COMPUTER NETWORK ADMINISTRATION AND SECURITY MANAGEMENT (AS DEGREE S0701)

Business Division
Degree S0701
Computer Network Administration and Security Management is a two-year program leading to the Associate in Science (A.S.) degree. It prepares individuals for employment in the computer/information technology field in such areas as network administrator and security management administrator.

The curriculum is intended to help students develop skills to design, administer and manage the heterogeneous corporate network with security emphasis. The courses examine and illustrate network security with various industry-leading network operating systems. Individual courses will assist students in preparing for related industry certification exams.

The main objective of the degree is to prepare students for employment following graduation. Students wishing a bachelor's degree should meet with a counselor or advisor for choices to transfer to available CSU joint degree programs.

This degree requires the completion of General Education coursework plus the following:

Required Courses

Course Prefix	Course Name	Units
Core Courses		
CISN 11	Telecommunications Networking	3
CISN 11L	Telecommunications/Networking Laboratory	0.5
CISN 24	Window Server Network and Security Administration	3
CISN 24L	Window Server Network and Security Administration Laboratory	0.5
CISN 51	Cisco CCNA Networking and Routing	3
CISN 51L	Cisco CCNA Networking and Routing Laboratory	0.5
CISS 21	Network Vulnerabilities and Countermeasures	3
CISS 21L	Network Vulnerabilities and Countermeasures Laboratory	0.5
CISS 23	Network Analysis, Intrusion Detection/Prevention Systems	3
CISS 23L	Network Analysis, Intrusion Detection/Prevention Systems Laboratory	0.5
CISS 25	Network Security and Firewalls	3
CISS 25L	Network Security and Firewalls Laboratory	0.5
CISS 29	CNASM Service Learning	1
Required Electives		
Choose one lecture or one combination lecture/lab course from the following:		1-4
CISB 11	Computer Information Systems	
CISN 21	Windows Operating System	
CISN 31 & 31L	Linux Operating System and Linux Operating System Laboratory	
CISN 34 & 34L	Linux Networking and Security and Linux Networking and Security Laboratory	
CISP 11 & 11L	Programming in Visual Basic and Programming in Visual Basic Laboratory	
CISP 21 & 21L	Programming in Java and Programming in Java Laboratory	
CISP 31 & 31L	Programming in C++ and Programming in C++ Laboratory	
CISP 41 & 41L	Programming in C# and Programming in C# Laboratory	
CISS 13	Principles of Information Systems Security	
CISS 15	Operating Systems Security	
CISS 27	Cyber Defense	
CISS 31	Computer System Forensics	
Total Units		**23-26**

CIS Program Website (http://www.mtsac.edu/cis/)

Program Learning Outcomes

Upon successful completion of this program, a student will be able to:

- Configure and install a firewall.
- Implement a secured translation for service hosting through firewall.

Review Student Learning Outcomes (SLOs) (http://www.mtsac.edu/instruction/outcomes/sloinfo.html) for this program.