Report on Certificate Course on Embedded Systems

The department of ECE has organized "**A Four day Certificate course on Embedded Systems**" in association with **APSSDC, Amaravathi from 09.09.2018 to 12.09.2018**. III Year B.Tech ECE students are actively participated in this four day course.
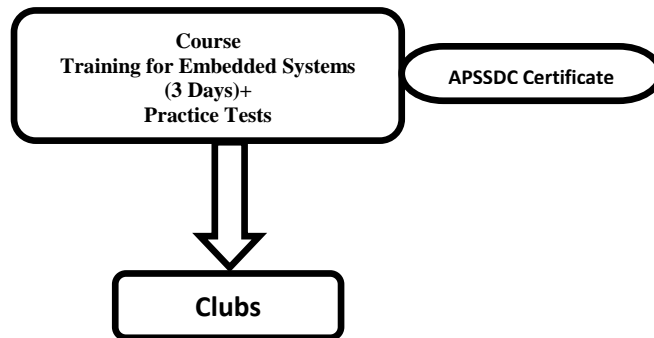
Resourse Persons from APSSDC, Amaravathi:

Mr.M.Umamaheswara Rao & Mr.D.Kalyan Kumar.

Embedded Systems Overview:

This Certificate course aims at imparting job-oriented training on Microcontroller architectures and concepts of Embedded C language from an industry perspective. By providing Hands-on workshop to students, they will get idea on hardware components. By using this knowledge they can develop simple real time projects. In this course students will use Embedded C for microcontroller.

Training workflow:

Course Training for Embedded Systems (3 Days)+ Practice Tests → **APSSDC Certificate**

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Clubs

Head of the department Dr.K.Murali and Resource person Mr. M. Umamaheswara Rao and Mr. D.Kalyan Kumar were participated in Inauguration of Certificate course.

First day: The resource persons have explained total overview of the above program. After that they concentrated on Introduction to Internet of Things & Embedded Systems. Also they explained about Introduction to 8051 family & Keil- IDE etc. The people who came from APSSDC, created awareness on Embedded C Programming, Proteus software, LED based Projects.

Second day: In 2nd day they explained about the working and demonstration of sample kits to the students. Students learned about Interfacing Button, seven segment display, 8051 interfacing with Relay, Motors with 8051 etc.

Third day: In third day students learned about LCD Interfacing With 8051 (in 8 bit Mode & 4-bit Mode), UART Interfacing With 8051 etc. In afternoon session students have done some basic projects with hardware & software tools.

Fourth day: Last day students enjoyed with hands-on session by doing simple projects & also clarified their doubts with resource persons on various topics.

Students were participated in hands on experience in Embedded systems certificate course.

Assessments/Practice test: To ensure that students have understood the content covered during the session; a brief test will be conducted on LMS after every training session. This will help the student understand where he/she needs to improve. **LMS** (Learning and Management System) is built from Open-Edx. It contains all course related content such as hand-outs, videos and practice sessions. APSSDC will provide individual student account and Student/college wise analytics are also available.

Resource persons, College staff, students from III year ECE was participated in valedictory session of a four day certificate course.