

➤ Course description

C programming language developed by AT & T's Bell Laboratories of USA in 1972. C is simple, reliable and no other programming language beats C in performance and speed of execution. C is used in programming desktop applications, compilers, and even hardware devices. Operating system like windows and UNIX is still written in C. C is one of the most important of all programming languages. Without learning C programming, it becomes difficult to learn other language like C++, Java, and PHP etc. This course will teach you fundamentals of C programming from ground up. By the end of this course you will have a deep understanding of the C Programming language.

➤ Who Should Attend :

This is perfect course for beginners who is new to programming and have never coded before. With this course you can learn fundamentals of C programming.

➤ Beginners, who are new to programming.

Engineering college student (1st year student for first year exams)

Preparing for Job/Placement

BCA/MCA student

Undergraduates/Diploma

➤ What will you Learn:

| Class Days | Details Topic Covered |
|------------|---|
| Day 1 | <u>Basics Of C Programming Language.</u> How to write Programs in C. Symbolic Constants , Variables and Arithmetic Expressions C Keywords, C Data Types, Structure of a Simple Program. |
| Day 2 - 3 | <u>Types, Operators and Expressions....</u> Variable Names, Data Types and Sizes, Constants, Arithmetic Operators, Relational and Logical Operators, Type Conversions, Increment and Decrement Operators, Bitwise Operators, Assignment Operators and Expressions, Conditional Expressions, Precedence and Order of Evaluation |
| Day 4 - 5 | <u>Functions and Program Structure....</u> Basics of Functions, Functions Returning Non-integers, External Variables, Scope Rules, Header Files, Static Variables, Register Variables, The C Pre-processor, File Inclusion, Macro Substitution, Conditional Inclusion. |
| Day 6 - 9 | Recursion and Stack |

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| | <p><u>Pointers and Arrays</u></p> <p>Pointers and Addresses, Pointers and Function Arguments, Pointers and Arrays, Address Arithmetic, Character Pointers and Functions, Pointer Arrays, Pointers to Pointers, Multi-dimensional Arrays, Initialization of Pointer Arrays, Pointers vs. Multi-dimensional Arrays Command-line Arguments, Pointers to Functions, Complicated Declarations, Pointers and Strings. Array of Pointers to Strings, Limitation of Array of Pointers to Strings.</p> <p><u>Doubt Clearing Class</u></p> |
| Day 10 | <p><u>Structures</u></p> <p>Basics of Structures, Structures and Functions, Arrays of Structures, Pointers to Structures, Self-referential Structures, Type def, Unions, Bit-fields</p> |
| Day 11 - 12 | <p><u>File Input/output</u></p> <p>Data Organization , File Operations, Opening a File, Reading from a File, Trouble in Opening a File, Closing the File, Counting Characters, Tabs, Spaces, A File-copy Program, Writing to a File, File Opening Modes, String (line) I/O in Files, Record I/O in Files, Text Files and Binary Files, Low Level Disk I/O, A Low Level File-copy Program</p> |
| Day – 13 | <u>Doubt Clearing Class</u> |
| Day – 14 | <u>Real time Project Exposure Overview</u> |