

ADVANCED C



Introduction:

- What is a program?, What is a programming language?, Evolution of C language, Features of C, Structure of a C program, Compilation and execution?
- Keywords in C, constants, variables, data types, Comments in C, Format strings, escape sequences, Basic I/O instructions.

Operators:

Classification of operators

- Arithmetic operators
- Logical operators
- Increment/Decrement operators
- Conditional operator
- Relational operators
- Assignment operators
- Bitwise operators
- Other operators

Flow control instructions:

Decision Control Instructions

- If, if-else, if-else-if, nested if-else

Loop control instructions

- For loop, while loop, do while, use of break and continue

Selection instructions

- Switch

Functions

Arrays

Pointers

Strings

Structures and Unions

Storage classes and scoping

Files

Other Features

Preprocessor

8051 MICRO CONTROLLER

Introduction to Embedded systems

- What is Embedded System?
- Types of Embedded System
- Classifications of Embedded Systems
- Characteristics of an Embedded System
- Applications of embedded system



8051 (8-bit) microcontroller Architecture & Programming

- Block diagram and Pin description
- Ports
- Timers
- Serial communication
- Interrupts

Lab Sessions:

- Session 1: Software Introduction (Keil Micro vision), Projection Creation
- Session 2: Port programming
- Session 3: Timer programming
- Session 4: Serial Communication
- Session 5: Interrupts
- Session 6: Practice

89S52 Interfacing with

- Session 1: PCB Express Tool
- Session 2: Seven segment display
- Session 3: LED's
- Session 4: LCD (16*2)
- Session 5: Keypad (4*4)
- Session 6: LCD & Keypad
- Session 7: Keypad & Serial
- Session 8: ADC (0809)
- Session 9: DC Motor
- Session 10: Stepper Motor
- Session 11: Relay

89S52 Interfacing with Modules

Different Types of Modules, Features of Different Modules, and Uses of Different modules interface

- Session 1. RFID
- Session 2. GSM
- Session 3. GPS
- Session 4: Zigbee
- Session 5: Finger print
- Session 6: Voice Module

CERTIFIED IN ARM ARCHITECTURE

Contact: 9640648777

Duration: 45 days



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PRACTICAL PROJECTS

- RFID and Keypad based ATM security.
- GSM based electrical Device Control.
- GPS Data Logger
- Zigbee based wireless data communication system.
- GSM & GPS based Vehicle Tracking
- RFID based time and Attendance

ARM7 MICRO CONTROLLER

ARM (32-bit) Processor Architecture & Programming

Introduction to ARM7

- Introduction to ARM family
- LPC2148 features
- Block diagram and pin description
- Register set
- Ports
- Timers
- Serial communication
- Interrupts

Lab Sessions

- Session 1: Software Introduction (Keil Micro vision)
- Session 2: Port programming
- Session 3: Timer programming
- Session 4: Serial Communication
- Session 5: Interrupts
- Session 6: Practice

LPC2148 interfacing with Modules

- Session 1: Seven segment display
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LPC2148: Interfacing with Modules

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