Goals
Saint Martin’s University’s Computer Science program provides students the education and training needed for careers in such high-demand fields as software development, web and mobile technologies, security and database management. Set in the midst of a rich liberal arts curriculum, the program is designed to meet the needs of industry and future advances in technologies.

The program provides:
• A rigorous educational environment in which faculty members work closely with their students
• Quality computer facilities
• Small classes, enabling students to receive individual attention from faculty members
• Updated class, library, computer and study environment to support the program
• A strong liberal arts component that broadens career options and the possibility of professional advancement

Students and graduates of the bachelor’s program will have a solid analytical foundation, strong computational skills, and a capstone project relevant to current industry needs.

See other side for program requirements.
PROGRAM REQUIREMENTS

Bachelor of Science

General Education Core (40 semester hours)

Major in Computer Science (54-56 semester hours)

Foundation Courses (24-25 semester hours)

- CSC 101  Introduction to Computer Science
- CSC 180  Introduction to Programming
- CSC 210  Database Fundamentals
- CSC 215  Network Fundamentals
- MTH 161  Mathematical Methods for Business and Social Sciences or MTH 171 Calculus 1 (required for Software Design and Development concentration)
- MTH 200  Mathematics for Computer Science
- MTH 201  Introduction to Statistics or MTH 357 Probability and Statistics
- BA 305  Business Communication or ENG 306 Professional and Academic Writing Skills

Concentration Courses

Software Design and Development Concentration (31 semester hours)

- CSC 200  Intermediate Programming
- CSC 250  Web Programming and Management
- CSC 340  Data Structures and Algorithms
- CSC 345  Data Communications and Networking
- CSC 385  Operating System Architecture
- CSC 446  Software Engineering: Analysis and Design
- CSC 450  Software Testing
- CSC 480  Senior Project
- MTH 172  Calculus II
- MTH 353  Linear Algebra

Web and Mobile Application Design and Development Concentration (30 semester hours)

- CSC 230  Intro to Web Development
- CSC 250  Web Programming and Management
- CSC 350  User-Centered Design
- CSC 355  Advanced Web Development
- CSC 375  Mobile Application Development
- CSC 455  Cloud Technologies and Web Services
- CSC 460  E-Commerce Development
- CSC 480  Senior Project
- 6 additional semester hours in computer science at the 300 or 400 level

Database Management Concentration (30 semester hours)

- CSC 310  Database Design
- CSC 360  Intro to Data Analysis
- CSC 380  Administering and Managing Databases
- CSC 423  Implementing a Data Warehouse
- CSC 463  Data Visualization Tools
- CSC 475  Designing Business Intelligence Solutions
- CSC 480  Senior Project
- 9 additional semester hours in computer science at the 300 or 400 level

Electives include new industry-attuned courses in subjects such as Game Design and Animation, Cryptography, Computer Security, and Data Mining.

www.stmartin.edu/computerscience