

The Beauty and Joy of Computing

"Fundamental concepts of computing including abstraction, algorithms, design, and programming."

Applied Programming and Problem Solving with Python

"Foundations of computing using Python. Programming fundamentals. Designing and implementing algorithms."

Programming and Problem Solving

"An intensive introduction to algorithm development and problem solving on the computer."

Introductory Programming for Engineers and Scientists

"Problem solving on the computer. Introduction to MATLAB. Generic programming concepts and techniques."

Programming and Problem Solving with Python

"An intensive introduction to algorithm development and problem solving using the Python programming language."

Computers and Ethics

"Analysis and discussion of problems created for society by computers, and how to address them."

Program Design and Data Structures

"Continuation of CS 1101/1104. The study of elementary data structures, their analysis, and their use in program design."

Discrete Structures

"Survey of the mathematical tools necessary for an understanding of computer science: sets, logic, and combinatorics."

Computer Organization

"The entire hierarchical structure of computer architecture, beginning at the low-level hardware and moving up to the high-level software."

Algorithms

"Advanced data structures, systematic study and analysis of important algorithms, and their application to problem solving."