STAY ON COURSE

Guided Pathways to Success for STEM

NETWORKING

CONTACT THE NAVIGATOR!

SHELLY ARMSTRONG
413.236.1639
sarmstrong@berkshirecc.edu

berkshirecc.edu/gpstem

What our College & Career Navigator can do for you:

- Assists in registering for GPSTEM programs at BCC
- Help with GPSTEM career pathways plan
- Help students overcome barriers that could prevent student success
- Direct students to internal and external resources for assistance
- Guide students through the process of registration, funding sources and general questions
- Guidance for Transfer or Employment
- Connect students to BerkshireWorks, the county's one-stop career center, providing comprehensive services for job-seekers including career readiness, placement and unemployment services.
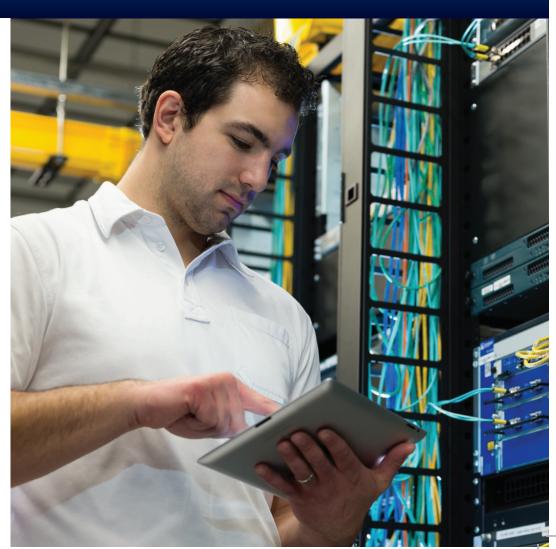- One-on-one assistance throughout their educational career from admissions to employment or transfer

Rev. Jan 2016

Networking

Information and Communication Technology (ICT) professionals are in short supply. Berkshire Community College's networking program helps students prepare for ITC careers. The curriculum provides comprehensive coverage of networking topics, while providing opportunities for hands-on practical experience and career skills development. The program is aligned with the globally recognized Cisco CCENT® and CCNA® certifications.

BCC's Networking Program offers students options in Certificate and Degree Programs.

The **Networking Certificate** is a first step in a Networking Career. By starting in the Networking Certificate program students can attain the skills needed to enter the workforce.

The credits earned in the certificate programs apply to the **Associate's Degree, Computer Information Systems — Networking Option**. This two-step approach allows students to get their training, enter the workforce and continue their education, allowing them to pursue higher paying jobs with greater responsibility. Learn more at **www.berkshirecc.edu/gpstem**.

Certificate
Certificate — Networking

WHAT does a Computer Specialist do?
- Test and evaluate existing network systems
- Perform regular maintenance to ensure that networks operate correctly
- Troubleshoot local area networks (LANs), wide area networks (WANs), and Internet systems

WHERE can a Computer Information System Certificate take you?
Job-related Titles:
- Computer Support Specialist
- Computer User Support Specialist
- Computer Network Support Specialist

⤢ JOB GROWTH
The U.S. Bureau of Labor Statistics predicts employment of computer support specialists is **projected to grow 17 percent from 2012 to 2022**, faster than the average for all occupations. More support services will be needed as organizations upgrade their computer equipment and software.

$ WAGES
In Massachusetts, computer specialists earn a median wage of **$35,900–$121,600** per year.
Source: Bureau of Labor Statistics, U.S. Department of Labor. *Occupational Outlook Handbook, 2014–15 Edition.*

Associate's Degree
Associate in Science — Computer Information Systems, Networking

WHAT does a Network & Computer System Administrator do?
- Install, configure, and support an organization's local area network (LAN), wide area network (WAN), and Internet systems or a segment of a network system
- Monitor and test Web site performance to ensure Web sites operate correctly and without interruption
- Monitor network to ensure network availability to all system users and may perform necessary maintenance to support network availability
- Assist in network modeling, analysis, planning, and coordination between network and data communications hardware and software

WHERE can an Associate's Degree in Computer Information Systems (Networking) take you?
Job-related Titles:
- Network Administrator
- Information Technology (IT) Manager
- System Administrator
- Web Developer

⤢ JOB GROWTH
The U.S. Bureau of Labor Statistics predicts employment of network and computer systems administrators is **projected to grow 12 percent from 2012 to 2022**, about as fast as the average for all occupations. Demand for information technology workers is high and should continue to grow as firms invest in newer, faster technology and mobile networks.

$ WAGES
In Massachusetts, Network and Computer System Administrators earn a median wage of **$53,000–$120,300** per year.
Source: Bureau of Labor Statistics, U.S. Department of Labor. *Occupational Outlook Handbook, 2014–15 Edition.*

Cisco Certifications
Berkshire Community College is a Cisco Networking Academy™ offering CCNA® Routing and Switching Curriculum and CCNA® Security Course. Upon completion of the **Networking Certificate**, students are prepared to take the **Cisco CCENT® ICND1** certification exam. Upon completion of the **Networking Associate's degree** students are prepared to take the **CCNA® Routing and Switching** certification exam.

CISCO

Stay on Course
Suggested Networking Pathway

The diagram below shows the suggested pathway to earn the Associate's Degree in Networking in four semesters. Courses that are also required to earn the Networking Certificate are shown in **BLUE** in the diagram below.

SEMESTER 1
❶ **Fundamentals of Computer Literacy** ❷ **C++ Programming I** ❸ **Systems Operations** ❹ **English Comp/Writing** ❺ Math (MAT-102 or higher)

SEMESTER 2
❶ **Introduction to Networks** ❷ **Routing & Switching Essentials** ❸ C++ Programming II ❹ English (Report/Technical writing) ❺ Humanities/Fine Arts
✓ **CCENT® ICND1 Certification Exam**

SEMESTER 3
❶ **Web Development** ❷ Computer Science I with Java ❸ Scaling Networks ❹ Connecting Networks
✓ **CCNA® Routing & Switching Certification Exam**

SEMESTER 4
❶ Network Security ❷ Free Elective ❸ Communications ❹ Elementary Statistics ❺ Behavioral & Social Science

2-YEAR DEGREE
ENTRY-LEVEL POSITIONS

4-YEAR DEGREE
ADVANCED POSITIONS

LOCAL EMPLOYERS
- **Banks** — Berkshire Bank, Greylock Federal, Lee Bank, Pittsfield Co-op, Adams Bank, Trustco, MountainOne
- **School Districts/Colleges**
- **Manufacturers**
- **Law Firms**
- **Ascentek**
- **Berkshire Health Systems**
- **CompuWorks**
- **General Dynamics**
- **Guardian Life Insurance**
- **Interprint**
- **Mad Macs**
- **Wave Systems**