

Year 5-6



Master's of Science in Computer Science

Year 6: Students choose electives from their chosen concentration and also complete either their Master's project or Master's thesis.

Year 5: During the first year, students take core courses. They also choose a concentration for their studies, within which they choose from a selection of concentration courses.

Typical Core Courses

Fundamentals of Software Engineering
 Operating/Distributed Systems
 Foundations of Computing
 Algorithms/Problem Solving
 Computer Systems Organization
 Software Systems

Concentration Courses

Intro to Data Mining
 Intro to Machine Learning
 Markov Chains in Computer Science
 Computer Graphics
 Web Security
 Numerical Mathematics
 Databases and Scripting Languages

Year 3-4



Bachelor's Degree in Computer Science

Year 4: Students take senior-level courses and fulfill internship and field-work requirements. Programs not requiring an internship recommended engaging a career exploration counselor to find an internship.

Year 3: Students take specialized courses such as graphic communication tools, introductory programming, quantitative/qualitative research, and problem solving.

GE Courses

Calculus 2 / 3
 Intro to Linear Algebra
 Social Sciences Synthesis
 Humanities & Synthesis

Computer Science Core Courses

Discrete Structures
 Problem Solving with Computers
 Database Process and Design
 Network/Information Assurance
 Software Engineering
 Operating Systems

Elective Courses

Programming in C+
 Web Design and Development
 Intro to Java Programming
 Intro to Python Programming
 Wireless and Mobile Computing
 Computer Security
 Models of Computation
 Data Visualization

Year 1-2



Associate's Degree / Pursuing Bachelor's Degree

Year 2: Students should continue to complete their GE courses and begin taking lower-division requirement courses. Pre-requisite courses provide students with a basic understanding of theoretical and practical skills.

Year 1: Students are required to take general education courses, but it is also recommended they work to fulfill their degree prerequisite requirements.

GE Courses

Analytical Reading, Expository Writing
 Critical Thinking
 Oral Communication
 Psychology
 Political Science
 Sociology

Computer Technology -Related Courses

Intro to Computer Networking
 Programming and Logic
 Network Security

Lower-Division / Major Prerequisites

Algebra II
 Pre-Calculus / Calculus I
 Intro to Computer Programming
 Intro to Linux
 Introductory Statistics

Year 0



High School Diploma

Transportation-related career academies.