



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Data Structures Using C++

CSE 2122

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

Introduction to programming in C++ and object-oriented programming; encapsulation using classes, inheritance, etc.

Prerequisites and Co-requisites:

Prereq: 1222 (202).

Course Goals / Objectives:

- Be competent with concepts of object-oriented programming and abstraction mechanisms
 - Be competent with the concepts of classes, member functions and variables, constructors, destructors, inheritance, and access mechanisms
 - Be competent with the concepts of prototype functions, functions, parameters, return values, overloading, and operators
 - Be familiar with control structures, dynamic memory allocation, arrays, and pointers
-

Course Topics:

- Introduction to course computing environment
 - Basic features, getting started, basic data types
 - Advanced data types, functions without returned values
 - Classes, members, constructors
 - Friends, destructors, returned values in functions
 - Operators
 - Inheritance
 - Flow of control, dynamic memory allocation, arrays and pointers
-

Designation:

Elective