

C++ Programming



e-Learning Course

Unlock the power of C++ programming, mastering fundamental concepts, advanced techniques, and best practices to build efficient, scalable applications!!

Zetlan Technologies

Help Desk: +91 8680961847

www.zetlantech.com

COURSE MODULES

Introduction to C++

- Object-Oriented Fundamentals
 - Programming Paradigms
 - Conquering Complexity
- C++ Basics
 - Built-in Types, Arrays and Pointers
 - Comments, Keywords, I/O Streams
 - Built-in Operators and Control Constructs
 - Dynamic Free Store Operators
- C++ Functions
 - Definition and Prototypes
 - Inline Functions
- Structures and References

Classes and Objects

- Encapsulation
 - Data Members, Member Functions
 - Private and Public
- Constructors and Destructors
 - Default Arguments
 - Storage Allocation and Deallocation
 - this Pointer
 - Copy Constructors

Overloading

- Overloading Functions
- Overloading Operators
 - Unary and Binary Operators
 - Initialization vs. Assignment
 - Stream Input and Output

Polymorphic Programming

- Inheritance
 - Public Inheritance and Subtyping
 - Base and Derived Classes
 - Constructors and Destructors
 - Base Class Initialization
 - Using Protected keyword
- Virtual Functions
 - Base Class Pointers and References
- Dynamic Binding
 - Abstract Base Classes
 - Pure Virtual Functions
 - Virtual Destructors

Code Reuse in C++

- Containment
 - Objects as Data Members
 - Member Initialization
- Private Inheritance
 - Base and Derived Relationship
 - Access Declarations

Designing with C++

- Templates
- Template Functions
- Template Classes
- Exceptions
- try, catch, throw
- Exception Hierarchies

