Information Technology, AAS
Network and Cloud Systems Administration – Concentration

Academic Year 2024-2025

Program Description:

The Associate in Applied Science Degree concentration in Network Systems Administration offers comprehensive network training from Mountwest Community and Technical College's Microsoft Information Technology Academy and VMWare Academy. Within the two-year Associate Degree program, students take courses preparing them for industry certifications from Microsoft and CompTIA taught by certified professors. This concentration provides specialized skills in network administration, virtualization, cloud services, and security. Students will take courses preparing them for the following certifications:

CompTIA's A+
CompTIA's Network+
CompTIA's Security+
Windows Server Hybrid Administrator Associate
Microsoft's Azure Fundamentals
Microsoft's Azure Administrator Associate
Microsoft's Azure Security Engineer Associate

Career Outlook and Salary Forecast:

For the most current 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.

Program Outcomes:

- Install and configure a Windows Server hybrid network based on business needs
- Configure an Active Directory infrastructure
- Plan, deploy, manage, and troubleshoot a Microsoft Exchange environment
- Plan a storage and virtualization infrastructure
- Implement secure computing baselines in an organization

Career Description:

Network and cloud systems administrators secure, maintain, and troubleshoot on-premises computer and cloud networks, which are groups of computers sharing information. Organizations employ network administrators to ensure their networks operate efficiently and meet business requirements. A cloud systems administrator develops, maintains, and troubleshoots the network connections of cloud computing resources. This concentration prepares you to handle both the on-premises and cloud duties required by an organization.

Contact Information:

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Mountwest empowers students to learn and lead in the community and in the workforce.

	Information Technology Major Code – CI20 • Network Systems Administration (Microsoft) Concentration Code – CI24						
Name:					**ID Number 942-**		
Educational Counselor:							
Faculty Advisor:							

COURSE	REQUIREMENTS	SEM	HRS	GR	SUBSTITUTE/REPEAT CRS	SEM	CR
ENL 131	Written Communication[1]		3				
IT 270	Computer Essentials and Application		4				
IT 120	Network Operating Systems		4				
IT 230	Network Communications[2]		3				
MAT 120	Applied Professional Math[3]		3				
IT 297	Co-Curricular Experiences in Networking		0				
			17				
COM 125	Interpersonal Communication		3				
SOCI 210	Fundamentals of Sociology		3				
IT 221	Advanced Operating Systems[4,5]	S	3				
IT 224	Fundamentals of Network Security[5,6]	S	3				
IT 297	Co-Curricular Experiences in Networking		0				
			12				
IT 210	Networking Administration I[7,8,9]	F	3				
IT 211	Networking Administration II[8,9]	F	3				
IT 216	Networking Administration III[8,9]	F	3				
IT 217	Networking Administration IV[8,9]	F	3				
IT 245	Information Storage and Management[9,10]	F	3				
IT 297	Co-Curricular Experiences in Networking		0				
			15				
IT 219	Networking Administration V[5,11,12]	S	3				
IT 222	Networking Administration VI[5,11,12]	S	3				
IT 223	Networking Administration VII[5,11,12]	S	3				
IT 255	Virtualization Technologies[5,10]	S	3				
PSYC 200	General Psychology		3				
IT 299	Information Technology Internship/Coop[13]		3				
			18				
	Hours Required for Graduation: 62						

[1] ENL 131 have a prerequisite of placement in 100-level English or a co-requisite of ENL 095.
[2] IT 230 has a co-requisite of IT 120 or permission.
[3] MAT 120 has a prerequisite of placement in 100-level Math or a minimum ACT Math score of 19 or SAT Math score of 510..
[4] IT 221 has a prerequisite of IT 120 or IT 131.
[5] IT 219, IT 221, IT 222, IT 223, IT 224, and IT 255 are offered spring semester only.
[6] IT 224 has a prerequisite of IT 101 or IT 102.
[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 210, IT 211, IT 216, IT 217, and IT 245 are offered fall semesters only.
[10] IT 245 and IT 255 have a prerequisite of IT 210 or permission.
[11] IT 219, IT 222, and IT 223 have a prerequisite of IT 217.
[12] Networking Administration classes IT 219, IT 222 and IT 223 must be taken concurrently. These classes cannot be taken individually.
[13] Permission of Program Coordinator/Dean is required in order to register for IT 299.