COMPUTER SCIENCE (B.S.)

The University of St. Francis Computer Science department guides students, and prepares them for a variety of technical and computer related careers. Through study, technical training, and practical hands-on experience, students will experience a variety of current industry standard technologies, implementations, configurations and integrations. Students will experience multiple programming languages, server platforms, and a variety of business implementations such as databases, internet programming, and systems. Majors specialize in current technologies, incorporating hands-on training with theory. Non-majors will incorporate computer literacy and practical skills appropriate to their disciplines. CS students establish life-long learning skills through engaged research, project leadership, community service, and alumni cooperatives.

The study of computer science focuses on the nature of computation and its relevance to solving problems in today's society. The computer science program at the University of St. Francis concentrates on the core of knowledge and methodologies that have emerged in this rapidly evolving discipline. Minor programs are offered in Computer Science and Information Technology in addition to certificate programs.

There are four majors in the computer science department.

- **Computer Science**
- **Information Technology**
- **Mathematics and Computer Science**
- **Web Development**

(Please refer to the specific major area for degree requirements)

One capstone program is also available to transfer students only with the appropriate AAS degree:

- **Information Technology/ Network Specialist**

Core courses in all programs provide students with methods and skills in problem solving, programming, hardware and software system design, data communication, and data management.

The Computer Science program provides knowledge, skills, and methods in the highly technical areas of systems programming and computer systems design and engineering. Professional opportunities include positions such as programmer, systems analyst, software engineer, scientific researcher and developer, technical consultant, corporate computer trainer, technical sales staff, and technical sales support staff. Completion of a minor in Information Technology, Mathematics, Accounting, or Finance is highly recommended.

Major Program (62 credit hours)

Code	Title	Hours
Required Courses		
COMP 135	Introduction to Information Technology	3
COMP 140	Computer Science I	4
COMP 150	Computer Science II	3
COMP 200	Hardware & Architecture	3
COMP 241	Web Programming Languages	3
COMP 253	JAVA with Data Structures	3
COMP 254	Advanced Data Structures	3
COMP 335	Operating Systems	3
COMP 356	Theory of Programming Languages	3
COMP 400	Database Management	3
COMP 480	Senior Project	3
COMP XXX	Four upper level Elective courses in Computer Science	12
MATH 175	Statistics	4
MATH 181	Calculus/Analytic Geometry I	5
MATH 182	Calculus/Analytic Geometry II	4
Select one of the following:		3
MATH 326	Discrete Mathematics (3)	
MATH XXX	(approved math elective)	
Total Hours		**62**

Students work with their advisors in selecting additional elective credits to fulfill the 120 credit hours required for graduation.