COMPUTER SCIENCE (CSI)

CSI 130 Introduction to Concepts in Computer Science (3 credits)
This course Introduces computer science concepts that include: algorithm analysis, agile methodologies and programming design and problem solving utilizing a contemporary programming language and psuedocode. Topics include principles of procedural programming, software development lifecycle, debugging techniques, unit testing, control structures, data structures, functions, arrays, file processing, Big-O notation and Scrum/Kanban/SAFe methodologies. Students cannot earn credit for both CSI 130 and CIS 115.

Prerequisite(s): MATH 101 (may be taken concurrently) or MATH 103 (may be taken concurrently)

CSI 131 Computer Science I (4 credits)
This is the first course in a sequence of two courses in computer science utilizing the syntax and semantics of the C programming language with emphasis on applications for Science, Mathematics and Engineering disciplines. The course provides an introduction to the principles of program design and development using procedural programming techniques. The course will provide an introduction to the following topics: life cycle program development, modularization, simple algorithm analysis, aggregated derived data types and sequential and random file processing. Usually offered in spring semester. Prerequisite/ Note: Computer Science students completing CIS 111 can not receive credit for CSI 131.

Prerequisite(s): MATH 203 (may be taken concurrently)

CSI 132 Computer Science II (4 credits)
The second in a two-course sequence in computer science utilizing the syntax and semantics of the object-oriented C++ programming language. Topics include classes, dynamic data structure, overloading, inheritance, stream input/output and file processing. Usually offered in fall semester.

Prerequisite(s): (CSI 131 and MATH 203 and MATH 204 (may be taken concurrently))