C Programming Certification Course



About Ecorporate Trainings

Ecorporate Trainings is designed to empower professionals with flexible, engaging, and personalised training solutions that drive career growth and organisational success.

We offer a learner-centric experience that allows employees to access a rich repository of courses and resources anytime, anywhere, on any device. Our platform features intuitive navigation, clear progress tracking, and interactive content tailored to diverse learning styles and proficiency levels.

About the Course

Ecorporate Trainings' C programming certification course is curated by industry experts to equip you with the skills necessary to design and develop robust applications and softwares. This C programming course is completely hands-on and you will get acquainted with core topics such as variables, data types, functions, operators, control flow statements, Arrays, and get familiar with advanced topics such as user-defined data types, pointers and memory allocation with industry use cases. Enroll in this C programming online training to become a certified professional.



C Programming Certification Course Curriculum

Basics of C Language and Flow Control

Topics:

- First C program.
- Functions
- Datatypes
- Control Flow
- Operators
- Number System
- Primitive and Non Primitive data types
- Working with Variables
- Constants
- Expression
- · Conditional branching
- Looping
- Memory Layout



Concepts of Array Memory and User-defined Datatypes

Topics:

- Arrays
- Declaration of an Array
- Initialisation of an Array



- Accessing Array Elements
- Memory Requirement
- Storage Allocation
- Structures
- Definition and Accessing a structure
- Unions
- How to use Union
- Bit Fields
- How to use Bit Fields

Understanding Functions in C

Topics:

- Functions
- Why do we need Functions?
- Definition and Declaration of function
- Argument vs Parameters
- Function with No Return Values and No Arguments
- Function with Return Values and No Arguments
- Function with Arguments and No Return Values
- Function with Arguments and Single Return Value
- Function with Arguments and Multiple Return Values
- Calling a Function
- Types of Function Calls Overview of Basics
- Call by Value
- Inline functions
- Re-entrant functions
- Recursive functions
- Stack frame of a C Function



C Code Organisation And Optimisation

Topics:

- C Coding Style
- C Naming Conventions
- C Header Files
- Compiler Options
- Linker Options
- C Libraries
- C Code Management

Understanding Pointers In C And Memory Allocation

Topics:

- What is a Pointer
- Declaration of pointers in C
- Initialization of pointers in C
- Assignment of C pointer values
- Pointer operators
- Arithmetic operations on pointers
- Pointers vs Arrays
- Passing pointers to a function
- Returning pointers from a function
- Static Memory Vs Dynamic Memory
- Allocation of Dynamic memory
- Freeing Memory allocated dynamically
- Linked Lists using Pointers in C
- Vectors, and how to build them using Arrays and Linked Lists with Pointers

C Programming Certification Course Projects

What are the system requirements for our C Certification Training?

For this course you would need a system with an Intel i3 processor or above, a minimum of 3GB RAM (4GB recommended), and an operating system that can be 32 bit or 64 bit. In addition, you require a browser and a text editor.

How will I execute the practicals?

You will require a C Integrated Development Environment to execute the practicals.

Which practicals will be a part of this C Certification Course?

Following practicals will be a part of this C Certification Course:

- Storing elements using arrays in C
- Using operators to make comparisons
- Using conditional statements to make decisions
- Executing code repeatedly using looping statements
- Building reusable code using C functions
- Passing arguments to C functions on Stack
- Combining data of different types using structures and union
- Initializing and declaring pointers
- Implementing arithmetic operations using pointers
- Freeing memory allocated dynamically
- Implementing linked list using pointers



Industry-recognized Certificate

Upon successful completion of the course, you will receive an industry-recognised certificate of completion from Ecorporate Trainings.



Ask your queries to our experts!

Ecorporate Trainings course counsellors and learner support advisors are available 24×7 to help you with your learning needs.

Call us on 9663241204!

or

E-mail us on ecorporatetrainings@gmail.com!



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