

## C AND C++ Training

Learn the world's most popular programming language

Duration: 6 weeks | Certified Training

### About Programming with C and C++ Training

'C' is a general-purpose programming language developed by **Dennis Ritchie**. Like most of the procedural language, C has the specialized feature for structured programming, allows variable scope and recursion. One good thing about C programming is, it enables mapping of constructs to machine instruction thereby requiring very minimal run-time support, and so it is widely used in application development.

C is one of the main programming languages being used for more than 2 decades and C compilers are also available for most of the computer architecture and Operating Systems. C programming is still popular for its simplicity of expression, compactness of the code, wide range of applicability and limitless flexibility it has to offers.

Following are the detailed table of contents of the training:

#### Table of Contents

1. **Basics: C Language:** *Study the basics of C language and learn to write your own functions.*

- Getting Started
- C Data Types, Variables and Operators
- Writing basic instructions
- Decision Making
- Loops
- C Standard Library
- Writing your own functions
- Preprocessor Commands
- Input /Output Management Functions , recursion function
- Control-Flow Statements (If, if else, else if, for, while)

2. **Advanced: C Language:** *Learn the concepts of arrays, pointers, structures, and unions.*

- Modular Programming with Functions
- Arrays & use of Pointers with 1D array, 2D array
- Structures and Union and Dynamic Memory Allocation
- The Preprocessor and Multiple-file Compilation
- File handlings Input/Output
- Strings handlings functions (strlen(), strrev(),strcat(),strcmp(),strcpy())
- The case Control Structure
- Miscellaneous Feature

## C++ Programming Language Syllabus

C++ is an excellent general purpose programming language build with Object oriented programming Paradigm. It is mostly regarded as intermediate level programming language as it has the features of both **low-level and high-level programming languages**. It is one of the powerful programming language implemented and used widely on many hardware's and operating systems (Windows , Linux (Ubuntu , Red Hat Linux)). IDE(Turbo C , Dev C , Code Blocks ) C++ has greatly influenced by other object oriented languages like Core Java, C# .net programming languages etc.

Following are the detailed table of contents of the training:

### Table of Contents

**1. Introduction to OOP and C++:** *Learn about objects, classes, structures, and unions.*

- Validator Function
- Classes and Objects
- Discussion on OOP Features
- Constructors & Destructors
- Access Modifiers
- Constructor and Function Overloading
- C++ Standard Library

**2. Advanced: C++:** *Study the concepts of abstract classes and exception handling.*

- Dealing with Inheritance
- Abstract Classes and Interfaces
- Files and Streams
- Dynamic Memory Handling
- Exceptions Templates Advanced Featured , STL
- Namespaces
- C++ Template
- Miscellaneous Class Issue

