

# C Programming Program

#### Master the Language that Powers the Foundations of Computing.

C is the mother of modern programming languages—known for its speed, efficiency, and control over hardware. It is the backbone of system software, embedded systems, operating systems, and more.

At Certed Technologies, our C Programming Program is carefully designed to provide a rock-solid foundation in procedural programming, data structures, memory management, and logic building—skills essential for every software developer.



### 🌍 Why C? Why Now?

C remains one of the most powerful and relevant languages in both academia and industry. Whether you're preparing for placements, mastering Data Structures, or entering Embedded Systems and IoT, C is an essential tool.

#### Why C still matters in 2025:

- Core to Operating Systems, Device Drivers, and Embedded Devices
- Teaches fundamentals of memory, pointers, and logic—critical for any language
- Forms the base for learning C++, Java, Python, and more
- Frequently tested in coding rounds and technical interviews



### Learn from Experienced C Programmers

Our trainers are software engineers, system programmers, and educators with hands-on experience in C-based application development, embedded systems, and academic mentoring. The program is structured for conceptual clarity, hands-on coding, and application building.

# Program Highlights

Feature Details

**Duration** 1.5 Months / 45–60 Hours

**Delivery Mode** Hybrid (Online + Offline)

**Tools Covered** GCC, Turbo C, Code::Blocks, Visual Studio Code

**Project Work** 3 Mini Projects + 1 Capstone Project

**Certifications** Certed Technologies Certificate + C Proficiency Badge

Career Support Placement Test Prep, Coding Interview Support, Resume

Review

# What You'll Learn

### Module 1: Introduction to C & Programming Basics

- History and Evolution of C
- Structure of a C Program
- Compiling and Executing C Code
- Basic Input/Output

### Module 2: Data Types, Variables, and Operators

- Keywords, Identifiers, Constants
- Primitive Data Types
- Arithmetic, Logical, Bitwise Operators
- Type Conversions

### Module 3: Control Structures & Loops

- Conditional Statements (if, if-else, switch)
- Looping: for, while, do-while
- break, continue, goto (use cases)

#### Module 4: Arrays, Strings, and Functions

- Single and Multi-Dimensional Arrays
- String Handling with <string.h>
- User-defined Functions
- Recursion and Scope

#### Module 5: Pointers and Dynamic Memory

- Introduction to Pointers
- Pointers and Arrays, Functions, Strings
- malloc, calloc, free, realloc
- Pointer Arithmetic and Applications

### Module 6: Structures, Unions & File Handling

- Defining Structures and Unions
- Nested Structures and Arrays of Structures
- File Operations: fopen, fread, fwrite, fclose
- Command Line Arguments

### Module 7: Capstone Project

Sample Projects:

- Student Record System
- o ATM Simulation Program
- o Mini File Encryption Tool

### Who Should Enroll?

- First-year to final-year Engineering/BCA/MCA students
- Aspirants preparing for campus placements or GATE/technical interviews
- Professionals entering Embedded Systems or System Programming
- Anyone looking to build strong programming logic and fundamentals

## Career Outcomes

This course lays the foundation for roles such as:

- System Programmer
- Embedded Developer
- Firmware Engineer
- Application Developer (C/C++)
- Competitive Programmer

#### **Relevant Industries:**

IT | Embedded Systems | Electronics | Aerospace | Automotive | IoT | Defense & Robotics



### **Tools & Platforms Covered**

# \chi Sample Project Ideas

- Library Management System
- Bank Management Console App
- Quiz Game in C
- File Compression Tool (Basic)
- Student Report Card Generator

### Certification

Earn a **Certed Technologies Certificate** and a **C Programming Proficiency Badge** showcasing your grasp of low-level programming and logic building.

# 📢 What Makes This Course Unique?

- Systematic from Basics to Advanced Concepts
- ✓ Practice-Oriented with Problem Solving Sessions
- Real Projects with File Handling and Pointers
- Excellent for Competitive Programming and Campus Prep
- Career Guidance for System and Embedded Roles

# To Upcoming Batch

Batch Start Date Mode Status

15 July 2025 Online Open

22 July 2025 Offline Few Seats

Left

05 August 2025 Hybrid Open

# Custom C Programming Training for Colleges & Corporates

#### Special tracks for:

- First-Year Engineering Orientation Programs
- Placement-Focused Bootcamps (C + DSA)
- Embedded Systems Developer Foundation
- Academic Labs & Coding Clubs

### Customization Options

- Add C + Data Structures Combo
- Include DSA Problem Sets
- Use Linux Environment or Embedded Simulators
- Mock Coding Rounds + Assessments

# **L** Talk to an Advisor

Email: support@certedtechnologies.com

Call/WhatsApp: +91-8920158923 | +91-9009015026

# Ready to Master the Language Behind the Machines?

"C is not just a language—it's the blueprint for understanding how computers work." Start your programming journey with the most fundamental, efficient, and versatile language today.

[ reference [ Proof of the content o

[ Request a Callback]

# ? Frequently Asked Questions (FAQs)

#### 1. Is this course beginner-friendly?

Yes. It starts from absolute basics and gradually builds toward advanced topics.

#### 2. Is C still relevant in modern tech?

Absolutely! It's widely used in embedded systems, OS development, robotics, and more.

#### 3. Can I take this alongside Python or Java?

Yes! In fact, learning C sharpens your logic and boosts understanding of other languages.

#### 4. Will this help in campus placements?

Definitely. C is a core part of most placement coding tests and technical interviews.

#### 5. Do I need to know Data Structures before taking this?

Not at all. This course prepares you with all required fundamentals.