

Information Technology AAS

Network Systems Security – Concentration

Career & Technical Division

Program Description:

The Associate in Applied Science Degree Program in Network Systems Security offers comprehensive network training from Mountwest Community and Technical College's Microsoft Information Technology Academy and Cisco Networking Academy. Within the two-year Associate Degree program, students take courses developed by Microsoft and Cisco, providing specialized skills in network administration, design, and security. Students will take courses preparing them for the following certifications:

CompTIA's A+
Microsoft's MCSA: (Microsoft Certified Solutions Associate)
Cisco's CCNA (Cisco Certified Network Associate)
CompTIA's Security+

Career Outlook:

Employment of network and computer systems administrators is projected to grow 5 percent from 2018 to 2028, about as fast as the average for all occupations. Demand for information technology (IT) workers is high and should continue to grow as firms invest in newer, faster technology and mobile networks.

Salary Forecast:

For the most current salary information please refer to the Bureau of Labor Statistics "Occupational Outlook Handbook" found at www.bls.gov/ooh/.

Employment Opportunities:

- Network administrator
- Web designer
- Systems support technician
- Network designer
- Security solutions designer
- Help desk technician
- Hardware technician
- Software applications

Career Description:

A well-rounded network professional is capable of performing network administration, design, maintenance, and security on a variety of network operating systems and devices. Microsoft Certified Solutions Associate manage and troubleshoot system environments running the Windows 2016 operating system. Cisco Certified Network Associates design, build, and maintain computer networks using a variety of network devices. CompTIA Security+ Specialists design and implement security solutions that reduce network vulnerability. MCTC's Network Systems Security option provides fundamental networking knowledge and skills with specific network security training crucial for entry into information security positions in public corporations and government entities.

Contact Information:

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Our mission is to prepare students for careers, civic responsibility and life-long learning.

Information Technology Major Code – CI20 • Network Systems Security Concentration Code – CI26

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|-------------------------------|----------------|
| Name: | ID Number 942- |
| Educational Counselor: | |
| Faculty Advisor: | |

COURSE REQUIRED

| COURSE | REQUIREMENTS | SEM | HRS | GR | SUBSTITUTE/REPEAT CRS | SEM | CR |
|----------|--|-----|-----|----|-----------------------|-----|----|
| ENL 231 | Business and Technical Writing ¹ | | 3 | | | | |
| IT 270 | Computer Essentials and Application | | 4 | | | | |
| IT 120 | Network Operating Systems | | 4 | | | | |
| IT 131 | Introduction to Networking ² (EDGE) | | 4 | | | | |
| IT 297 | Co-Curricular Experiences in Networking | | 0 | | | | |
| | | | | | | | |
| COM 125 | Interpersonal Communication | | 3 | | | | |
| IT 141 | Networking Systems II ^{3,4} (EDGE) | | 4 | | | | |
| IT 224 | Fundamentals of Network Security ^{3,5} | | 3 | | | | |
| MAT | Approved Math Elective ⁶ | | 3 | | | | |
| IT 297 | Co-Curricular Experiences in Networking | | 0 | | | | |
| | | | | | | | |
| IT 210 | Networking Administration I ^{2,7,8} | | 3 | | | | |
| IT 211 | Networking Administration II ^{2,8} | | 3 | | | | |
| IT 216 | Networking Administration III ^{2,8} | | 3 | | | | |
| IT 217 | Networking Administration IV ^{2,8} | | 3 | | | | |
| IT 231 | Networking Systems III ^{2,9} (EDGE) | | 4 | | | | |
| IT 297 | Co-Curricular Experiences in Networking | | 0 | | | | |
| | | | | | | | |
| SOCI 210 | Fundamentals of Sociology | | 3 | | | | |
| IT 225 | Fundamentals of Wireless LANs ^{3,10} | | 4 | | | | |
| IT 241 | Networking Systems IV ^{3,11} (EDGE) | | 4 | | | | |
| PSYC 200 | General Psychology | | 3 | | | | |
| IT 299 | Information Technology Internship/Coop ¹² | | 3 | | | | |
| | Hours Required for Graduation: 61 | | | | | | |

Earn A Degree Graduate Early (EDGE):

This program provides students the opportunity to receive credit for their high school EDGE courses.

¹ ENL 231 have a prerequisite of placement in 100-level English.

² IT 131, IT 210, IT 211, IT 216, IT 217, and IT 231 are offered fall semesters only.

³ IT 141, IT 224, IT 225, and IT 241 are offered spring semester only.

⁴ IT 141 has a prerequisite of IT 131.

⁵ IT 224 has a prerequisite of IT 101 or IT 102.

⁶ Choose from any 100-level or above.

⁷ IT 210 has a prerequisite of IT 120 or permission.

⁸ Networking Administration classes IT 210, IT 211, IT 216, and IT 217 must be taken concurrently. These classes cannot be taken individually.

⁹ IT 231 has a prerequisite of IT 141.

¹⁰ IT 225 has a prerequisite of IT 131, IT 230, or Permission.

¹¹ IT 241 has a prerequisite of IT 231.

¹² IT 299 has a prerequisite of permission of Program Coordinator/Dean.

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