

Information Technology AAS

Network Systems Development (CCNA) - Concentration

Career & Technical Division

Program Description:

The Cisco Networking Academy at Mountwest Community & Technical College offers Cisco Certified Network Associate (CCNA) training that prepares individuals to install, configure, and operate LAN, WAN, and dial access services for enterprise organizations with networks from 100 to more than 500 nodes. Concepts laboratory exercises focus on IP, Ethernet based LANs, Frame Relay and Serial WANs, interior routing protocols such as RIP and IGRP and exterior protocols such as BGP. The Cisco Networking Academy Program is a comprehensive-learning program that provides students with the IT skills essential in a global economy. The Networking Academy delivers web-based content, online assessment, student performance tracking, hands-on labs, instructor support, and preparation for the CCNA industry-standard certifications.

Career Outlook:

The U.S. Department of Labor states that Network Systems and Data Communications Analysts will see an increase in employment growth of 53.36% between 2008 and 2018. The computer systems design and related services industry is expected to be one of the top-ten fastest growing industries in the U.S. economy, projected to add more than 115,800 jobs between 2008 and 2018. Professionals and specialists will see the best prospects for employment because they have the higher level skills necessary to stay abreast of rapid changes in technology. (http://www.bls.gov/emp/ep_table_103.htm).

Employment Opportunities:

- Network administrator
- Network engineer
- Systems support technician
- Network designer
- Network security systems designer

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/.

Program Admission Requirements:

The college adheres to an open admission policy which means applicants with a high school diploma or a GED are eligible for admission. Applicants with neither a high school diploma nor a GED may be admitted on a conditional basis.

Career Description:

The U.S. Department of Labor states that Network Systems and Data Communications Analysts analyze, design, test, and evaluate network systems, such as local area networks (LAN), wide area networks (WAN), Internet, intranet, and other data communications systems; perform network modeling, analysis, and planning; research and recommend network and data communications hardware and software. This includes telecommunications specialists who deal with the interfacing of computer and communications equipment. Analysts may supervise computer programmers. (<http://stats.bls.gov/oes/current/oes151081.htm>).

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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 Development (CCNA) Concentration Code – CI25				
Name:			ID Number 942-	
CAPS SCORES:	MATH:	ENGLISH:	READ:	DOE:
COL 101 Faculty:				
Educational Counselor:				
Faculty Advisor:				

COURSE REQUIRED

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
ENL 111	Written Communication ¹		3				
IT 102	Advanced Computer Applications		3				
IT 120	Network Operating Systems		4				
IT 131	Introduction to Networking ² (EDGE)		4				
COM 112	Oral Communication ³		3				
IT 224	Fundamentals of Network Security ^{4,5}		3				
IT 141	Networking Systems II ^{5,6} (EDGE)		4				
IT 221	Advanced Operating Systems ⁷		3				
ENL 231	Business and Technical Writing ¹		3				
IT 231	Networking Systems III ^{2,8} (EDGE)		4				
IT 270	Computer Essentials and Applications ⁹		4				
	Approved IT Elective ¹⁰		3				
	Approved Math Elective ¹¹		3				
IT 225	Fundamentals of Wireless LANs ^{5,12}		4				
IT 241	Networking Systems IV ^{5,13} (EDGE)		4				
IT 277	Management Information Systems ¹⁴		3				
IT 299	Information Technology Internship/Coop ¹⁵		3				
	Approved IT Elective ¹⁰		3				

DEVELOPMENTAL COURSES REQUIRED

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
	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 111 and ENL 231 have a prerequisite of placement in 100-level English, and placement in 100-level reading.
- ² IT 131 and IT 231 are offered fall semester only.
- ³ COM 112 has a prerequisite of placement in 100-level reading.
- ⁴ IT 224 has a prerequisite of IT 101 or IT 102.
- ⁵ IT 141, IT 224, 241, and IT 225 are offered spring semester only.
- ⁶ IT 141 has a prerequisite of IT 131.
- ⁷ IT 221 has a prerequisite of IT 120 or IT 131.
- ⁸ IT 231 has a prerequisite of IT 141.
- ⁹ IT 270 has a prerequisite of IT 101, or IT 102.
- ¹⁰ Choose from one of the following: IT 111, IT 112, IT 113, IT 150, IT 160, IT 165, IT 210, IT 211, IT 215, IT 216, IT 217, IT 222, IT 223, IT 226, IT 227, IT 230, IT 240, IT 245, IT 255, IT 272, IT 276, IT 278, IT 279, or IT 293.
- ¹¹ Choose from any MAT 100-level or above.
- ¹² IT 225 has a prerequisite of IT 131, IT 230, or permission.
- ¹³ IT 241 has a prerequisite of IT 231.
- ¹⁴ IT 277 must be taken in last semester or permission.
- ¹⁵ IT 299 requires permission of IT Program Coordinator/Dean.

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