COMPUTER PROGRAMMING (CMPR)

CMPR 166, INTRODUCTION TO COMPUTER SCIENCE 3 (3)
Introduction to computer science problem- solving, and algorithm development, using a high-level structured programming language. Designed for the student seeking an introductory course to computer programming. (A special fee will be assessed.) Prerequisite: Grade of C or better in MTHM 023 or satisfactory placement assessment score or divisional approval.
General Education: IN1
Course Entry Requirement(s): Course placement policy: Grade of C or higher in MTHM 081 or MTHM 095 or satisfactory placement assessment score in mathematics
Typically Offered: Fall and Spring Semesters

CMPR 168, OBJECT-ORIENTED PROGRAMMING 4 (5)
A course in object-oriented programming including classes, objects, function and operator overloading, inheritance and polymorphism, templates, exception handling, input/output and file handling techniques and program documentation. The course includes a review of procedural programming. Laboratory required. (A special fee will be assessed.)
General Education: IN1
Course Entry Requirement(s): Prerequisite: CMPR 166 or previous programming course and MTHM 171 or division approval
Typically Offered: Fall Semester

CMPR 268, DATA STRUCTURES 3 (3)
Algorithm development and advanced object-oriented programming design with primary focus on data abstraction. The emphasis is on the specification, design, implementation and use of the fundamental data types such as arrays, lists, stacks, queues, trees and graphs. The programming techniques include encapsulation, information hiding, generics, inheritance, and polymorphism. Sorting and searching algorithms and introduction to graph algorithms.
General Education: IN1
Course Entry Requirement(s): Prerequisite: CMPR 168 with a "C" or better and MTHM 270
Typically Offered: Fall and Spring Semesters

CMPR 275, COMPUTER ARCHITECTURE 3 (3)
This course is intended primarily as a computer science course in computer architecture for students pursuing a four year degree. It focuses on performance and cost analysis, computer architecture, memory systems, input/output systems, interrupt, functional units, CPU, pipelining and memory system.
General Education: IN1
Course Entry Requirement(s): Prerequisite: CMPR 168 with a "C" or better and MTHM 270 or division approval
Typically Offered: Fall and Spring Semesters

CMPR 299, INDIVIDUALIZED STUDIES IN COMPUTER PROGRAMMING 1-3 (1)
An in-depth study of areas in computer programming presented by discussion and/or individual research and reading. Topics will vary. Repeatable up to six (6) times for a total of six (6) credit hours.
Course Entry Requirement(s): Prerequisite: Second-year standing and division approval
Typically Offered: Offer as required