

Program: Computer Networking Systems Technician

Computer network systems technicians link the hardware and software that comprise computer data communications networks. They install, configure and maintain network components, work on client workstations, servers, domain controllers, shared printers, cables, and routers. They maintain network equipment, applications, data and user interfaces and workstations as well as troubleshoot local and wide area networks. Desktop, server and network administration positions are needed in all industries due to the ongoing movement towards computer automation. Students are encouraged to spend additional hours of study to obtain Microsoft, Cisco, and CompTIA A+, certifications. Possible certifications students can obtain include COMP TIA A+, Security +, Microsoft MCP, MCSA, MCSE, Cisco CCENT, or CCNA.

For program costs and fees refer to the catalog TUITION AND FEES PAGE.

Program Learning Outcomes

1 Design a small or medium sized computer network including media types, end devices and interconnecting devices that meets a customers specific needs

2 Perform basic tasks expected of a network administrator including management of user accounts, shared resources and network security

3 Perform basic configurations on routers and Ethernet switches

4 Perform operational tasks within a Linux environment, such as the creation and management of files, folders and accounts

5 Perform standard DNS and DHCP management operations, such as setup, modification and troubleshooting

6 Construct simple computer scripts that accomplish a given task

7 Define basic network security issues and possible solutions

Degree	Quarter	Course ID	Title	Prerequisites	Credits
COMPUTER NETWORKING SYSTEMS TECHNICIAN AAS (105) 5 credits of electives required	1	Required Courses	CNST201	Cisco Network Fundamentals	5
			INFO101	Computer Application Essentials	5
			INFO104	A+ Essentials	5
	Electives	ECS201	Telecommunications Network Cabling System	5	
	2	Required Courses	CNST202	Cisco Routing Protocols and Concepts	5
		INFO105	A+ Practical	5	

		INFO120	Client Operating System		5
	Electives	ECS202	Fiber Optics		5
3	Required Courses	CNST212	Cisco LAN Switching and Wireless		5
		CNST220	Cloud Services		5
		INFO205	Security I		5
4	Required Courses	CNST213	Cisco - Accessing the WAN		5
		CNST218	Server I		5
		INFO206	Security II	INFO205	5
5	Required Courses	CNST205	Fundamentals of Linux		5
		CNST207	Server II	CNST218	5
		CNST214	Cyber Security		5
6	Required Courses	CNST209	Server III	CNST207, CNST218	5
		CNST216	Scripting		5
	Electives	INFO292	Independent Projects		5
	Required Courses	CNST212	Cisco LAN Switching and Wireless		5
		CNST213	Cisco - Accessing the WAN		5
		CNST214	Cyber Security		5

General Education Requirements

Note: See a Career Advisor prior to choosing courses that meet general education requirements.

Degree	Gen Ed Area	Course Options		Credits
AAS	Communications (5 credits required)	ENGL175	PROFESSIONAL WRITING	5
		ENGL&101	ENGLISH COMPOSITION I	5
	HUM/SS/NS/O (5 credits required)	BIOL&160	GENERAL BIOLOGY	5

	BIOL&175	HUMAN BIOLOGY WITH LAB	5
	BIOL&241	ANATOMY & PHYSIOLOGY I	5
	BIOL&242	HUMAN A&P II	5
	BIOL&260	MICROBIOLOGY	5
	CHEM&121	INTRODUCTION CHEMISTRY	5
	CHEM&131	Null	5
	CMST&102	INTRO TO MASS MEDIA	5
	CMST&152	INTERCULTURAL COMM	5
	CMST&210	INTERPERSONAL COMMUNICTN	5
	CMST&220	PUBLIC SPEAKING	5
	CMST&230	SML GROUP COMMUNICATIONS	5
	ECON&201	MICROECONOMICS	5
	ECON&202	MACROECONOMICS	5
	HIST101	HISTORY-SCIENCE/TECH	5
	HREL111	COLLEGE/JOB SRCH SUCCESS	5
	NUTR&101	INTRO TO NUTRITION	5
	PHYS&221	ENGINEERING PHYS I W/LAB	5
	PHYS&222	ENGINEER PHYS II W/LAB	5
	PHYS&223	ENGINEER PHYS III W/LAB	5
	POLS&101	INTRO TO POL SCIENCE	5
	PSYC&100	GENERAL PSYCHOLOGY	5
	PSYC&200	LIFESPAN PSYCHOLOGY	5
	SOC&101	INTRO TO SOCIOLOGY	5
Quantitative (5 credits required)	MATH171	TECHNICAL MATH	5
	MATH172	APPLIED BUSINESS MATH	5
	MATH174	MATH FOR ALLIED HEALTH	5
	MATH&107	MATH IN SOCIETY	5
	MATH&141	PRECALCULUS I	5
	MATH&142	PRECALCULUS II	5

COMPUTER NETWORKING SYSTEMS TECHNICIAN ADDENDUM 3/30/22

MATH&146	INTRODUCTION TO STATS	5
MATH&151	CALUCLUS I	5
MATH&153	CALCULUS III	5

Degree	Quarter	Course ID	Title	Prerequisites	Credits	
COMPUTER NETWORKING SYSTEMS TECHNICIAN AAS-T (115) 5 credits of electives required	1	Required Courses	CNST201	Cisco Network Fundamentals		5
			INFO101	Computer Application Essentials		5
			INFO104	A+ Essentials		5
		Electives	ECS201	Telecommunications Network Cabling System		5
	2	Required Courses	CNST202	Cisco Routing Protocols and Concepts		5
			INFO105	A+ Practical		5
			INFO120	Client Operating System		5
		Electives	ECS202	Fiber Optics		5
	3	Required Courses	CNST212	Cisco LAN Switching and Wireless		5
			CNST220	Cloud Services		5
			INFO205	Security I		5
	4	Required Courses	CNST213	Cisco - Accessing the WAN		5
			CNST218	Server I		5
			INFO206	Security II	INFO205	5
	5	Required Courses	CNST205	Fundamentals of Linux		5
		CNST207	Server II	CNST218	5	
		CNST214	Cyber Security		5	
6	Required Courses	CNST209	Server III	CNST207, CNST218	5	
		CNST216	Scripting		5	

Electives	INFO292	Independent Projects	5
Required Courses	CNST212	Cisco LAN Switching and Wireless	5
	CNST213	Cisco Accessing the WAN	5
	CNST214	Cyber Security	5
Electives			

General Education Requirements

Note: See a Career Advisor prior to choosing courses that meet general education requirements.

Degree	Gen Ed Area	Course
Options	Credits	

AAS-T Communications (5 credits required)	ENGL&101	ENGLISH COMPOSITION I	5
	HUM/SS/NS/O (15 credits required)		
	BIOL&160	GENERAL BIOLOGY	5
	BIOL&175	HUMAN BIOLOGY WITH LAB	5
	BIOL&241	ANATOMY & PHYSIOLOGY I	5
	BIOL&242	HUMAN A&P II	5
	BIOL&260	MICROBIOLOGY	5
	CHEM&121	INTRODUCTION CHEMISTRY	5
	CHEM&132	Null	5
	CMST&102	INTRO TO MASS MEDIA	5
	CMST&152	INTERCULTURAL COMM	5
	CMST&210	INTERPERSONAL COMMUNICTN	5
	CMST&220	PUBLIC SPEAKING	5
	CMST&230	SML GROUP COMMUNICATIONS	5
	ECON&201	MICROECONOMICS	5
	ECON&202	MACROECONOMICS	5
	NUTR&101	INTRO TO NUTRITION	5
	PHYS&221	ENGINEERING PHYS I W/LAB	5
	PHYS&222	ENGINEER PHYS II W/LAB	5
	PHYS&223	ENGINEER PHYS III W/LAB	5
	POLS&102	Null	5
	PSYC&100	GENERAL PSYCHOLOGY	5
	PSYC&200	LIFESPAN PSYCHOLOGY	5

Quantitative (5 credits required)

SOC&101	INTRO TO SOCIOLOGY	5
MATH&107	MATH IN SOCIETY	5
MATH&141	PRECALCULUS I	5
MATH&142	PRECALCULUS II	5
MATH&146	INTRODUCTION TO STATS	5
MATH&151	CALUCLUS I	5

MATH&152	CALCULUS II	5
MATH&153	CALCULUS III	5
