INFORMATION TECHNOLOGY (A.S.) +

CCV's Information Technology program prepares students for the exciting and ever-changing field of information technology (IT). Organizations need skilled technicians to install, manage, and adapt complex information networks. As companies continue to expand their information systems, IT workers keep communications running smoothly and help to resolve complicated problems. Information technology professionals find employment in a wide array of industries. Our curriculum provides students with foundational skills in networking, security, programming, and operating systems. Students will build depth of knowledge in at least one of four focus area options: cloud computing, cybersecurity and networking, IT support, and web development. Students in the Information Technology degree program may choose to pursue related CCV certificates and industry recognized credentials while obtaining their degree including certificates in Cloud Computing, Cybersecurity and Networking, IT Support, and Web Development.

All associate degrees include completion of general education requirements which, together with program requirements, constitute a minimum of 60 credits. In some cases program requirements also fulfill general education requirements. You may not use a single course to meet two general education requirements.

General Education
Complete at least one course in each of the following:
- ❑ First Semester Seminar
     INT 1050 - Dimensions of Self & Society
- ❑ Introductory Written Expression – VSCS
     ENG 1061 - English Composition
- ❑ Digital and Computing Literacy – VSCS
     _____
- ❑ Mathematics - VSCS
     _____
- ❑ Natural Science - VSCS
     _____
- ❑ Social Science - VSCS
     _____
- ❑ Arts & Aesthetics - VSCS
     _____
- ❑ Humanistic Perspectives - VSCS
     _____
- ❑ Communication
     Meets graduation standard in oral communication
- ❑ Research & Writing Intensive
     ENG 2135 - Technical Writing & Research
- ❑ HUM 2010 - Seminar in Educational Inquiry
     Meets graduation standard in writing and information literacy
- ❑ Quantitative Reasoning Assessment
     Meets graduation standard in quantitative reasoning

You may use a course to meet both a program requirement and a general education requirement; however, you may not use a single course to meet two general education requirements.

Program Requirements
Courses are listed in the order in which we recommend you take them.
- ❑ CIS 1100 - Introduction to Computer Science*
- ❑ CIS 1350 - Desktop Operating Systems
- ❑ CIS 2120 - Network and Security Foundations
- ❑ ENG 2135 - Technical Writing & Research*
- ❑ CIS 2230 - System Administration
- ❑ CIS 2245 - Concepts of Computer Security

Select one of four focus areas
Cloud Computing:
- ❑ CIS 1450 - Foundations of Cloud Computing
- ❑ CIS 2350 - Cloud Infrastructure and Services
- ❑ CIS 2460 - Cloud Computing Capstone

Cybersecurity and Networking:
- ❑ CIS 2235 - Advanced System Administration
- ❑ CIS 2255 - Principles and Management of Cybersecurity
- ❑ CIS 2265 - Cyber Defense and Network Security

IT Support:
- ❑ CIS 1035 - Foundations of Information Security
- ❑ CIS 2110 - Concepts of PC Hardware
- ❑ CIS 2360 - Computer User Support
- ❑ WFE 0541 - CompTIA A+ Prep and Exam Workshop

Website Development:
- ❑ CIS 1151 - Website Development
- ❑ CIS 1152 - Advanced Website Development
- ❑ CIS 2140 - JavaScript for Web Development

Electives: 0-5 credits _____

Minimum Total Credits in Degree: 60

+ This program can be completed fully online.

Program Outcomes

Graduates of the Information Technology program will be able to:

- demonstrate knowledge and skills that meet industry standards;
- use a computer programming language to solve problems and implement appropriate solutions;
- upgrade, maintain, and install software applications with emphasis on problem anticipation and user support;
- prepare a plan for implementing a network solution in a small business setting;
- demonstrate academic skills required of all CCV graduates, including competency in writing, information literacy, oral communication, quantitative reasoning; and
- explore pathways and demostrate preparedness for educational and career development in the student's field of study.

The Information Technology program is great for you if:

- you enjoy working with programming and computer systems;
- you are looking for a career in IT support, software development, network administration, cloud computing, cybersecurity, or web development;
- you plan to matriculate to an IT-related bachelor's degree;
- you enjoy problem-solving, teamwork, and have good communication skills; and
- you are prepared to work in a dynamic and changing work environment.

Key information and advice for students in the Information Technology program:

- The Information Technology degree provides practical experience with networks and information systems.
- This program provides skills necessary to be a computer support specialist in a small business or any environment that uses technology in its daily operations.
- This program can be completed entirely online.
- Students who complete the cloud computing focus area will have an opportunity to earn the Amazon Web Services (AWS) Certified Cloud Practitioner and Certified Solutions Architect Certifications.
- Students may elect to prepare for various CompTIA certification exams such as IT Fundamentals, A+, Net +, Security +, Linux +, and Server +.
- This program fits easily into most IT-related bachelor's degrees and allows for more specialization in IT at the 3rd and 4th year levels.

The Information Technology program prepares you for careers such as:

- IT Support Specialist
- Assistant Network Administrator
- Cyber Security Analyst
- Web Developer
- Cloud Architect
- IT Analyst

For up-to-date Vermont labor market information, including salary information and growth projections, view the Economic and Labor Market Information on the Vermont Department of Labor Website http://www.vtlmi.info/.