

COMPUTATIONAL SCIENCE (COSC)

COSC 2020 Comput Concepts & Applic (4 Credit Hours)

This course introduces students to the foundations of algorithm development and programming, basics of matrix algebra and numerical analysis, solving ordinary differential equations.

Corequisite(s): COSC 2021.

COSC 2021 Computing Concepts & App Lab (0 Credit Hours)

Lab for ENGP 2020

Corequisite(s): COSC 2020.

COSC 3000 C++ Prog For Sci & Engr (3 Credit Hours)

This course begins with an introduction to C++ and will cover up to relatively sophisticated programming techniques including data structures, abstract data types, interfaces, and algorithms. The goal is for the student to get a taste of the design and implementation of large programs and to become proficient at programming in C++.

COSC 3100 Data Visualization (3 Credit Hours)**COSC 3200 Large Scale Computation (3 Credit Hours)****COSC 6000 C++ Prog For Sci & Engr (3 Credit Hours)**

This course begins with an introduction to C++ and will cover up to relatively sophisticated programming techniques including data structures, abstract data types, interfaces, and algorithms. The goal is for the student to get a taste of the design and im

COSC 6100 Data Visualization (3 Credit Hours)**COSC 6200 Large Scale Computation (3 Credit Hours)****COSC 6600 Comput Model Biomed Sys (4 Credit Hours)**

The objective of this graduate course is to provide students with the skills and knowledge necessary for computational modeling of biological and physiological systems. The first half of the course will cover introduction to UNIX, elements of programming

Corequisite(s): COSC 6601.

COSC 6601 Comp Model of Biomed Sys Lab (0 Credit Hours)

Lab section for COSC 6600

Corequisite(s): COSC 6600.

COSC 6700 Math Models Ecol & Evolution (3 Credit Hours)

An introductory course in mathematical modeling in biology with emphasis on construction and interpretation of models in ecology. The goals of the course are to provide training in a wide variety of mathematical and computational techniques that are used