



QUINSIGAMOND
Community College

CSET: Network Associate Certificate

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NETWORK ASSOCIATE CERTIFICATE

Program Goals

The Network Associate Certificate prepares graduates to work in the Information Technology field as an entry-level Network Specialist, such as a Network Administrator or Network Associate. According to the Occupational Outlook Handbook, 2012-2013 Edition, employment of network systems and data communications analysts is expected to increase by 28% from 2010 to 2020, which is much faster than the average for all occupations.¹ Demand for these workers will result from the increased use of IT and digital communications technology at home and in the business environment.

A Network Associate certificate *“validates the ability to install, configure, operate, and troubleshoot medium-size route and switched networks, including implementation and verification of connections to remote sites in a WAN.”*²

¹ <http://www.bls.gov/oco>

² http://www.cisco.com/web/learning/le3/le2/le0/le9/learning_certification_type_home.html

Student Learning Outcomes

Upon completion of the program graduates will be able to:

Network Associate Certificate **Student Learning Outcomes** include the following knowledge, skills, and abilities:

- Demonstrates the application of information technology to common business functions, including the implementation and use of basic end user software.
- Demonstrates the fundamentals of telecommunications in a modern business environment, including management of voice, call centers, and Voice Over IP.
- Analyzes and applies operating systems concepts to implement and support multiple industry standard operating systems in enterprise networking environments.
- Applies networking concepts to design, implement and maintain LANs and WANs to support modern implementations including internetworking and data convergence.
- Ability to design and implement basic and advanced routing utilizing the TCP/IP and other common networking protocols and utilities.
- Defines and manages network services for effective network performance.
- Designs data storage solutions that meet the enterprises' varied needs, including fault tolerance and disaster recovery.
- Troubleshoots computer networking infrastructures to resolve user problems.

Admissions Process

Admissions inquiries should be directed to admissions@gcc.mass.edu. Prospective students may apply to the program of their choice by following the enrollment steps at the following link: http://www.gcc.edu/pages/Enrollment_Steps.html.

Admissions Requirements

High School Diploma or GED/High School Equivalency

Students should note that some first semester courses carry minimum prerequisites. Refer to the program grid.

CORI, SORI, Finger Printing & Drug Testing

A Criminal Offenders Record Information (CORI) and Sexual Offenders Record Information (SORI) may be required. Finger printing and drug testing may be required.

Additional Cost

See page 30 for program fees for this program. (Note: Not all programs have program fees).

Students who pursue any of the industry certifications will incur additional expenses for testing fees.

Location

This program may be completed at the QCC Worcester campus.

This program may be completed face-to-face.

This program can be completed 50% or more online.

Technical Performance Standards

See page 17 for technical standards for this program. (Note: Not all programs have technical performance standards).

Credit for Prior Learning

Students enrolled in this program may be able to earn academic credit for prior learning, including industry standard certifications. Please contact the office of Career Placement Services at careerservices@gcc.mass.edu, 508.854.4439, Room 272 A.

Career Outlook

Please consult The Massachusetts Career Information System at <http://masscis.intocareers.com/> or The Occupational Outlook Handbook at <http://www.bls.gov/oco/> for specific occupational information. The CIP code for this program is 11.0901.

Transfer Articulations & Opportunities

Prospective students may learn more about transfer articulation agreements at the following link: <http://www.gcc.mass.edu/transfer/ArticPathways.html>. More information regarding transfer opportunities is available at: <http://www.gcc.mass.edu/transfer>.

Program Contact: cset@gcc.mass.edu

Additional Program Information: For the most up to date information, go to the program website at www.QCC.edu.

- The Network Associate Certificate offers extensive coursework, lecturing on theoretical information technology design, principles, and approaches and supplementing the lecture with practical hands-on application in QCC's state-of-the-art CSET labs.

The Network Associate Certificate offers courses that teach material from several industry standard certifications including:

- Computing Technology Industry Association (CompTIA):
 - Network+ - CSC 234 *Networking Technologies*
 - Linux+ - CST 245 *UNIX Operating Systems I*
 - Convergent Technology Professional (CTP+) - CST 207 *Telecommunications in Business*
- Microsoft's Certified Technical Specialist:
 - Configuring Windows 8 - CSC 141 *Windows Client Operating Systems*
- Cisco's Certified:
 - Network Administrator (CCNA) - CST 240 *Routing Technologies*
 - EMC's Proven Professional Storage Technologist - CSC 210 *Storage Technologies*

NETWORK ASSOCIATE CERTIFICATE (Program Code: NAC)

Course Title	Course #	Offered	Plan to Take	Grade	Credits	Prerequisites
Semester 1						
Windows Client Operating Systems	CSC 141	F/S/SU			4	Coreq: CSC 141 Coreq: CSC 141 A grade of "C" or higher in ENG 091 and passing the ENG 096 departmental writing final examination essay or approp place score
Networking Technologies	CSC 234	F/S/SU			4	
UNIX Operating Systems I	CST 245	F/S/SU			4	
Telecommunications in Business	CST 207	F/S			3	
Semester 2						
Lync Server Administration (New: SP 2015)	CST 253	S			1	CSC 141, CSC 234, Coreq: CST 231 A grade of "C" or higher in ENG 091 and passing the ENG 096 departmental writing final examination essay or approp place score Coreq: CSC 234 CSC 234, Coreq: CST 231 Coreq: CST 231
Storage Technologies	CSC 210	S/SU			3	
Internetworking Principles and Protocols	CST 231	F/S			3	
Network Infrastructure Management	CST 235	F/S/SU			3	
Routing Technologies	CST 240	F/S			3	
Total Credits Required					28	

Program Notes:

- Students should note that many required courses have ENG and/or MAT prerequisites.