

Short Term Courses – NIELIT

Certificate Course in Embedded System Designing 8051 & ARM/ Cortex Microcontroller

Objective of the Course:

To train engineering under-graduates on 8051 and ARM/ Cortex microcontrollers. Design new embedded systems using C- language programme and interfacing various peripherals.

Learning Outcomes:

After the end of the course the student will be able to understand the hardware interfacing of the peripherals to microcontrollers. Design new embedded systems using microcontrollers.

Expected Job Roles:

Embedded Programmer

Duration of the Course (in hours) 120 hrs

Appr. Fees (INR): Rs.16,000/-

Minimum Eligibility Criteria and pre-requisites, if any Diploma, Engineering Under graduates (Undergoing)

Outline of Course

S. No	Topic	Minimum No. of Hours
1.	Embedded C	8 hrs
2.	8051 Architecture	2 hrs
3.	8051 Peripherals & Interfacing	8 hrs
4.	ARM /Cortex architecture	6 hrs
5.	ARM /Cortex Peripherals & Interfacing	16 hrs
Theory / Lecture Hours:		40 hrs
Practical / Tutorial / Lecture Hours:		80 hrs (including project)
Total Hours:		120 hrs

Books recommended for reference and reading: The definite guide to the ARM Cortex- M3, second edition.

Group Code: EMBD **Group Name:** Embedded System

Course Code: CP01 **Course Name:** Certificate Course in Embedded System Designing 8051 & ARM/ Cortex Microcontroller