



## MSME-Tool Room, Guwahati

Tool Room & Training Centre, Guwahati

### Course Time Table

SUBJECT: C Programming

DURATION: 2 weeks

PER DAY: 3 hrs

OBJECTIVE:

**At the end of Session Participants Should Know:**

\* Creation of Structure oriented programs with C classes.

\* learn how to design and program in C.

Day	Course Content
Day 1	<ul style="list-style-type: none"><li>✓ Online software installation guidance with self-introduction and interaction.</li><li>✓ Software installation guidance.</li><li>✓ Introduction to TRTC.</li><li>✓ Introduction to C</li><li>✓ How to write &amp; run a C program</li><li>✓ Statements &amp; Comments</li></ul>
Day 2	<ul style="list-style-type: none"><li>✓ Characters set in C</li><li>✓ Tokens</li><li>✓ Identifier</li><li>✓ Keywords</li><li>✓ Constants</li><li>✓ Indentation</li><li>✓ Variable</li><li>✓ Format Specifier</li><li>✓ Data types(number,string,list,tuple,set,dictionary)</li></ul>
Day 3	<ul style="list-style-type: none"><li>✓ Data types(number,string,list,tuple,set,dictionary)</li><li>✓ Practice Exercise</li><li>✓ Type casting, Type conversion</li><li>✓ Input and output Function</li></ul>
Day 4	<ul style="list-style-type: none"><li>✓ Operators in C – Arithmetic operator, Relational operator, Assignment operator, Logical operator, Bitwise operator, Identity operator, Increment and decrement operator, compound operator etc.</li><li>✓ Practice Exercise using Operators</li></ul>
Day 5	<ul style="list-style-type: none"><li>✓ Control Structures in C-Sequence, Selection &amp; Loop</li><li>✓ The If statement and its' related statement</li><li>✓ An example with if and it's related statement</li></ul>
Day 6	<ul style="list-style-type: none"><li>✓ The Switch Statement</li></ul>

	<ul style="list-style-type: none"> <li>✓ Practice exercise on Switch Statement</li> <li>✓ The for loop</li> <li>✓ The while loop</li> <li>✓ The range statement</li> <li>✓ Break &amp; Continue</li> <li>✓ Assert</li> <li>✓ Practice exercise on looping</li> </ul>
Day 7	<ul style="list-style-type: none"> <li>✓ The Do-while loop</li> <li>✓ Practice exercise on looping</li> </ul>
Day 8	<ul style="list-style-type: none"> <li>✓ Array in C</li> <li>✓ 1D-Array , sorting, searching, merging</li> <li>✓ 2D-Array, Array sum, Difference, multiplication</li> </ul>
Day 9	<ul style="list-style-type: none"> <li>✓ Practice Exercise</li> </ul>
Day 10	<ul style="list-style-type: none"> <li>✓ Practice Exercise</li> </ul>
Day 11	<ul style="list-style-type: none"> <li>✓ String Programming using string.h header file, string functions</li> <li>✓ User defined Function programming – function prototype, function invoking, function definition, local and global variables and Recursion</li> </ul>
Day 12	<ul style="list-style-type: none"> <li>✓ Structure and Union and programming using structure and union</li> <li>✓ Programming using pointer – definition of pointer, call by value vs call by reference, types of pointer, pointer operations, storage class, dynamic memory allocation using malloc(), calloc().</li> </ul>
Day 13	<ul style="list-style-type: none"> <li>✓ File Handling programming – text file, binary file, use of key words – FILE, fopen(), fprintf(), fscanf(), fclose()</li> <li>✓ Revision &amp; Practice</li> </ul>

N.B:

\*Classes & Demonstration will be conducted every day for a time period of two hour & doubt clear Session of one hour with all day online/on-call support.

\*Hard copy of Certificate will be send to Participant's address by post or it may also be collected from our Centre when situation get normalized.

\*Each trainee can avail a free one-week Internship (Practical/Project based) training at our Centre after this pandemic situation get normalized.

You may contact with coordinator for course related further information.

Course Coordinator: SudeepBasak

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