NETWORK ADMINISTRATION (A.A.S.)

CCV's Network Administration program teaches you how to design, build, and maintain local and wide area networks. Successful completion of four Cisco networking courses prepares you for the Cisco Certified Networking Associate (CCNA) or Cisco Certified Entry Network Technician (CCENT) industry certification exams. In addition to Cisco networking, you learn how to support computer users and troubleshoot computer problems. Courses in hardware, programming, Windows and Linux will help you build your knowledge in hardware and software, and two focus areas allow you to further expand your skills in web development or database management. Upon completion of the program, you will also be prepared for the CompTIA A+, Linux+ and Network+ certification exams. Graduates of this program meet the needs of employers who seek to hire entry-level personnel with strong networking and troubleshooting skills.

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 Requirements for A.A.S.
Core Competencies

Complete at least one course in each of the following:

❑ First semester seminar _____

❑ Technological Literacy
   CIS 1151 - Website Development
   or
   CIS 1360 - Database Management Systems

❑ Communication
   CIS 2360 - Computer User Support
   Meets graduation standard in oral communication

❑ English Composition
   ENG 1061 - English Composition

❑ Mathematics _____

❑ Research & Writing Intensive
   ENG 2050 - Global Issues in the Media

Areas of Inquiry

Complete at least one course in each of the following:

❑ Scientific Method _____

Integrative Approaches
Complete both the following:

❑ HUM 2010 -Seminar in Educational Inquiry
   Meets graduation standard in writing and information literacy

❑ Quantitative Reasoning Assessment
   Meets graduation standard in quantitative reasoning

Program Requirements

Courses are listed in the order in which we recommend you take them.

❑ CIS 1311 - Cisco I: Network Fundamentals
❑ CIS 1312 - Cisco II: Routing Protocols & Concepts
❑ CIS 1313 - Cisco III: LAN Switching & Wireless
❑ CIS 1314 - Cisco IV: Accessing the WAN
❑ CIS 1350 - Desktop Operating Systems
❑ CIS 2110 - Concepts of PC Hardware
❑ CIS 2150 - Introduction to Linux
❑ CIS 2152 - Intermediate Linux
❑ CIS 2360 - Computer User Support *
❑ CIS 2125 - Windows Server Administration
❑ CIS 2031 or CIS 2140 or CIS 2271 - Introductory programming course
❑ CIS 2245 - Concepts of Computer Security
❑ ENG 2050 - Global Issues in the Media *
❑ CIS 2860 - Community & Work Experience

Select one of the following focus areas:

Web Focus
❑ CIS 1151 - Website Development *
❑ CIS 2272 - Intermediate Java Programming
   or
   CIS 2430 - Web Application Programming

Database Focus
❑ CIS 1360 - Database Management Systems *
❑ CIS 2340 - SQL Database Administration

Note(s)
*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.

Minimum Total Credits in Degree: 68

Program Outcomes

Graduates of the Network Administration program will be able to:

- demonstrate knowledge and skills that meet industry standards and CCNA and CCENT certification requirements in the use of routers and network administration technology;

- demonstrate knowledge and skills that meet industry standards and CompTIA A+ certification requirements in the use of computer hardware and operating systems technology;

- use a computer programming language to solve problems in a workplace setting and implement appropriate solutions;

- demonstrate proficiency in the development and administration of database systems or web sites to support workplace needs;

- demonstrate academic skills required of all CCV graduates, including competency in writing, information literacy, oral communication, and quantitative reasoning; and

- explore pathways for educational and career development in the student's field of study.

The Network Administration program is great for you if:

- you have a strong interest in computers;

- you are primarily interested in networking with a focus on Cisco;

- you would rather work behind the scenes, with distributors more than end users; and

- you can handle an intensive course-completion format.

Key information and advice for students in the Network Administration program:

- This program can be completed entirely online with the exception of the Cisco courses and one classroom meeting for Concepts of PC Hardware.

- Cisco courses are available in Winooski.

- Students will learn to design, build, and maintain local and wide area networks.

- Students will be prepared for the Cisco CCNA and CCENT certification exams.

- Students will be prepared to begin an exciting career in the field of networking and computer troubleshooting.

The Network Administration program prepares you for careers such as:

- Assistant Network Administrator
- Network Technician
- Computer Support Specialist

Job outlook in Network Administration in the state of Vermont:

Title	Median Salary	Projected Growth (10 Yrs)
Assistant Network Administrator	$59,460	9%
Network Technician	$69,230	9%
Computer Support Specialist	$45,010	11%

Source: Vermont Department of Labor, http://www.vtlmi.info/index.cfm