

ARM Based Embedded System Design

(Value Added course)

VAC Coordinator: **Prof. B.Abdul Rahim, HOD, Dept.of ECE**

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Course Structure:

Course	Class	No. of students	Duration	Starting Date
ARM Based Embedded System Design	IV B.Tech	60	3 hrs/week (Maximum of 30 hours)	10.07.2015

Prerequisite:

This course has no specific prerequisites. However some familiarities with the following are especially helpful.

- 8051 Architecture
- Digital signal Processing
- C and Assembly Language Programming

Course Objectives:

The goal of this course is to familiarize students with the concepts and practical skills required to successfully program embedded systems. After finishing the course, students should feel comfortable building their own projects using ARM.

Topics to be covered:

- Basics of microcontrollers and its applications
- Introduction to ARM

- Introduction to ccs and creating a project
 - What is code composer studio

- Workspaces and projects
- Building, debugging and watching variables, Break points
 - Understanding build options
 - Building and loading the project
 - Debug environment
- GPIO, Clock and Timers
- ADC, UART
- Flash writing, Character LCD