

Open Course Title: OOP concept using C++ and QT framework

Target Students from Branches:ECE/TCE/EEE/CSE/Mech/Civil/MCA

Prerequisites: A student wishing to take this course must be proficient with advanced C. The specific topics the student would need to have mastered include: arrays, structures, pointers, dynamic memory management, writing multi-file programs, and data structures.

Total duration of the course:25 Hours.

No. of Lecture hours: 3X5 = 15

No. of hands on / Practical : 2.5 X 5 = 12.5

Abstract

Most commercial-grade software development these days is based on object-oriented methods and the most frequently used language for OO programming is C++. It is therefore important that our engineering students be well conversant with this language. Since C++ was born out of C, they have much in common at the level of basic language structures. This course takes advantage of this fact and teaches C++ programming language together by comparing and contrasting them at all levels from basic language constructs to the constructs needed for application development.

Open Course Details

A student who successfully fulfills the course requirements will have demonstrated:

CO1: an ability to explain the object-oriented concepts in C++.

CO2: an ability to demonstrate the use of various OOPs concepts with the help of C++ programs.

CO3: an ability to write object-oriented programs of moderate complexity in C++.

Note: The coordinators shall provide at least three course outcomes for the open course.

Schedule

Day 1:12/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:00 – 10:30	Migration from C to C++	Prof. Vishwakiran/Prof. Shankar	CO1, CO2
1:30 – 3:00	Variables in C++	Prof. Vishwakiran/Prof. Shankar	CO1, CO2
Day 2:13/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:00 – 10:30	Functions in C++	Prof. Vishwakiran/Prof. Shankar	CO1, CO2
1:30 – 3:00	Classes and Objects	Prof. Vishwakiran/Prof. Shankar	CO1, CO2

		Shankar	
Day 3:14/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:00 – 10:30	Constructors and Destructors	Prof. Vishwakiran/Prof. Shankar	CO1, CO2
1:30 – 3:00	Operator overloading	Prof. Vishwakiran/Prof. Shankar	CO1, CO2
Day 4:15/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:00 – 10:30	Inheritance	Prof. Vishwakiran/Prof. Shankar	CO2, CO3
1:30 – 3:00	Virtual Functions	Prof. Vishwakiran/Prof. Shankar	CO2, CO3
Day 4:16/02/2019			
Time	Topics	Resource Person Details	CO-PO Mapping
9:00 – 10:30	Exceptional Handling	Prof. Vishwakiran/Prof. Shankar	CO2, CO3
1:30 – 3:00	QT framework	Prof. Vishwakiran/Prof. Shankar	CO2, CO3

Note: 11:00-12:30 & 3:30 -4:30 pm Practicals.