CS - COMPUTER SCIENCE

CS 105 - Introduction to Computing   **Units: 3**

Introduction to essential concepts and practices in computing. Design, assemble, and operate basic computer hardware and software in a collaborative environment.

Term Offered: Spring and Fall

CS 135 - Computer Science I   **Units: 3**

This course is an introduction to modern problem solving and programming methods. Emphasis is placed on algorithm development. A special focus will be on procedural and data abstraction, emphasizing design, testing, and documentation.

Enrollment Requirements: Prerequisite: MATH 127 or MATH 128 (Taught at other NSHE Institutions) or satisfactory test placement into MATH 181. May be taken concurrently with MATH 127.

Term Offered: Spring and Fall

CS 138 - Programming for Data Science in Python I   **Units: 3**

Problem-solving methods and algorithm development in the Python programming language. Program design, coding, debugging, and documentation using techniques of good programming style. Program development in a robust operating environment.

Enrollment Requirements: Prerequisite: MATH 124 or higher, or instructor approval.

CS 151 - Introduction to Cybersecurity   **Units: 3**

Introduction to fundamental concepts of cybersecurity, common cybersecurity vulnerabilities and threats, and techniques and tools for detecting and defending against cyber-attacks.

Term Offered: Spring and Fall

CS 202 - Computer Science II   **Units: 3**

This course builds on the concepts of Computer Sciences I. Emphasis on problem solving and program development techniques. Typical numerical and non-numerical problems are examined. Design, implementation, and abstraction principles of elementary data structures are studied.

Enrollment Requirements: Prerequisite: CS 135 with a 'C' or better; MATH 127 or higher, or qualifying ACT, SAT or Accuplacer score.

Term Offered: Spring and Fall

CS 219 - Computer Organization   **Units: 3**

Introduction to organization and integration of computer components. Topics include: computer abstractions and performance, arithmetic operations, instruction set architecture, assembly programming, datapath, pipelining, memory hierarchy, I/O, and parallel architectures.

Enrollment Requirements: Prerequisite: CS 202 or CPE 201

Term Offered: Spring and Fall

CS 252 - Digital Forensics Fundamentals   **Units: 3**

Introduction to the basic computer and networking, forensic process, digital evidence collection, preserving the evidentiary chain, cybercrime statutes, and the legal aspects of search and seizure.

Term Offered: AS NEEDED