C++ Programming Course Syllabus

Introduction to C++ Programming
- Overview of C++ language
- Object-oriented programming (OOP) concepts
- Setting up the development environment (IDEs, compilers)
- Basic structure of a C++ program
- Data types, variables, and constants in C++

Control Flow and Decision Making in C++
- Conditional statements (if, else, switch)
- Looping constructs (while, for, do-while)
- Break and continue statements

Functions and Modular Programming in C++
- Function definition and declaration
- Parameters and return values
- Scope and lifetime of variables
- Function overloading and templates
- Recursion and its applications in C++

Arrays and Strings
- Arrays: declaration, initialization, and manipulation
- Strings and string functions

Exception Handling
- Overview of exceptions and error handling
- Need for exception handling in programming
- The role of try, catch, and throw statements
- Basics of the exception handling mechanism in C++

Final Course Outcomes
- Hands on experience with real time projects
- Industry Recognized Certificate
- Placement Assistance