

# **COMPUTER SCIENCE (CSCI)**

#### **CSCI 101. Introduction to Computers**

Credits: 3

Typically Offered: FASPSU

Introduces students to general computer concepts such as input and output devices, the computers impact on society, networks, security and software. Includes hands-on experience in word processing, spreadsheets, data management and presentations.

#### **CSCI 122. Beginning Visual Basic**

Credits: 3

Typically Offered: ONDEMAND

A course in writing programs using the Visual Basic language for students with no previous experience with a programming language, but some experience with a computer. Students learn to design, implement, test, and debug small-scale programs using basic data types and control structures with an emphasis on logical thinking and problem solving.

#### CSCI 124. Beginning C++-Visual C++

Credits: 3

Prerequisite: CSCI 160. Corequisite: CSCI 161. Typically Offered: FALLSPR

Introduction to programming in the C++ language for students with object oriented programming experience in another language.

#### **CSCI 125. Beginning COBOL**

Credits: 3

Prerequisite: CSCI 122. Typically Offered: ONDEMAND

An introduction to computer programming and computer applications.

#### CSCI 127. Beginning Java

Credits: 3

Typically Offered: ONDEMAND

An introduction to the Java programming language for students with some programming experience in another language. Covers Java syntax, applets, and applications.

#### CSCI 132. Programming In Progress

Credits: 3

An introduction to programming in the Progress language, an enterprise language used in many large corporations. Includes relational database design, event driven and transactional programming.

#### CSCI 160. Computer Science I

Credits: 4

Prerequisite: CIS 185 or instructor approval.

Typically Offered: FALLSPR

Systematic development of algorithms and programming structure with an emphasis on problem solving and design. The use of good programming style to aid in designing, coding, and debugging programs. Includes use of a structured high level language. Primarily for those who plan to major or minor in Computer Science.

## CSCI 161. Computer Science II

Credits: 4

Prerequisite: CSCI 160. Typically Offered: FALLSPR

An expansion of the computer science foundations provided in CSCI 160, including computer code resuse techniques, an introduction to data structures, study and application of a software life cycle, and simulations.

#### CSCI 172. Intermediate VIsual Basic

Credits: 3

Prerequisite: CSCI 122. Typically Offered: ONDEMAND

This course is a continuation of Beginning Visual Basic. Topics include arrays, random-access files, graphics, and database management.



### CSCI 174. Intermediate C++/Visual C++

Credits: 3

Prerequisite: CSCI 160. Corequisite: CSCI 161. Typically Offered: FALL

Intermediate level programming in the C++/Visual C++ language. Topics include abstract data types and their implementation using the C++ class mechanism; sorting and searching; object-oriented programming and software reuse; and STL container classes and iterators.

#### CSCI 250. Assembly Language

Credits: 3

Prerequisite: CSCI 160 or departmental approval.

Typically Offered: FALL

This course includes a study of machine and assembly language concepts, programming in assembly language, and assembly subroutines called from a high-level language.

### **CSCI 270. Computer Organization**

Credits: 3

Prerequisite: CSCI 160. Corequisite: CSCI 161. Typically Offered: SPRING

The structure and organization of computer hardware, includes creating a simulated digital computer system to illustrate the mechanics of information transfer and control.