

TRACK 1 - MCA 2023 - Problem Solving Techniques - Training Plan Schedule

#SESSION	DATE	SESSION TOPIC	Timing	Duration (Hrs)
1	Wednesday, August 17, 2022	Introduction to Computers and Programming Writing your first program Variables, Operators and Expressions Variable declarations, more operators and precedence Input and Output Statements	6.30PM to 8.30PM	2
2	Thursday, August 18, 2022	Conditionals Loops	6.30PM to 8.30PM	2
3	Friday, August 19, 2022	Introduction to arrays Working with 1D arrays Find prime numbers Debugging demo Multi-dimensional arrays	6.30PM to 8.30PM	2
4	Saturday, August 20, 2022	Pointers More on pointers Arrays and pointer arithmetic	6.30PM to 8.30PM	2
5	Monday, August 22, 2022	Introduction to Strings More on Strings Introduction to functions More details on functions Arguments, variables and parameters	6.30PM to 8.30PM	2
6	Tuesday, August 23, 2022	Level 01 - GRADED LIVE CHALLENGE - WITH TUTOR MONITORNG	6.30PM to 8.30PM	2
7	Wednesday, August 24, 2022	Pass parameters by reference Recursive Functions C control structures, functional specification of programs	6.30PM to 8.30PM	2
8	Thursday, August 25, 2022	Complexity Analysis using Sum and Product Rule Complexity Analysis of Recursive Functions Algorithms and Powering Polynomial evaluation and multiplication	6.30PM to 8.30PM	2
9	Friday, August 26, 2022	Linear and Binary Search Analysis Analysis of minimum and maximum in an array Sorting I: Insertion, Merge Sorting II: Counting, Radix	6.30PM to 8.30PM	2
10	Saturday, August 27, 2022	Finding i-th smallest Structures More on Structures	6.30PM to 8.30PM	2
11	Monday, August 29, 2022	Using structures and pointers to structures Dynamic memory allocation Linked List	6.30PM to 8.30PM	2
12	Tuesday, August 30, 2022	Level 02 - GRADED LIVE CHALLENGE - WITH TUTOR MONITORNG	6.30PM to 8.30PM	2
13	Wednesday, August 31, 2022	Brief introduction to C++: Classes and objects Abstract Data Types More on ADT Stacks : Last In First Out Queues: First In First	6.30PM to 8.30PM	2
14	Thursday, September 1, 2022	Trees, Tree Traversal, Binary Search Heaps	6.30PM to 8.30PM	2
15	Friday, September 2, 2022	Greedy Algorithms, Graphs Representations and Matrix Chain Multiplication	6.30PM to 8.30PM	2
16	Saturday, September 3, 2022	Hash Tables, Graph Algorithms: Dijkstras Algorithm and Prims Algorithm	6.30PM to 8.30PM	2
17	Monday, September 5, 2022	Graph Traversals : BFS, DFS and Articulation Points File I/O Modular Programming	6.30PM to 8.30PM	2
18	Tuesday, September 6, 2022	Level 03 - GRADED LIVE CHALLENGE - WITH TUTOR MONITORNG	6.30PM to 8.30PM	2
			Total Hours	36 Hrs