

Program: C programming Language & C++ (OOPS)
Duration: 50hrs With Lab session

C Topics

Introduction
C Program Structure
Variables, Expressions, & Operators
Input and Output Functions (Formatted, String & character)
Program Looping
Decision Making Statements
Array Variables
String Functions
Math Library Functions
User-defined Functions
Formatted Input and Output
Pointers
Structures
Unions
File Input and Output
Dynamic Memory Allocation
Command Line Arguments
Operator Precedence Table

Object Oriented Programming Using C++

Introduction about C++

Basics of C++

Structure of a program
Variables & Data Types
Constants
Operators
Basic Input/Output

Control Structures

Looping & statement

Functions

User define functions and types

Compound data types

Arrays
Character Sequences
Pointers
Dynamic Memory
Data structures
Other Data Types

Object Oriented Programming

Class
Object
Abstraction
Encapsulation
Inheritance
Polymorphism

Advanced concepts

Templates
Namespaces
Exceptions
Type Casting
Preprocessor directives

C++ Standard Library.

Input/Output with files