

COMPUTER & INFORMATION SYSTEMS - ASSOCIATE OF APPLIED SCIENCE (AAS)

Description

The Computer and Information Systems Associate of Applied Science is structured around a core curriculum and three specialized options, allowing students to tailor their education to their career interests. The core curriculum provides a strong foundation in essential areas such as computer concepts, software applications, operating systems, networking, database management, computer maintenance, internet technologies, mathematics, communication skills, and human relations. This comprehensive approach ensures that students gain the technical and interpersonal skills needed to thrive in the IT industry.

Program Learning Outcomes

Upon successful completion of the degree, students will be able to:

1. Troubleshoot software and hardware installation and configuration.
2. Create and manage networks.
3. Create algorithms and computer programs that solve problems.
4. Use SQL when working with tables and querying databases.
5. Develop webpages that incorporate design best practices.
6. Evaluate the systems development lifecycle.
7. Use productivity software to effectively communicate ideas and information.

Entrance Requirements

Academic Entrance Requirements

Recommended:

- High school diploma or GED
- Completion of WR 065 Rhetoric and Critical Thinking II or higher or minimum placement Wr/Comm Level 7
- Completion of MTH 060 Beginning Algebra or higher or minimum placement Math Level 10
- Basic computer competency or CIS 010 Computer Keyboarding and CIS 070 Introduction to Computers: Windows

Other Entrance Requirements

All enrolled program students may have to pass a criminal history check (CHC) as a condition of their acceptance into a worksite for cooperative work experience. Students who do not pass the CHC may not be eligible to complete requirements at affiliated practicum sites or be hired for some professional positions. Students who believe their history may interfere with their ability to complete the program of study should contact the program director or department chair.

Additional Costs (Beyond Standards Tuition/Fees and Textbooks)

Material Costs

Recommended:

- 16 to 64GB portable storage (USB or SSD drive): \$20 to \$100
- A desktop or laptop computer capable of running the latest version of the Windows operating system and the latest version of Microsoft Office: approximately \$400
- Reliable high-speed internet access

Course Requirements

Course	Title	Credits
Core Courses		
CIS 101	Information Technology Orientation	3
CIS 122	Introduction to Programming	4
CIS 124	Tech+	4
CIS 131	Software Applications	4
CIS 135DB	Database Theory/SQL	4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 179	Networking Essentials	4
CIS 183C	Introduction to Cybersecurity	4
CIS 195	Web Development I	4
CIS 244	Information Systems Analysis	4
CIS 279WC or CIS 179L	Windows Client Linux Essentials	4
CIS 297	CIS Professional Capstone	4
General CIS AAS Degree		
Select 27 credits with a CS or CIS prefix numbered 100 or higher		27
Other Required Courses		
BA 214 or WR 227Z	Business Communications Technical Writing	3-4
COMM 111Z or COMM 218Z or COMM 219	Public Speaking Interpersonal Communication Small Group Communication	4
Human Relations:		3-5
MTH 102	Applied Technical Mathematics (or choose one course from the foundational requirements math list)	4
WR 121Z	Composition I	4
Total Credits		96-99

Advising Notes

Planning is important. Most option courses are offered once per academic year and many need to be taken in sequence. Some core classes are offered once every two years. Students may take non-program support courses any term to build skills related to prerequisites.

This degree is designed for students planning to enter their chosen careers upon graduation. Often only selected credits are considered transferable to public or private baccalaureate institutions.

Performance Standards

- Academic Requirements:

- Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
- All courses in the program must be completed with a grade of C or higher.

CIS Elective (must have CIS/CS prefix numbered 100 or higher)	3
Credits	15
Total Credits	96-99

Sample Plan

First Term		Credits
CIS 101	Information Technology Orientation	3
CIS 124	Tech+	4
MTH 102	Applied Technical Mathematics (or choose one course from the foundational requirements math list)	4
WR 121Z	Composition I	4
Credits		15
Second Term		
BA 214 or WR 227Z	Business Communications or Technical Writing	3-4
CIS 140	A+ Essentials I	4
CIS 145	A+ Essentials II	4
CIS 183C	Introduction to Cybersecurity	4
Credits		15-16
Third Term		
CIS 131	Software Applications	4
CIS 195	Web Development I	4
CIS Elective (must have CIS/CS prefix numbered 100 or higher)		4
COMM 111Z or COMM 218Z or COMM 219	Public Speaking or Interpersonal Communication or Small Group Communication	4
<u>Human Relations:</u>		3-5
Credits		19-21
Fourth Term		
CIS 135DB	Database Theory/SQL	4
CIS 179	Networking Essentials	4
CIS 279WC or CIS 179L	Windows Client or Linux Essentials	4
CIS Elective (must have CIS/CS prefix numbered 100 or higher)		4
Credits		16
Fifth Term		
CIS 122	Introduction to Programming	4
CIS 244	Information Systems Analysis	4
CIS Elective (must have CIS/CS prefix numbered 100 or higher)		4
CIS Elective (must have CIS/CS prefix numbered 100 or higher)		4
Credits		16
Sixth Term		
CIS 297	CIS Professional Capstone	4
CIS Elective (must have CIS/CS prefix numbered 100 or higher)		4
CIS Elective (must have CIS/CS prefix numbered 100 or higher)		4