COMPUTER SCIENCE

MINOR

Program Requirements

Our increasingly digital world demands that students from all disciplines have a knowledge of fundamental computing concepts to pursue graduate study and to begin careers in the profession of their choice. Our 15-credit Computer Science minor is designed to allow students from any major—from fine arts and humanities to health science and education—to acquire the computing skills needed to succeed in the 21st century. The Computer Science minor is designed to prepare students for careers as software engineers, software developers and computer programmers. Students can join the Association for Computing Machinery (ACM), a student organization that promotes new technology trends, participates in hackathons and programming contests, and hosts video-game championships and other social events throughout the year.

Five courses (15 credits) are required for the Computer Science minor, including the three required courses listed below along with at least two additional elective courses from the Department of Computing and Information Science (CIS).

Core Courses for the Computer Science Minor:

- CIS 100: Introduction to Computer Science
- CIS 210: Linear Data Structures
- CIS 210: Non-linear Data Structures

Plus at least two other CIS elective courses. Electives include:

- CIS 220: Digital Logic & Computer Organization
- CIS 230: Operating Systems
- CIS 260: Computer Communications and Networks
- CIS 261: Information Security
- CIS 262: Digital Forensics
- CIS 280: Data Visualization & Communication
- CIS 350: Relational Database Systems
- CIS 360: Computer Systems Security
- CIS 361: Network Security
- CIS 352: Big Data Analytics
- CIS 471: Machine Learning

For more information on the Computing and Information Science programs, please contact Professor M. Afzal Upal, Ph.D., department chair, at mupal@mercyhurst.edu.