COMPUTER INFORMATION TECHNOLOGY AAS

The Associate of Applied Science (AAS) degree in Computer Information Technology is a two-year program of study designed to prepare students for diverse career opportunities in the planning, implementation, security, and maintenance of computer and network communication systems for businesses of all sizes. The program builds the skills needed for roles in technical support, cybersecurity, cloud administration, network administration, and server administration, with training aligned to internationally recognized industry certifications and proprietary systems such as CompTIA, Microsoft, Cisco, Juniper, and Ubiquiti.

Students gain hands-on experience in areas such as microcomputer systems, data communications and security, cybersecurity fundamentals, operating systems, hardware and software analysis, cloud computing, virtualization, and troubleshooting techniques. The curriculum emphasizes the application of these skills in real-world settings using industry-standard tools and best practices.
Note: Some careers in this field may involve background checks and physical requirements that could impact a student's ability to perform certain job functions. Please consult with a program advisor for more information.

Entrance Requirements

- The program admits students each semester (Fall and Spring).
- Enrollment priority is on a first-come, first-served basis as determined by the student's faculty advising date.
- Writing Placement Exam (WPE) score of 2 or higher, or equivalent college placement exam scores.

Upon successful completion of the Computer Information Technology AAS program, students will be able to:

- Attempt industry certification exams including CompTIA A+, ITF+ (IT Fundamentals), Security+, Linux+, Server+, Cloud+, CySA+; Cisco CCST, CCNA; and the Certified Associate Python Programmer (PCAP).
- Apply industry-standard safety practices and protocols in IT environments, including proper handling of hardware, electrostatic discharge precautions, and cybersecurity hygiene.
- Use diagnostic tools and test equipment to troubleshoot and maintain computer systems and networks.
- Install, configure, upgrade, and maintain microcomputer hardware, peripherals, and operating systems, including Windows and Linux environments.
- Deploy and support client- and server-based software applications in business and enterprise settings.
- Configure and secure basic to intermediate Linux systems, utilizing command-line tools for file management, process control, user and group permissions, and shell scripting.
- Implement core networking concepts such as IP addressing, subnetting, VLANs, switching, and routing technologies — including basic configuration of Cisco routers and switches.
- Design and troubleshoot local area networks (LANs), wireless LANs (WLANs), and structured cabling systems to meet business and technical requirements.
- Apply network security principles including access control, authentication, encryption, and endpoint protection, and perform risk assessments and vulnerability mitigation.
- Understand and apply cybersecurity concepts such as malware analysis, vulnerability assessment, cryptography, identity protection, social engineering prevention, and incident response.
- Work with cloud computing environments, including virtualization, cloud deployment models, resource provisioning, and infrastructure-as-a-service (IaaS) concepts.
- Develop basic scripts and programs in the Python programming language to support automation, data processing, and system management tasks.

Minimum Grade Requirement

- Students must earn a grade of C or higher in all required IT courses to receive credit for program graduation.

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:		3.00-5.00
MATH-123	MATH IN MODERN SOCIETY	
MATH-140	ALGEBRAIC REASONING AND PROBLEM-SOLVING	
MATH-143	PRECALCULUS I: ALGEBRA	
MATH-147	PRECALCULUS	
MATH-153	STATISTICAL REASONING	
MATH-170	CALCULUS I	
MATH-254	STATISTICAL METHODS	
MATH-257	MATHEMATICS FOR ELEMENTARY TEACHERS II	
MTHPT-130	FINITE MATHEMATICS	
MTHPT-137	MATH FOR TECHNOLOGY	
MTHPT-153	STATISTICAL REASONING	
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		**15.00-17.00**

Program Requirements

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 (CCNA 1: INTRODUCTION TO NETWORKS)	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 (CCNA: SWITCHING, ROUTING, AND WIRELESS ESSENTIALS)	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 (CCNA: ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION)	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 Computer 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