Computer Information Systems
Associate in Science Degree

Effective: Fall 2025

Required Core Courses: 19 units

Total Required Units: 25 units
Total Units: 60 units

Course Number	Course Title	Fall	Spring	OER/ZTC
CIS 50	IT Essentials	4		yes
CIS 60	Networking Essentials		3	yes
CIS 70	Computer and Network Security Fundamentals		3	yes
CIS 80	Introduction to Databases		3	yes
CIS 81	Introduction to Python		3	yes
CIS 90	The IT Professional	3		no

Required Electives: 6 units

Course Number	Course Title	Fall	Spring	OER/ZTC
CA 31	Computer Applications I	3	3	yes
CIS 71	Introduction to Cybersecurity	3		No
CIS 82	Cloud Computing	3		No
CIS 91	Introduction to Artificial Intelligence		3	no

Free Electives: 14 units
General Education Requirements: 21 units

       See a counselor to prepare your educational plan with the latest scheduling information.

Program Student Learning Outcomes
1. Identify computer hardware, and diagnose hardware problems
2. Implement simple algorithms, automate business processes, and visualize data using the Python programming language
3. Describe network components, protocols, architectures, and the application of current communication and networking technologies.
4. Determine how to detect and stop security breaches in networks and applications, and help organizations increase awareness of security policies and procedures.
5. Design a database to meet defined requirements and implement queries in SQL.
6. Explain the core concepts of the cloud computing paradigm and apply fundamental concepts in cloud infrastructures to understand the tradeoffs in power, efficiency, and cost.