

COMPUTER SCIENCE (CSC)

CSC-116 Information Computing (3)

This course presents the basic concepts of information systems and computer literacy. The course incorporates theory as well as hands-on practice, which focuses on spreadsheets and database management systems (DBMS). Arts & Sciences Elective Code: A

Hours per week: 2.0 lecture, 2.0 lab

CSC-142 Computer Science (4)

Introduces computer programming including data types, expressions, input/output, control structures, functional and object-oriented programming, and simple data structures. Emphasizes problem-solving skills through program refinement, documentation and programming style. Arts & Sciences Elective Code: A

Hours per week: 4.0 lecture

Prerequisite: Take MAT-102, MAT-708 or a qualify with placement test score.

CSC-153 Data Structures (4)

Continues the study of program design and construction begun in CSC-142. Emphasizes data structures and practice in their specification, design, implementation and use. Includes container classes, arrays, lists, stacks, queues, trees, graphs, algorithm analysis, object-oriented programming, data abstraction, and searching and sorting techniques.

Arts & Sciences Elective Code: A

Hours per week: 4.0 lecture

Prerequisite: Take CSC-142 or CIS-175.

CSC-160 Software Design and Development (4)

Builds on the foundation of basic programming skills acquired in CSC-142. Emphasizes the design and development of software systems. Includes user interface programming, graphics and multimedia, networking and concurrency. Provides experience developing software over an extended time period through long-term projects. Arts & Sciences Elective Code: A

Hours per week: 4.0 lecture

Prerequisite: Take CSC-142.

CSC-175 Computer Organization and Assembly Language Programming (4)

Emphasizes the organization and operation of computer systems at the assembly-language level. Covers mapping of statements and constructs in a high-level language onto sequences of machine instructions, as well as the internal representation of simple data types and structures. Offers programming practice with an assembly language to provide practical application of concepts presented in class. Arts & Sciences Elective Code: A

Hours per week: 4.0 lecture

Prerequisite: Take CSC-142.

CSC-924 Honors Project (1)

Allows qualified honors student to pursue a special concentration of study under the guidance of a faculty member. Requires completion of an honors project contract. May be taken more than once. Arts & Sciences Elective Code: A; Comments: Permission of instructor and dean

Hours per week: 1.0 lecture

CSC-928 Independent Study (1-3)

Allows for a special concentration of study under the guidance of a faculty member. Requires an independent study contract. May be taken more than once. Arts & Sciences Elective Code: A; Comments: Permission of instructor and dean

Hours per week: 2.0 lab