COMPUTER INFORMATION TECHNOLOGY & SECURITY AAS

Information Technology prepares students for a wide range of employment opportunities in the design, implementation and security of Internetworking solutions for small, medium and large enterprises. Positions involving technical support for small computer system hardware and software implementations embedded in local and wide area networks are supported through the use of the CompTIA, Microsoft, and network offerings. Major elements of this course of study include microcomputer theory, data communications, operating systems, security fundamentals including virus eradication, systems hardware and software analysis, virtualization, troubleshooting techniques, use of computer analysis hardware, and application of all of these elements in the work setting. This program has physical requirements that may affect the student's ability to perform in this field.

Entrance Requirements

- Program has semester admittance (Fall and Spring).
- Enrollment priority is on a first-come, first-served basis as determined by the student's faculty advising date.
- Aleks score in Math of 30 or higher, Writing Placement Exam of 2 or higher, or qualify for MTHPT-137 and ENGL-101.

Upon completion of the Information Technology AAS degree, the student will have basic skills to:

- Understand and implement appropriate industrial standard safety measures for given situations.
- Use industry standard tools and diagnostic test equipment.
- Cyber security course will engage your understanding of online safety in the context of the wider world, introducing you to different types of malware, including viruses and trojans, as well as concepts such as network security, cryptography, identity theft and risk management.
- Setup, upgrade, configure and troubleshoot microcomputers and microcomputer peripherals.
- Install and maintain microcomputer-based applications.
- Setup, upgrade, configure, and troubleshoot microcomputer based operating systems including Linux and Microsoft Windows.
- Design, implement, and troubleshoot LAN solutions for a given specification using Windows Server and Linux. Solutions include the use of the appropriate network operating systems and provisions for Internet connectivity as well as proxy services, print services, file services, web services, DNS/DHCP, mail services, authentication and security, and management services.
- Design, install, and test structured cabling systems.
- Use the OSI model to configure switches, routers and multilayer switches to provide LAN and WAN connectivity in LAN, WAN and WLAN networks. In addition, standardized routing protocols will be applied to specific intranet solutions.
- Each student is required to obtain or complete the examination for at least one nationally recognized IT certification.
- Students must earn a grade of C or better in all required IT courses to qualify for the Associate of Applied Science degree in Information Technology.

General Education Requirement

Code	Title	Credits
Written Communication		
Select one of the following:		6.00
ENGL-101 & ENGL-102	WRITING AND RHETORIC I and WRITING AND RHETORIC II	
ENGL-109	COLLEGE WRITING AND RESEARCH	
Oral Communication		
Select one of the following:		3.00
COMM-101	FUNDAMENTALS OF ORAL COMMUNICATION	
COMM-203	SMALL GROUP COMMUNICATION	
COMM-204	PUBLIC SPEAKING	
Mathematical Ways of Knowing		
Select one of the following:		4.00
MTHPT-137	MATH FOR TECHNOLOGY	
MATH-147	COLLEGE ALGEBRA AND TRIGONOMETRY	
Social & Behavioral Ways of Knowing		
Select one of the following:		3.00
ANTH-102	CULTURAL ANTHROPOLOGY	
ANTH-120	WORLD PREHISTORY	
ANTH-170	INTRODUCTION TO NATIVE AMERICAN STUDIES	

ECON-201	PRINCIPLES OF MACROECONOMICS	
ECON-202	PRINCIPLES OF MICROECONOMICS	
GEOG-102	INTRODUCTION TO GEOGRAPHY	
HIST-101	WORLD HISTORY I	
HIST-102	WORLD HISTORY II	
HIST-111	UNITED STATES HISTORY I	
HIST-112	UNITED STATES HISTORY II	
HRPT-184	DIVERSITY IN ORGANIZATIONS	
HRPT-185	HUMAN RELATIONS IN ORGANIZATIONS	
POLS-101	AMERICAN NATIONAL GOVERNMENT	
POLS-237	INTERNATIONAL POLITICS	
POLS-285	COMPARATIVE GOVERNMENT	
PSYC-101	INTRODUCTION TO GENERAL PSYCHOLOGY	
PSYC-205	LIFESPAN DEVELOPMENTAL PSYCHOLOGY	
SOC-101	INTRODUCTION TO SOCIOLOGY	
SOC-102	SOCIAL PROBLEMS	
Total Credits		**16.00**

Program Requirements [1]

Code	Title	Credits
Technical Core		
IT-231	INFORMATION SYSTEMS I	4.00
IT-232	INFORMATION SYSTEMS II	4.00
IT-233	INFORMATION SYSTEMS III	4.00
IT-234	INFORMATION SYSTEMS IV	4.00
IT-251	NETWORKING I	4.00
IT-252	NETWORKING II	4.00
IT-253	NETWORKING III	4.00
IT-254	NETWORKING IV	4.00
IT-271	CYBERSECURITY I	4.00
IT-272	CYBERSECURITY II	4.00
IT-273	CYBERSECURITY III	4.00
IT-274	CYBERSECURITY IV	4.00
Total Credits		**48.00**

[1]   All program required courses need a grade of C or better.

Sequential Plan of Study

Course	Title	Credits
First Year		
Fall		
ENGL-101	WRITING AND RHETORIC I	3.00
IT-231	INFORMATION SYSTEMS I	4.00
IT-251	NETWORKING I	4.00
IT-271	CYBERSECURITY I	4.00
	Credits	**15.00**
Spring		
CORE	Mathematical Ways of Knowing	3.00-5.00
IT-232	INFORMATION SYSTEMS II	4.00
IT-252	NETWORKING II	4.00

IT-272	CYBERSECURITY II	4.00
	Credits	**15.00-17.00**
Second Year		
Fall		
CORE	Oral Communication	3.00
CORE	Social & Behavioral Ways of Knowing	3.00
IT-233	INFORMATION SYSTEMS III	4.00
IT-253	NETWORKING III	4.00
IT-273	CYBERSECURITY III	4.00
	Credits	**18.00**
Spring		
ENGL-102	WRITING AND RHETORIC II	3.00
IT-234	INFORMATION SYSTEMS IV	4.00
IT-254	NETWORKING IV	4.00
IT-274	CYBERSECURITY IV	4.00
	Credits	**15.00**
	Total Credits	**63.00-65.00**

Graduates from Information Technology programs go on to obtain careers in a variety of fields:

- IT Security Specialist
- Cyber Security Technician
- IT Specialist
- Computer Network Architect
- Computer Systems Analyst
- Computer and Information Research Scientist