

Computer Science (CSCI)

Courses

CSCI 120. Introduction to Programming. 3 Credits.

An introduction to computer programming using any programming language.

Typically Offered: Spring, even years.

Prerequisite: ASC 93 or higher.

CSCI 124. C++ I. 4 Credits.

An introduction to programming in C++. The course is only offered online.

Typically Offered: Fall, Spring.

CSCI 127. Introduction to Programming in Java. 3 Credits.

An introduction to computer programming using the Java language.

Typically Offered: Spring.

Prerequisite: ASC 93 or higher.

CSCI 160. Introduction to Structured Programming I. 3 Credits.

An introduction to structured programming using C++. Topics include input, output, looping and decision structures, subprograms, and interface to a GUI operating system.

Typically Offered: Fall, odd years.

Prerequisite: ASC 93 or higher.

CSCI 161. Introduction to Structured Programming II. 3 Credits.

A continuation of CSCI 160. Topics include: Arrays, structures, object-orientated programming, inheritance, polymorphism string manipulation, recursion and pointers.

Typically Offered: Spring.

Prerequisite: CSCI 160.

CSCI 174. C++ II. 4 Credits.

An intermediate course in programming in C++. The course is offered only online.

Typically Offered: Fall, Spring.

CSCI 199. Special Topics. 1-4 Credits.

Courses not offered in the regular catalog that provide an opportunity to extend student learning.

Typically Offered: On sufficient demand.

Repeatable: Up to 12 Credits.

CSCI 242. Data Structures. 3 Credits.

The study of abstract data types (ADTs) and alternatives for implementation of lists, arrays, sets, trees, and graphs. The course explores dynamic and static data structures; time and space analysis of algorithms for initializing; and accessing, searching, sorting and traveling. Cross referenced with SE 242.

Typically Offered: Fall, even years.

Prerequisite: CSCI 161.

Same As: CSCI 242/SE 242.

CSCI 299. Special Topics. 1-4 Credits.

Courses not offered in the regular catalog that provide an opportunity to extend student learning.

Typically Offered: On sufficient demand.

Repeatable: Up to 12 Credits.

CSCI 350. Assembly Language Programming. 3 Credits.

An exploration of microprocessor-based machine and assembly language concepts.

Typically Offered: Spring, even years.

Prerequisite: CSCI 370.

CSCI 365. Programming Language Topics. 3 Credits.

A study of program design, style, expression, debugging and testing in specific programming languages such as Ada, C/C++, Lisp, Logo, Modula-2, Pascal, Prolog, or Visual BASIC. Course may be repeated for different languages.

Typically Offered: On sufficient demand.

Prerequisite: CSCI 160.

Repeatable: Up to 6 Credits.

CSCI 370. Computer Organization & Systems. 3 Credits.

An examination of the fundamentals of computer organization and operating system concepts. Cross referenced with SE 370

Typically Offered: Fall, odd years.

Prerequisite: CSCI 160.

Same As: CSCI 370/SE 370.

CSCI 372. Comparative Programming Languages. 3 Credits.

A comparison of the features of several different programming languages with regards to syntax and semantics.

Typically Offered: On sufficient demand.

Prerequisite: CSCI 161.

CSCI 380. Teaching Computer Science. 3 Credits.

An investigation of objectives, methods, techniques, materials, software, and activities related to the teaching of computer science.

Typically Offered: On sufficient demand.

Prerequisite: Admitted to Teacher Education.

CSCI 399. Special Topics. 1-4 Credits.

Courses not offered in the regular catalog that provide an opportunity to extend student learning.

Typically Offered: On sufficient demand.

Repeatable: Up to 12 Credits.

CSCI 450. Practicum in Computer Science. 1-3 Credits.

Experience in the use of computer hardware and software and the opportunity to observe and assist in the management of a computer laboratory.

Typically Offered: On sufficient demand.

Prerequisite: CSCI 370.

Grading: S/U only.

CSCI 494. Undergraduate Research. 3-12 Credits.

The course is designed to integrate subject matter from major coursework and other disciplines into a project that leads to the creation of an original body of knowledge.

Typically Offered: On sufficient demand.

Repeatable: Up to 12 Credits.



CSCI 497. Internship. 3-12 Credits.

An opportunity for students to apply classroom learning to an on-the-job work experience. Internship must be related to the student's major or minor course of study and may be in any geographic location. Credit is granted in the range of three to twelve hours per semester and may be repeated up to a maximum of 12 credit hours. Application and approval through Career Services.

Typically Offered: Fall, Spring, Summer.

Prerequisites: Junior Standing or Senior Standing and cum GPA of 2.50 or higher.

Grading: S/U only.

Repeatable: Up to 12 Credits.