

# Computer Networking Certificates

## One-Year Certificate Program

### 2008-2009

**Network Support and Administration**  
 30-credit Certificate Program  
**Computer Network Security**  
 16-18 credit Certificate Program  
**Computer Help Desk**  
 30-credit Certificate Program

**Certificate Information:** Choose a Computer Networking Certificate to focus on the development of job- or career-specific skills in a short-term, concentrated format. Occupational Certificates are earned after completion of 16-30 credits. Many courses may apply toward Associate in Science and Associate in Applied Science degrees in business. For additional information about our business programs, visit our Web site at <http://www.AnokaRamsey.edu>.

**Program Goals:** By completing this certificate, students will achieve the following learning goals: 1) design and develop secure voice, video, and data networks; 2) implement and configure networked devices; 3) demonstrate the skills necessary to administer and monitor networks; 4) exhibit mastery of problem-solving skills to troubleshoot existing and emerging technologies; and, 5) function as responsible and ethical network administrators for organizations and society.

**Program Admission:** To apply for admission to one of the Computer Networking (CNET) Programs, submit the *Application for Computer Networking Programs* to the Records and Registration Office. Applications are available in Counseling and Advising Services or the Records and Registration Offices on either campus. Students may earn more than one certificate.

**Developmental Courses:** Some students may need preparatory courses in the area of English, mathematics, or typing/keyboarding. Courses numbered below 1000 will not apply toward the certificate.

<b>Network Support and Administration</b>			
<b>Program Core Requirements</b>	<b>18 credits</b>	<b>Additional Career Requirements</b>	<b>12 credits</b>
CNET 2101 Data Telecommunications and Computer Networks	3	BUS 1103 Human Relations in the Work Place	3
CNET 1111 IT & Data Assurance I	3	<b>Electives</b>	9
CNET 1112♦ IT & Data Assurance II	3	Choose a minimum of 9 credits from the following:	
CNET 2112♦ Desktop Operating Systems	3	BUS 1108 Business Math (3 cr)	
CNET 2113♦ Network Operating Systems	3	BUS 1113* Advanced Computer Applications (3 cr)	
CNET 2301♦ Internet Protocol Routing	3	BUS 1122 Business Ethics and Social Issues (3 cr)	
<b>Notes:</b> (1) A minimum cumulative grade point average (GPA) of 2.0 in courses numbered 1000 or above at ARCC. (2) A minimum grade of C must be earned in all Program Core requirements. (3) All Program Core requirements must be completed at Anoka-Ramsey Community College. (4) Due to the dynamic nature of the computer networking industry, students are not able to sell back CNET course materials to the bookstore. (5) Courses must be completed within 3 years. Students may petition to extend the window beyond the 3 years.		BUS 1180* Developing Web Pages (3 cr)	
♦ Course has a prerequisite.		BUS 2215 Legal Environment of Business (3 cr)	
		BUS 2244 Principles of Management (4 cr)	
		CNET 1101 PC Troubleshooting, Maintenance & Repair (2 cr)	
		CNET 1201* A+ Core Hardware and OS Technologies (3 cr)	
		CNET 1202 Cisco Certified Design Associate (3 cr)	
		CNET 2105 Security Awareness and Policies (1 cr)	
		CNET 2114 Unix Operating Systems (3 cr)	
		CNET 2205 Fundamentals of Wireless LANs (3 cr)	
		CNET 2211 Managing Network Security I (3 cr)	
		CNET 2212 Managing Network Security II (3 cr)	
		CNET 2297* Field Experience & Seminar (1-11 cr)	
		CNET 2303* LAN Switching and Adv. Router Configs (3 cr)	
		CNET 2304* WAN Theory and Design (3 cr)	
		CNET 2401* Cisco Certified Network Associate (3 cr)	
		CSCI 1101* Introduction to Computer Science and Problem-Solving (3 cr)	
		CSCI 1106* Fundamentals of Computer Science I (4 cr)	
		CSCI 1107* Fundamentals of Computer Science II (4 cr)	

Course prerequisites are shown in parentheses behind course numbers.

**NOTE: All Program Core courses must be completed at ARCC with a grade of C or higher.**

**06/2008**

(continued)

### Computer Network Security

<b>Program Requirements</b>	<b>16-18 credits</b>	<b>Notes:</b> (1) A cumulative GPA of 2.0 or above is required to complete this certificate. (2) A minimum grade of C must be earned in all Program Core requirements. (3) All Program Core requirements must be completed at Anoka-Ramsey Community College. (4) Due to the dynamic nature of the computer networking industry, students are not able to sell back CNET course materials to the bookstore. (5) Courses must be completed within 3 years. Students may petition to extend the window beyond the 3 years.
CNET 2105 Security Awareness and Policies	1	
<b>OR</b> CNET 2205 Fundamentals of Wireless LANs	3	
CNET 1111 IT and Data Assurance I	3	
CNET 1112 IT and Data Assurance II	3	
CNET 2114 Unix Operating Systems	3	
CHET 2211 Managing Network Security I	3	
CNET 2212 Managing Network Security II	3	

### Computer Help Desk Specialist

<b>Program Core Requirements</b>	<b>17 credits</b>	<b>Additional Career Requirements</b>	<b>13 credits</b>
BUS 1112 Introduction to Computers	3	BUS 1103 Human Relations in the Work Place	3
CNET 1101 PC Troubleshooting, Maintenance & Repair	2		
CNET 2101 Data Telecommunications and Computer Networks	3	<b>Electives</b>	<b>10</b>
CNET 1111 IT 7 Data Assurance I	3	Choose a minimum of 10 credits from the following:	
CNET 2112♦ Desktop Operating Systems	3	BUS 1101 Introduction to Business (3 cr)	
CHET 2113♦ Network Operating Systems	3	BUS 1108 Business Math (3 cr)	
		BUS 1111 Computer Basics (3 cr)	
		BUS 1119♦ Introduction to Relational Databases (3 cr)	
		BUS 1122 Business Ethics and Social Issues (3 cr)	
		BUS 1143♦ Electronic Spreadsheets (3 cr)	
		BUS 1153 Beginning Keyboarding (2 cr)	
		BUS 1155♦ Microcomputer Word Processing (4 cr)	
		BUS 1180♦ Developing Web Pages (3 cr)	
		BUS 2215 Legal Environment of Business (3 cr)	
		CNET 1111 It and Data Assurance I (3 cr)	
		CNET 1112 It and Data Assurance II (3 cr)	
		CNET 2114 Unix Operating Systems (3 cr)	
		CNET 2201♦ Network Structure and Design (3 cr)	
		CNET 2205 Fundamentals of Wireless LANs (3 cr)	
		CHET 2211♦ Managing Network Security I (3 cr)	
		CNET 2212♦ Managing Network Security II (3 cr)	
		CHET 2297♦ Field Experience & Seminar (1-11 cr)	
		CSCI 1101♦ Introduction to Computer Science and Problem-Solving (3 cr)	
<b>Notes:</b> (1) A cumulative GPA of 2.0 or above is required to complete this certificate. (2) A minimum grade of C must be earned in all Program Core requirements. (3) All Program Core requirements must be completed at Anoka-Ramsey Community College. (4) Due to the dynamic nature of the computer networking industry, students are not able to sell back CNET course materials to the bookstore. (5) Courses must be completed within 3 years. Students may petition to extend the window beyond the 3 years.			
♦Course has a prerequisite.			