degrees in physics, chemistry, engineering or computer science.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9. Additionally, students who do not demonstrate mastery in pre-calculus with trigonometry on the placement test will be required to complete MTH 166 prior to enrolling in MTH 175.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

#### CREDITS

ENG 111*	..... College Composition I .....	3
ENG 112*	..... College Composition II .....	3
HIS 121	..... United States History I (or HIS 111) .....	3
HLT/PED <sup>1</sup>	..... Health or Physical Education .....	1
MTH 175*	..... Calculus of One Variable I .....	3
MTH 176*	..... Calculus of One Variable II .....	3
MTH 178*	..... Topics in Analytic Geometry .....	2
SDV 100	..... College Success Skills (or SDV 108) .....	1
E <sup>2</sup>	..... Humanities/Fine Arts Elective (List A) .....	6
E <sup>2</sup>	..... Social Science Elective (List A).....	6

### MATHEMATICS AND RELATED COURSES

#### CREDITS

CHM 111*	.... College Chemistry I .....	4
CHM 112*	.... College Chemistry II .....	4
MTH 277*	.... Vector Calculus .....	4
MTH 285*	.... Linear Algebra .....	3
MTH 287*	.... Mathematical Structures .....	3
MTH 291*	.... Differential Equations .....	3
PHY 241*	.... University Physics I .....	4
PHY 242*	.... University Physics II .....	4

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
CHM 111 ENG 111 HLT/PED MTH 175 SDV 100 HUMANITIES/FINE ARTS ELECTIVE	CHM 112 ENG 112 HIS 121 MTH 176 MTH 178	MTH 277 MTH 285 PHY 241 SOCIAL SCIENCE ELECTIVE	MTH 287 MTH 291 PHY 242 HUMANITIES/FINE ARTS ELECTIVE SOCIAL SCIENCE ELECTIVE

# Social Sciences

## Associate Of Science 882

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution and complete a baccalaureate degree in fields such as anthropology, economics, history, pre-law, political science, psychology, social sciences or sociology.

A Specialization in Education is also offered for students who want to prepare to teach at the elementary or secondary school level.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

### CREDITS

CST 100.....	Principles of Public Speaking .....	3
ENG 111* .....	College Composition I .....	3
ENG 112* .....	College Composition II .....	3
ENG 241* .....	Survey of American Literature I (or ENG 243) .....	3
HIS 121 .....	United States History I (or HIS 111) .....	3
HIS 122 .....	United States History II (or HIS 112) .....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education .....	3
ITE 115 .....	Intro Computer Applications and Concepts .....	3
MTH 151* .....	Mathematics for the Liberal Arts I .....	3
MTH 152* .....	Mathematics for the Liberal Arts II (or MTH 157).....	3
PSY 200* .....	Principles of Psychology .....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
SOC 200 .....	Principles of Sociology .....	3
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List B).....	3
E <sup>2</sup> .....	Science Sequence (List A).....	8
E <sup>2</sup> .....	Social Science Electives (List B).....	12

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup>Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

### SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ENG 111 HIS 121 MTH 151 SDV 100 SOCIAL SCIENCE ELECTIVE SCIENCE ELECTIVE	ENG 112 HIS 122 MTH 152 SOCIAL SCIENCE ELECTIVE SCIENCE ELECTIVE	ENG 241 ITE 115 PSY 200 SOCIAL SCIENCE ELECTIVE	CST 100 HLT/PED HUMANITIES/FINE ARTS ELECTIVE SOC 200 SOCIAL SCIENCE ELECTIVE



# Social Sciences Education Specialization

Associate

Of

Science

882-01

**Purpose:** This curriculum is designed for students who plan to transfer to a four-year institution to prepare for a teaching career at the elementary or secondary level.

**Program Objectives:** Students who wish to be teachers in Virginia must major in a content area at a four-year institution such as history, English, mathematics, science or interdisciplinary studies. Although students will be required to complete several professional education courses at the senior institution, they must major in an area besides education.

**PRAXIS Exams:** To teach in Virginia, students must pass the PRAXIS I and PRAXIS II examinations, which have replaced the National Teachers Exam. The PRAXIS I exam measures basic skills in reading, writing, and mathematics. It is used by some four-year institutions as an admissions requirement into their teacher education programs. Virginia Western education students should check with the institution that they plan to attend about the requirements for completing the PRAXIS I exam. The PRAXIS II exam measures content knowledge in the student's major field and is usually taken in the senior year at the four-year institution.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

It is strongly recommended that developmental education requirements be completed as soon as possible.

## CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

BIO 101*	..... General Biology I .....	4
BIO 102*	..... General Biology II .....	4
CST 100	..... Principles of Public Speaking .....	3
ENG 111*	..... College Composition I .....	3
ENG 112*	..... College Composition II .....	3
ENG 241*	..... Survey of American Literature I (or ENG 243) .....	3
GEO 210	..... Cultural Geography .....	3
HIS 121	..... United States History I (or HIS 111) .....	3
HIS 122	..... United States History II (or HIS 112) .....	3
HLT/PED <sup>1</sup>	..... Health or Physical Education .....	2
ITE 115	..... Intro Computer Applications and Concepts .....	3
MTH 151*	..... Mathematics for the Liberal Arts I .....	3
MTH 152*	..... Mathematics for the Liberal Arts II (or MTH 157).....	3
PHI 101	..... Introduction to Philosophy .....	3
PLS 211	..... U.S. Government I (or ECO 201) .....	3
PSY 200*	..... Principles of Psychology .....	3
SDV 100	..... College Success Skills (or SDV 108) .....	1
SOC 200	..... Principles of Sociology.....	3

## EDUCATION AND RELATED COURSES

CREDITS

ART 101	..... Art Appreciation I .....	3
EDU 100	..... Introduction to Education .....	1
MUS 121	..... Music Appreciation I .....	3

**Total Minimum Credits for Degree ..... 60**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
BIO 101 ENG 111 HIS 121 MTH 151 PSY 200 SDV 100	BIO 102 EDU 100 ENG 112 HIS 122 MTH 152 PHI 101	ENG 241 ITE 115 GEO 210 MUS 121 SOC 200	ART 101 CST 100 HLT/PED PLS 211

While a course may satisfy a requirement for a Virginia Western program, it may not fulfill a requirement at a four-year institution. Students who intend to transfer should verify specific program requirements with their four-year institution.

# Surgical Technology

## Certificate

### DISTANCE LEARNING PROGRAM

#### Offered through partnership with Piedmont Virginia Community College (PVCC)

The Surgical Technology Certificate is offered through a distance learning partnership between Piedmont Virginia Community College, Virginia Western Community College, and Lewis-Gale Medical Center. Students complete general education requirements at Virginia Western. Surgical technology courses are offered through PVCC at Virginia Western via web-based conferencing technology.

**Purpose:** This curriculum is designed to provide the community with individuals who can function as surgical technologists. This program of study will provide students with an entry-level career in the health care field that is rewarding, in demand, and provides an opportunity for career advancement.

**Program Objectives:** This three-semester Surgical Technology certificate program will prepare individuals to perform selected activities in the operating room as an entry-level member of the surgical team. The certificate curriculum is designed to provide graduates the opportunity to become nationally certified as a surgical technologist.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4 and 5.

**Admission Requirements:** Students who plan to complete the program through distance education at Virginia Western should follow the PVCC application instructions located at [www.pvcc.edu/programs\\_study/certificate/cert\\_surgicaltechnology.php](http://www.pvcc.edu/programs_study/certificate/cert_surgicaltechnology.php). Completion of the Surgical Technology program application is due by May 1 to Piedmont Virginia Community College. For more information please contact the Health and Life Sciences Division at PVCC: (434) 961-5445.

### CURRICULUM AND OTHER REQUIREMENTS

#### GENERAL EDUCATION CORE COURSES CREDITS

BIO 141*	.....Human Anatomy and Physiology I .....	4
BIO 142*	.....Human Anatomy and Physiology II .....	4
ENG 111*	.....College Composition I .....	3
HLT 143*	.....Medical Terminology .....	3
BIO 205	.....General Microbiology .....	4
SDV 100	.....College Success Skills (or SDV 108) .....	1

#### SURGICAL TECHNOLOGY AND RELATED COURSES CREDITS

SUR 140	.....Introduction to Surgical Care .....	4
SUR 145	.....Fundamentals of Surgical Care .....	4
SUR 210	.....Surgical Procedures .....	8
SUR 250	.....Surgical Pharmacology .....	2
SUR 254	.....Professional Issues .....	1
SUR 260	.....Clinical Practicum .....	5

**Total Minimum Credits for Certificate .....43**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**Note:** Surgical technology classes will be completed at Virginia Western through Web-based conferencing technology from PVCC.

### SUGGESTED SCHEDULE

FIRST YEAR		
FALL	SPRING	SUMMER
BIO 141	BIO 142	BIO 205
HLT 141	SDV 100	ENG 111
SUR 140	SUR 210	SUR 254
SUR 145	SUR 250	SUR 260



# Technical Studies: Energy Management

Associate of

Applied

Science

718-02

**Purpose:** This curriculum is designed to prepare students for the challenges of designing, promoting, auditing, managing, and implementing energy systems in today's society of rapidly changing, energy related industries and residential structures. Energy management students study conventional energy generation and distribution as well as alternative energy with wind, solar(PV) solar(thermal,) geothermal, energy efficiency, and energy production systems to develop an understanding of the challenges and opportunities in developing a renewable energy economy.

**Program Objectives:** Targeted occupations include Energy Auditor, Energy Manager, Energy Rater, Energy Consultant, Home Performance Consultant, Building Performance Consultant, Home Energy Rater, and Energy Engineering Technician.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, and 3.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Technical Studies program head as listed on program webpage.

## CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

ENG 111* .....	College Composition I.....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education.....	2
ITE 115 .....	Intro to Computer Applications and Concepts.....	3
MTH 120*.....	Intro to Mathematics (or MTH 115) .....	3
SDV 101 .....	Orientation to EGR (or SDV 100).....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3
E <sup>2</sup> .....	Social Science Elective (List A).....	3
E <sup>2</sup> .....	Social Science Elective (List B).....	3

## ENERGY MANAGEMENT AND RELATED COURSES

CREDITS

AIR 281 .....	Energy Management I.....	3
AIR 282 .....	Energy Management II.....	3
BLD 111 .....	Blueprint Reading and the Building Code.....	3
DRF 201*.....	Computer Aided Drafting & Design.....	3
ELE 130*.....	Electricity .....	4
ELE 138.....	National Electric Code.....	2
ELE 176*.....	Introduction to Alternative Energy .....	3
ELE 225 .....	Electrical Control Systems .....	4
ENE 100 .....	Conventional and Alternative Energy Applications....	4
ENG 115 .....	Technical Writing.....	3
IND 190.....	Coordinated Internship I.....	3
IND 290.....	Coordinated Intership II.....	3
SAF 127 .....	Industrial Safety.....	2
E <sup>3</sup> .....	Energy Management Elective .....	4

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> Faculty advisor approved energy management electives are strongly recommended to choose from the following prefixes: PV- ELE 177, Wind - ELE 178, or Solar Thermal - ENE 105.

\*This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
BLD 111	ELE 138	AIR 281	AIR 282
ELE 130	ENE 100	ELE 225	DRF 201
ELE 176	ENG 115	IND 190	HLT/PED
ENG 111	ITE 115	ENERGY MGMT	IND 290
HLT/PED	MTH 120	ELECTIVE	HUMANITIES/FINE ARTS
SAF 127		SOCIAL SCIENCE	ELECTIVE
SDV 101		ELECTIVE	SOCIAL SCIENCE
			ELECTIVE

# Technical Studies: Mechatronics Technology Specialization

Associate of

Applied

Science

718-01

**Purpose:** This curriculum combines the concepts and practices of mechanical and electrical processes in order to manipulate motorized, hydraulic, and pneumatic machines to perform complex automated functions in an industrial or manufacturing setting. Students develop the skills to assemble, install, test and troubleshoot, calibrate, and service a variety of devices, products and electronic instruments. Coursework also includes collaborative projects in which students form teams with another program area to build a factory, enabling them to apply their skills and knowledge to a simulated work experience.

**Program Objectives:** Entry-level or advanced opportunities at automated manufacturing and computer aided industrial sites. Positions include mechanical, maintenance, electrical, quality, computer, process, and manufacturing technicians. Other job titles may include electronic service technician or industrial electrician.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5 and 6.

It is strongly recommended that developmental education requirements be completed as soon as possible.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Technical Studies program head as listed on program webpage.

## CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

ENG 111* .....	College Composition I.....	3
HLT/PED <sup>1</sup> .....	Health or Physical Education.....	1
ITE 115 .....	Intro to Computer Applications and Concepts.....	3
MTH 115* .....	Technical Mathematics (or MTH 166) .....	3
SDV 101 .....	Orientation to EGR (or SDV 100).....	1
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3
E <sup>2</sup> .....	Social Science Elective (List A).....	3

## MECHATRONICS AND RELATED COURSES

CREDITS

BLD 111 .....	Blueprint Reading and the Building Code.....	3
ELE 133* .....	Practical Electricity I.....	3
ELE 134* .....	Practical Electricity I.....	3
ELE 239* .....	Programmable Logic Controller Systems I .....	3
ETR 123* .....	Electronic Applications I.....	1
ETR 141* .....	Electronics I.....	3
ETR 286* .....	Principles and Applications of Robotics .....	3
IND 230.....	Applied Quality Control.....	3
IND 290.....	Coordinated Internship .....	3
MEC 119 .....	Introduction to Basic CNC and CAM .....	3
MEC 155 .....	Mechanisms.....	2
MEC 162 .....	Applied Hydraulics and Pneumatics.....	3
PHY 201* .....	General College Physics I .....	4
PHY 202* .....	General College Physics II .....	4
SAF 127 .....	Industrial Safety.....	2
E <sup>3</sup> .....	Energy Management Elective .....	5

**Total Minimum Credits for Degree .....65**

<sup>1</sup> Consult approved Health courses in the Description of Courses for selection. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

<sup>2</sup> Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.

<sup>3</sup> Faculty advisor approved electives should be chosen from the following prefixes and may be substituted to align with actual work experience: AIR, ARC, BLD, CIV, DRF, EGR, ELE, ETR, ENE, GIS, IND, MAC, MEC, PHY, TEL and WEL.

\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.

## SUGGESTED SCHEDULE

FIRST YEAR		SECOND YEAR	
FALL	SPRING	FALL	SPRING
ELE 133 ENG 111 ITE 115 MTH 115 SAF 127 SDV 101	ELE 134 ETR 123 ETR 141 HLT/PED IND 230 MEC 162	BLD 111 ETR 286 MEC 119 PHY 201 SOCIAL SCIENCE ELECTIVE TECHNICAL ELECTIVE	ELE 239 IND 290 MEC 155 PHY 202 HUMANITIES/FINE ARTS ELECTIVE TECHNICAL ELECTIVE

# Veterinary Technology

## Associate of Applied Science

### DISTANCE LEARNING PROGRAM

Offered through partnership with  
Blue Ridge Community College (BRCC)

This curriculum is designed for those students who for personal or financial reasons cannot travel to Weyers Cave for the on-campus program. Students may complete general education requirements at Virginia Western. Veterinary technology courses are interactive, two-way audio and video, and are transmitted from Blue Ridge Community College to Virginia Western via compressed video technology three hours a day, two days a week.

**Purpose:** This curriculum is designed to prepare students as veterinary technicians.

**Program Objectives:** In Virginia, licensed veterinary technicians working under the direct supervision of a licensed veterinarian may perform those tasks related to animal health except the diagnosis of disease, prescribing drugs, or performing surgery.

Veterinary technicians may be employed in a veterinary hospital, diagnostic/research laboratory, the pharmaceutical industry, zoos/wildlife centers, as sales and livestock managers, or veterinary educators.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

Students who do not demonstrate proficiency on the placement test in the following mathematical units will be required to complete developmental courses: MTE 1, 2, 3, 4, 5, 6, 7, 8 and 9.

**Admissions Requirements:** Students who plan to complete the program through distance education at Virginia Western should follow the BRCC application instructions located at <http://community.brcc.edu/vettech/index.php/admission/>. Applications are due to Blue Ridge Community College by January 31, 2015. The next class will be accepted for Fall 2015.

For more information please visit the Veterinary Technology Department at BRCC at <http://community.brcc.edu/vettech/>.

Although this program is not designed for transfer, agreements with specific institutions may exist. Contact the Vet Tech program head as listed on program webpage.

### CURRICULUM AND OTHER REQUIREMENTS GENERAL EDUCATION CORE COURSES

CREDITS

#### THE FOLLOWING GENERAL EDUCATION COURSES MAY BE COMPLETED AT VIRGINIA WESTERN PRIOR TO PROGRAM ADMISSION:

ENG 111* .....	College Composition I.....	3
SDV 100 .....	College Success Skills (or SDV 108) .....	1
CHM 111* .....	College Chemistry I.....	4
HLT/PED .....	Health or Physical Education .....	2
E <sup>2</sup> .....	Humanities/Fine Arts Elective (List A) .....	3
E <sup>2</sup> .....	Social Science Elective (List A).....	3

#### THE FOLLOWING COURSES WILL BE TRANSMITTED BY BRCC TO THE VIRGINIA WESTERN DISTANCE SITE:

VET 100.....	Introduction to Animal Science.....	4
VET 105.....	Introduction to Veterinary Tech.....	3
VET 111.....	Anatomy and Physiology of Domestic Animals .....	4
VET 115.....	Laboratory Techniques I.....	4
VET 120.....	Veterinary Medical Terminology and Calculations .....	3
VET 121.....	Clinical Practices I .....	4
VET 210.....	Animal Disease and Microbiology.....	4
VET 215 .....	Laboratory Techniques II .....	4
VET 216 .....	Animal Pharmacology .....	3
VET 217 .....	Intro. to Laboratory, Zoo, and Wildlife Medicine .....	3
VET 221 .....	Advanced Clinical Practices III .....	4
VET 222 .....	Advanced Clinical Practices IV .....	4
VET 230 .....	Veterinary Hospital Management .....	3
VET 236 .....	Companion Animal Behavior .....	3
VET 290 .....	Coord Practice in Veterinary Tech .....	4
VET 295 .....	Advanced Surgical Nursing .....	3

**Total Minimum Credits for Degree** ..... 73

<sup>1</sup> *Electives must be chosen from the specific list referenced in the curriculum requirements above. List A and List B electives can be found on the Approved List of Transfer courses.*

<sup>\*</sup> *This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**Program Note:** It is the student's responsibility to verify that transcripts have been received at BRCC. Transfer credits are evaluated by the registrar. BRCC transmits this program using compressed video technology. Courses will be offered in sequence to allow a student who takes every course to finish in 9 semesters.

Students will be required to travel to the Weyers Cave Campus three times during the semester for laboratory work and practical exams.

Graduates of this program are eligible to take the National Veterinary Technician Exam (NVTE).

# Water and Wastewater Technology

Career  
Studies  
Certificate  
221-828-72

**Purpose:** This curriculum is designed to prepare students to become water or wastewater plant operators in municipal and industrial treatment facilities and laboratories.

**Program Objectives:** Coursework in this program academically prepares students to sit for the state certification exam required for a water or wastewater operator's license. There are minimum educational and experience requirements depending on the various licensure levels. All levels require a high school or GED diploma, training, and on-the-job experience.

Operators must pass an examination certifying that they are capable of overseeing water/wastewater plant operations. There are different levels of certification, depending on the operator's experience and training. Both water and wastewater operators are licensed by experience and education by the Virginia Board for Waterworks and Wastewater Works Operators through the Virginia Department of Professional and Occupational Regulation (DPOR).

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

ENV 110.....	Intro to Water/Wastewater Treatment Technology ...	3
ENV 115*.....	Water Purification .....	3
ENV 148.....	Math for Water/Wastewater Operations.....	3
ENV 149*.....	Wastewater Treatment Plant Operations .....	3
PSY 120.....	Human Relations.....	3
SAF 127 .....	Industrial Safety.....	2

**Total Minimum Credits for Certificate ..... 17**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

**Note:** Additional courses may be offered for DPOR Water and Wastewater Licensure.

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
ENV 110	ENV 115
ENV 148	ENV 149
SAF 127	PSY 120

# Welding and Metal Processing

Career

Studies

Certificate

221-995-47

**Purpose:** This curriculum is designed to prepare students for entry-level positions in production type welding.

**Program Objectives:** Employment opportunities include arc, gas, MIG, and/or TIG welder or metal fabricator.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Program Notes:** To be successful in this program, students must have proficiency in oral and written communication skills and general mathematics.

## CURRICULUM AND OTHER REQUIREMENTS

## CREDITS

DRF 161	..... Blueprint Reading I .....	2
SAF 127	..... Industrial Safety .....	2
WEL 120	..... Introduction to Welding .....	3
WEL 121*	..... Arc Welding .....	2
WEL 130*	..... Inert Gas Welding .....	3
WEL 135*	..... Inert Gas Welding .....	2
WEL 145	..... Welding Metallurgy .....	3

**Total Minimum Credits for Certificate ..... 17**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*

## SUGGESTED SCHEDULE

FIRST YEAR	
FALL	SPRING
DRF 161	SAF 127
WEL 120	WEL 121
WEL 145	WEL 130
	WEL 135

# Wellness

**Career  
Studies  
Certificate**  
**221-190-02**

**Purpose:** This program is designed to provide both knowledge and skills related to understanding the dimensions of wellness for occupations in the health, fitness, senior health care, health care support and health related non-profit sector. It also provides post-secondary preparation for entry-level health related career opportunities or career advancement. Graduates may continue their studies in the Exercise Science and Personal Training certificate. Specific courses in this certificate provide in-depth knowledge of lifestyle factors that influence personal health status.

**Program Objectives:** Employment opportunities include entry-level positions in health related non-profit organizations and foundations.

**Admission Requirements:** Applicants must meet the requirements for admission to credit-level coursework established by the college.

**Developmental Requirements:** Students who do not place into college-level English on the placement test will be required to take developmental courses.

It is strongly recommended that developmental education requirements be completed as soon as possible.

**CURRICULUM AND OTHER REQUIREMENTS CREDITS**

HLT 100 .....	First Aid, Safety and CPR .....	3
HLT 116 .....	Intro to Personal Wellness .....	2
HLT 240 .....	Consumer Health .....	3
PED 107 .....	Exercise and Nutrition .....	2
PED 109 .....	Yoga .....	1
PED 170 .....	Tai Chi for Health .....	1
PSY 200* .....	Principles of Psychology (or PSY 230) .....	3
SDV 100 .....	College Success Skills .....	1
E .....	Physical Education Elective .....	1

**Total Minimum Credits for Certificate ..... 17**

*\* This course has a requisite. Requisites for all courses are listed in the course description section at the back of the catalog.*


**SUGGESTED SCHEDULE**

FIRST YEAR	
FALL	SPRING
HLT 116	HLT 100
HLT 240	PED 109
PED 107	PSY 200
PED 170	PED ELECTIVE
SDV 100	






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## Executive Team



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