COMPUTER SCIENCE (CSC)

CSC 1005 | Computer Literacy
Lecture Credit: 3

Introduces students to current technologies. Special focus on ensuring students become technologically competent and computer literate. Emphasis is placed on technology fundamentals and terminology through the evaluation of hardware and software. Provides students with a working knowledge of operating system use, file management and security. Introduces the internet as a research and communication tool. Application software is covered to ensure the fundamental computer skills for personal, academic and business use are obtained.

CSC 1019 | Introduction to Programming
Lecture Credit: 3

Focuses on a general introduction to computer programming. Emphasizes the design and implementation of structured and logically correct programs with good documentation. Focuses on basic programming concepts, including numbering systems, control structures, modularization, and data processing. A structured programming language is used to implement the student`s program designs.

Prerequisite: College Ready for Algebra

CSC 1050 | Visual Basic Programming: 6.0
Lecture Credit: 3

Introduces programming and applications development for the Microsoft Windows Programming environment using Visual Basic 6.0.

CSC 1060 | Computer Science I: (Language)
Lecture Credit: 4

Introduces students to the discipline of computer science and programming. Algorithm development, data representation, logical expressions, sub-programs and input/output operations using a high-level programming language are covered. Intensive lab work outside of class time is required.

Prerequisite: CSC 1019 or MAT 1340 with a grade of C or better

CSC 1061 | Computer Science II: (Language)
Lecture Credit: 4

Continues algorithm development and problem solving techniques not covered in Computer Science I using a high-level programming language. Students are able to gain experience in the use of data structures and the design and implementation of larger software projects. Intensive computer laboratory experience is required for this course.

Prerequisite: CSC 1060 with a grade of C or better

CSC 1065 | Discrete Structures
Lecture/Lab Credit: 4

Prepares students for a fundamental understanding of computing and computer science. Includes set theory, boolean algebra, relations, functions, graph theory and techniques for formal reasoning.

CSC 1075 | Special Topics
Provides students with a vehicle to pursue in depth exploration of special topics of interest.

Note: Special topics courses range from 0-12 credits and vary in learning type. Please see your program chair for more information about your options.

CSC 2017 | Advanced Python Programming
Lecture Credit: 3

Continues program development and problem-solving not covered in CSC 1019: Introduction to Programming. Students will create larger programs in the areas of advanced expression, iterator objects, parsing, and GUI applications.

Prerequisite: CSC 1019 and MAT 1340 or CSC 1060 with a grade of C or better

CSC 2025 | Computer Architecture/Assembly Language Programming
Lecture/Lab Credit: 4

Covers how a computer operates and the relationship between machine code and the primary computer components. The course explores the design of the processor, registers, memory, and various types of storage. Assembly language is used for computer processes commands and how programming languages use memory addresses. Overview of architecture that is in development will be discussed.

Prerequisite: CSC 1061 with a grade of C or better
Corequisite: CSC 1061

CSC 2034 | C++ Programming
Lecture/Lab Credit: 4

Starts with basic differences between C++ and other programming languages and progresses to programming advanced C++ concepts such as operator overloading, friends, references, namespaces, pointers and dynamic arrays, templates, streams and file I/O, recursion, polymorphism, exception handling and Standard Template Library. The course covers large programs that are coded implementing object-oriented design principles such as classes and objects, polymorphism, encapsulation, composition, inheritance and templates.

Prerequisite: CSC 2033 with a grade of C or better

Note: CCD does not offer CSC 2033. Please see your advisor for more information.

CSC 2040 | Java Programming
Lecture Credit: 3

Introduces the Java programming language and covers basic graphics, events/procedures, user interface, and libraries. Enables the student to write and execute a variety of Java programs. Incorporates Java Applets into HTML.

Prerequisite: CSC 1060 or CSC 2017 with a grade of C or better

CSC 2046 | Mobile App Development
Lecture Credit: 3

Learn how to develop mobile apps using key features and frameworks. Students will learn application design and development using a mobile development platform software development kit (SDK) and corresponding programming language. Main features include: handling UI triggered and touch events, data management, simple and complex UI views, drawing, location and application settings.

Prerequisite: CSC 1060 with a grade of C or better