

Certification In C++ Language Course

Course Content

INTRODUCTION

- * C++ Characteristics
- * Object-Oriented Terminology
- * Polymorphism
- * Object-Oriented Paradigm
- * Abstract Data Types
- * I/O Services
- * Standard Template Library
- * Standards Compliance

FUNCTIONS &POINTERS

- * Functions: Declaration And Definition
- * Variables: Definition, Declaration, And Scope
- * Variables: Dynamic Creation And Derived Data
- * Arrays And Strings In C++
- * Qualifiers

CLASSES IN C++

- * Defining Classes In C++
- * Classes And Encapsulation
- * Member Functions
- * Instantiating And Using Classes
- * Using Constructors
- * Multiple Constructors And Initialization Lists
- * Using Destructors To Destroy Instances
- * Friendship

OPERATOR OVERLOADING

- * Operator Overloading
- * Working With Overloaded Operator Methods

INITIALIZATION &ASSIGNMENT

- * Initialization Vs. Assignment

- * The Copy Constructor
- * Assigning Values
- * Specialized Constructors And Methods
- * Constant And Static Class Members
- * Storage Management
- * Memory Allocation
- * Dynamic Allocation: New And Delete

INHERITANCE

- * Overview Of Inheritance
- * Defining Base And Derived Classes
- * Constructor And Destructor Calls

POLYMORPHISM

- * Overview Of Polymorphism
- * Function Overloading
- * Function Over Writing

INPUT & OUTPUT

- * Standard Streams
- * Manipulators
- * Unformatted Input And Output
- * File Input And Output

EXCEPTIONS

- * Exceptions
- * Inheritance And Exceptions
- * Exception Hierarchies
- * Inside An Exception Handler