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