COMPUTER SCIENCE

Frederick Community College

Program Contact
James Hatch • 301.624.2769 • jhatch@frederick.edu

Computer Science

The Computer Science A.S. degree program enables students to learn the basics of computer languages, system architecture, and operating systems. Students can apply learned skills to professional disciplines such as system architecture, operating systems, and artificial intelligence.

Computer Science A.S. Degree

The Computer Science A.S. degree program provides a core of courses that prepare students to transfer to a four-year college or university and major in computer science. The program is designed to provide broad coverage of both mathematics and computer science comparable to that offered in the first two years of a four-year college's computer science major with an emphasis on object-oriented design and programming.

This program prepares students for entry-level employment or for transfer to a four-year college or university.

Learning Outcomes

- Create an object-oriented program that implements data structures
- Identify problem requirements that demonstrate understanding of user needs
- Explain solutions that satisfy problem requirements
- Analyze complexity of problem solutions
- Design problem solutions that demonstrate efficiency
- Construct software applications that implement a Graphical User Interface (i.e., GUI) Front-End
- Produce documentation that describes implementation

Computer Science Studies Certificate

The Computer Science Studies Certificate program is designed for students seeking to build skills in specialty areas, upgrade current skills, or broaden their general knowledge base in information technology. The program is suited for those seeking early entry to a computer science bachelor's program or for those with an undergraduate degree seeking to enter a graduate program that requires preparation in computer science and mathematics.

Growth Potential & Estimated Salaries

The median annual wage for computer and information research scientists was $122,840 in 2019. Overall employment of computer and information research scientists is projected to grow 16% from 2018 to 2028, much faster than the average for all occupations.

Source: Bureau of Labor Statistics Occupational Outlook Handbook (bls.gov/ooh)

Internship Program

Internships help students integrate what is taught in the classroom with what is required in the workplace. Students take internships to develop knowledge and skills valued by employers. Students in the Computer Studies Certificate program at Frederick Community College (FCC) are eligible to receive credit for internships.

frederick.edu

Transfer Note

To find more information about how credits will transfer from FCC to a state four-year institution, visit artsys.usmd.edu or consult a College advisor. FCC has articulation agreements with Frostburg State Unviersity, Hood College, University of Maryland College Park – Shady Grove, and University of Maryland – Global Campus, allowing students a seamless transfer experience. Students who plan to transfer should speak with an advisor or program manager from their chosen transfer institution before selecting elective courses.

Financial Assistance

FCC provides a tuition payment plan for students who wish to spread payment over several months. Scholarship and loan assistance is available for eligible students. For complete scholarship information, contact Financial Aid at 301.846.2620.

View required course listings: frederick.edu/computerscience

For more information:

James Hatch • 301.624.2769 • jhatch@frederick.edu

08/20