



Object-Oriented Programming in C++

Introduction

The course is designed for Computer Science and Computer Engineering students, as well as those in their early careers.

You will learn the principles of Object-Oriented Programming and Design.

The course will lead to a better understanding of different programming paradigms, and will be a stepping stone to learning another programming languages.

Pre-Requisites

Knowledge of 'C' Programming

Course Details

In this course, you will gain a solid foundation in Object-Oriented programming and design. You will go beyond the basics and develop a deep understanding that will help you implement them in other languages.

The course will be instructor-led and delivered online for 20 hours by an experienced industry veteran.

We will help you with assignments and programming problems.

Our self-help groups and other channels will continue to support you after the course

Object-Oriented Programming in C++ – Course Contents

Course Contents

| Hour # | Topic |
|--------|---|
| 1 | Overview of Object-Oriented Programming |
| 2 | Setting up the Programming Environment |
| 3 | Understanding Abstraction |
| 4 | Encapsulation in C++ |
| 5 | Understanding Classes & Objects |
| 6 | Working with a Class in C++ |
| 7 | Class Inheritance, Function Overriding & Overloading |
| 8 | Operator Overloading |
| 9 | Using Pointers in C++ & the <i>this</i> pointer |
| 10 | Memory Handling in C |
| 11 | Polymorphism, Function Overriding, Virtual Functions in C++ |
| 12 | Exception Handling in C++ |

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| 13 | The Standard Template Library |
| 14 | Standard Template Library - Containers |
| 15 | Standard Template Library - Iterators |
| 16 | Standard Template Library - Algorithms |
| 17 | Simple Design Patterns |
| 18 | Project in C++ |
| 19 | |
| 20 | |