

CS COURSE STUDENT LEARNING OUTCOMES

CS 105 - Introduction to Computing

Students will be able to interact and work with various other students to examine varied computing issues at the local, national and global levels.

Students will be able to identify ethical conflicts involving real-world computing and engineering conditions and argue for or against different positions offered by a given ethical circumstance.

Students will be able to analyze and discuss the history, present circumstances and future implications of computers and technologies on individuals and society.

Students will be able to identify, analyze and interpret contemporary issues related to the impact of Computer Science and Engineering at the local through global levels.

Students will be able to conduct hands-on interaction with hardware and software related to Computer Science and Engineering.

CS 135 - Computer Science I

CSLOs are under review.

CS 138 - Programming for Data Science in Python I

Students will be able to write Python code to solve problems when given a set of specifications.

Students will be able to use Python data types and input/output methods.

Students will be able to use appropriate control structures and built-in Python data structures (lists, dictionaries, sets, tuples).

Students will be able to use Pandas, NumPy, and SciPy for basic data import and analysis.

Students will be able to use functions as well as pass and return values.

Students will be able to write helpful comments and utilize a proper programming style.

CS 151 - Introduction to Cybersecurity

Students will be able to analyze the ethical and legal issues and responsibilities related to cybersecurity topics.

Students will be able to use basic cybersecurity terminology and identify common threat types and basic defense procedures.

Students will be able to employ current techniques, skills, and tools used in cybersecurity.

CS 202 - Computer Science II

CSLOs are under review.

CS 219 - Computer Organization

Students will be able to describe the overall system architecture and digital components of a digital computer.

Students will be able to present and discuss examples of assembly language programming.

Students will be able to use and analyze data representation, digital logic and illustrate processor programming with respect to a digital computer.

Students will be able to use coding schemes such as ASCII, EBCDIC and Unicode to represent binary data.

CS 252 - Digital Forensics Fundamentals

Students will apply current industry best-practices to the analysis of some hypothetical and real case scenarios.

Students will articulate the laws applying to the appropriation of computers for forensic analysis, citing what laws are relevant and applicable under what circumstances.

Students will describe the underlying concepts of how data is stored on computers and digital devices and the general structure of the Internet.

Students will perform a basic digital forensic analysis using computer and network-based tools.