

C++ Programming for Beginners

The C++ Programming for Beginners in Hindi course is designed to introduce you to the fundamentals of C++ programming in an accessible way. Delivered entirely in Hindi, this course covers essential topics such as variables, data types, functions, control structures, and object-oriented programming.

Beginner Module

- Introduction to C
- C program compilation process
- Constants & Variable types
- C expression and operators
- Formatted and Unformatted I/O functions
- Format Specifier
- Conditional statements
- Control loops
- Preprocessor
- Arrays
- Strings
- Pointers
- Dynamic Memory Allocation - (malloc, calloc & free)
- OOP Concepts
- Introduction to C++
- Creation of class and objects
- Access specifiers
- Use of "this" pointer
- Array of Objects

Intermediate Module

- Passing Object as Argument
- Constructor
- Constructor Overloading

- Dynamic Memory Allocation (new & delete)
- Destructor
- Reference Variable & Reference Object
- Call by Reference
- Copy Constructor
- Static Variable and Static Method
- Operator Overloading
- Friend function
- Various types of Operators to be overloaded
- Overloading Operator with Friend Function

Advance Module

- Introduction to inheritance
- Types of inheritance & Implementation of inheritance
- Virtual Base Class
- Aggregation
- Composition
- Method Overriding
- Virtual function
- Abstract Class
- Using try, throw and catch
- Catching exception
- Handling exception
- Creating a file
- Navigating into the file
- Modifying the content in the file

Expert Module

- Function Template
- Class Template
- Class Template with Multiple Parameter
- Inheriting a template class
- Partially Special Template class
- Fully Special Template class
- What is STL
- What is Container
- Vector
- Deque

- List
- Stack
- Priority Queue
- Set
- String
- Namespace

- **After this Course, You will be Able to**

- Understand and apply the fundamentals of C++ programming.
- Write efficient code for software applications across various platforms.
- Implement object-oriented programming concepts in C++.
- Manage memory and optimize code for better performance.
- Utilize C++ standard libraries to perform common programming tasks.
- Develop C++ applications with confidence, from small programs to larger software projects.

All You Need to Start this Course

- No prior programming experience is required.
- A computer with internet access for hands-on practice.
- A desire to learn C++ programming in Hindi.