

Information Technology AAS

Network Systems Security – Concentration

Career & Technical Division

Program Description:

The Associate in Applied Science Degree concentration 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 preparing them for industry certifications from Cisco, Microsoft, and CompTIA taught by certified professors. This concentration provides specialized skills in network administration, design, and security. Students will take courses preparing them for the following certifications:

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

Career Outlook:

Employment of information security analysts is projected to grow 32 percent from 2018 to 2028, much faster than the average for all occupations. Demand for information security analysts is expected to be very high, as these analysts will be needed to create innovative solutions to prevent hackers from stealing critical information or causing problems for computer networks. (<https://www.bls.gov/ooh/computer-and-information-technology/information-security-analysts.htm>)

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 Associates 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

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

COURSE REQUIRED

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
IT 270	Computer Essentials and Applications		4				
IT 120	Network Operating Systems		4				
IT 131	Introduction to Networking ¹		4				
IT 141	Networking Systems II		4				
IT 297	Co-Curricular Experiences in Networking		0				
			16				
ENL 231	Business and Technical Writing ²		3				
IT 231	Networking Systems III ³		4				
IT 241	Networking Systems IV		4				
IT 224	Fundamentals of Network Security ⁴		3				
IT 297	Co-Curricular Experiences in Networking		0				
			14				
IT 210	Networking Administration I ^{5,6}		3				
IT 211	Networking Administration II ⁶		3				
IT 216	Networking Administration III ⁶		3				
IT 217	Networking Administration IV ⁶		3				
COM 125	Interpersonal Communication		3				
IT 297	Co-Curricular Experiences in Networking		0				
			15				
SOCI 210	Fundamentals of Sociology		3				
IT 225	Fundamentals of Wireless LANs ⁷		4				
	Approved Math Elective ⁸		3				
PSYC 200	General Psychology		3				
IT 299	Information Technology Internship/Coop ⁹		3				
			16				
	Hours Required for Graduation: 61						

¹IT 131 has a corequisite of IT 141.

²ENL 231 has a prerequisite of placement into 100 level English or a corequisite of ENL 095.

³IT 231 has a prerequisite of IT 141 and a corequisite of IT 241.

⁴IT 224 has a prerequisite of IT 101, IT 102 or IT 270.

⁵IT 210 has a prerequisite of IT 120 and corequisites of IT 211, IT 216 and IT 217.

⁶Networking Administration classes IT 210, IT 211, IT 216 and IT 217 must be taken concurrently. These classes cannot be taken individually.

⁷IT 225 has a prerequisite of IT 131, IT 230 or Permission.

⁸Any MAT 100 level or higher.

⁹IT 299 has a prerequisite of permission of Program Coordinator/Dean.

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