

## **Course Descriptions (Fall 2025 Offerings)**

**CS 101: Introduction to Programming (3 Credits)** *A foundational course for all majors. Students learn essential programming concepts, logical thinking, and problem-solving using the Python language. Topics include variables, control flow, functions, and basic file I/O.*

**CS 102: Data Structures and Algorithms (4 Credits)** *Focuses on the design, implementation, and analysis of fundamental data structures (lists, stacks, queues, trees, graphs) and classic algorithms. Includes weekly lab sessions for practical application. | **Prerequisite:** CS 101 with a grade of C or better |*

**CS 301: Operating Systems (3 Credits)** *Explores the fundamental concepts of modern operating systems, including process management, memory management, file systems, and security. Students will implement core OS components in a low-level language. | **Prerequisite:** CS 210 |*

**CS 450: Artificial Intelligence (3 Credits) (Sample Elective)** *Introduces the core concepts and techniques of Artificial Intelligence. Topics include search algorithms, knowledge representation, machine learning basics, and natural language processing. | **Prerequisite:** CS 102 |*