



Param computers

Empowering Minds, Transforming Futures

Mastering C Programming

This course serves as an in-depth introduction to the fundamentals of programming in the C language. With the ever-increasing demand for skilled programmers in the tech industry, mastering C programming can provide a solid foundation for various software development roles. Participants will delve into the principles of C programming, learn how to write efficient code, and understand the importance of this language in developing robust software applications.

Skills you'll gain:

- Proficiency in C language syntax and semantics
- Ability to develop C programs from scratch
- Debugging and troubleshooting skills for C programs
- Problem-solving and logical thinking capabilities

Detailed Course Outline:

Module 1: Introduction to C Programming

- Overview of C language and its importance
- Setting up the development environment
- Basic programming concepts and structure

Module 2: Data Types and Variables

- Different data types in C
- Variable declaration, initialization, and scope
- Operators and expressions in C

Module 3: Control Flow and Decision Making

- Conditional statements (if, else if, else)
- Loops (while, for, do-while)
- Switch statements and decision-making constructs

Module 4: Functions and Modular Programming

- Declaring and defining functions

- Scope of variables in functions
- Recursive functions and function prototypes

Module 5: Arrays and Strings

- Declaring and initializing arrays
- Manipulating and traversing arrays
- String handling and standard library functions

Module 6: Pointers and Memory Management

- Understanding pointers and their uses
- Pointers and arrays relationship
- Dynamic memory allocation and deallocation in C

Module 7: Structures and Unions

- Defining structures and unions
- Accessing structure members
- Operations on structures and unions

Module 8: File Handling and Preprocessor Directives

- Working with files in C
- Preprocessor directives and their applications
- Header files and macro definitions

Course Title : Certificate in C Programming Language

Course Duration : 3 Months (Min. as per student's performance)

Course Fee : Rs. 3999/-