





Placement Training Course Details

Program: Higher Level C Programing Skills







Course Structure

Computer programming is important today because so much of our world is automated. Humans need to be able to control the interaction between people and machines. Since computers and machines are able to do things so efficiently and accurately, we use computer programming to harness that computing power

Importance of C

- 1. C is robust language and has rich set of built-in functions, data types and operators which can be used to write any complex program.
- 2. Program written in C are efficient due to availability of several data types and operators.
- 3. C has the capabilities of an assembly language (low level features) with the feature of high level language so it is well suited for writing both system software and application software.
- 4. C is highly portable language i.e. code written in one machine can be moved to other which is very important and powerful feature.
- 5. C supports low level features like bit level programming and direct access to memory using pointer which is very useful for managing resource efficiently.
- 6. C has high level constructs and it is more user friendly as its syntaxes approaches to English like language.

a. Objectives:

- 1. To develop programming Skills catering to the industries
- **2.** To develop effective program solving ability in students.

Course Details:

SL.No.	Course	Course Code	Total Training Hours/Semester
1	Higher Level C Programming Skills	ATME_CCP_01	36 Hours/Semester







COURSE MODULE

Course Code	Course Title	Prerequisite	Contact Hours/Week		Number of Hours/Semester	
			L1+L2	A		
ATME_CCP_01	Higher Level C Programming Skills	• C programming Fundamentals	17 + 14	5	L1-Lecture L2: Lab A-Assessment 36 Hours/Semester	
Objectives	To develop programming Skills catering to the industries 2. To develop effective program solving ability in students during recruitment					

Topics to be Covered

Module-1: Introduction, Installing required software, Basic Concepts, starting to write your code [2 Hours]

Assessment:1 Hour

Module-2: Variables and Data types, Operators, Control flow [5Hours]

Assessment:1 Hour

Module-3: Arrays, Functions, Character strings, Debugging [5 Hours]

Assessment:1 Hour

Module-4: Structures, Unions, Pointers, File I/O, Standard C library [5 Hours]

Assessment:1 Hour

Module-5: Company specific Programs, MCQ questions, Find the error: Lab activity [14 Hours]

Assessment:1 Hour

Reference Books

- 1. C Programming Absolute Beginner's Guide is a book written by Greg Perry and Dean Miller.
- 2. The C Programming Language (2nd Edition) written by Brain W. Kernighan
- 3. Head First C written by Griffiths David provides you in-depth knowledge about the C language.
- 4. C Programming in easy steps 5th edition book
- 5. Expert C programming is a book written by Peter Van Der Linden is a second book which offers many advanced tips and tricks
- 6. The C Programming Language 2nd Edition. This book is written by Kernighan for Advanced C programmer

Course Outcomes At the end of the course the student will be able to:

- 1. To solve complex programs during recruitment
- 2. To debug and solve programs using c language.

Note:

- 1. Each student to be evaluated for a Total of 50 Marks.
- 2. Each Module Assessment is for 50 Marks which shall be scaled down to 10Marks.