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A Five Days Faculty Development Program organized

by

Department of Electronics and Communication Engineering

In association with IEEE student chapter MITS

MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE

(UGC-AUTONOMOUS INSTITUTION)



Recent Trends in Embedded System and its applications



6th Feb 2023 to 10th Feb 2023



REGISTRATION DETAILS

Participant have to pay registration fee of RS. 250. (Registration fee includes access to all the technical and hand-on sessions as well as participation certificate)

Bank account details :

Account Name	: Madanapalle Institute of Technology and Science
Account Number	: 50200004213888
Name of the Bank	: HDFC Bank Ltd.
IFS Code	: HDFC0002435
Branch Name	: CTM Road, Madanapalle-517325

 No Cheque/ DD/ Cash payments are accepted.

Link: - <https://forms.gle/uCXq1t2q1yZMScLu8>

Objectives of FDP

The objective of this Faculty Development Program (FDP) on Embedded System is intended to give theoretical background and hands-on experience in hardware & software development for embedded system. The FDP will be customized for the training on microcontroller uses in embedded system. The FDP will provide hands-on practice on KEIL Simulator. Further, a brief overview of ARM Processor Cortex M3 will help for future Enhancement of performance of the embedded systems.

Highlights of FDP

The following topics will be covered:

- Embedded Computing and ARM Processors.
- Embedded Computing Platform Design.
- Processes and Operating Systems.
- System Design Techniques and Networks.
- Advanced Embedded Applications.

Resource Persons:

The program will be conducted by the academicians in the concerned field from IITs/NITs and Central Universities. Speakers from industries are also expected as part of the course.

About The Programme

This faculty development training program aims to provide exposure to various operating systems, processors, designing techniques and hands-on experience to the participants in Embedded and real time systems. The programme aims in providing the faculty members in depth knowledge of the course Embedded and Real Time Systems. Advanced applications will also be included in the FDP to provide knowledge on current industrial trends.

About Department of ECE

The Department of Electronics & Communication Engineering started functioning from the academic year 1998 for B. Tech course. The department has distinguished faculty, most of them holding Ph.D. degrees from eminent universities. The Department obtained UGC-Autonomous Status in the year 2014 and is running the program successfully meeting all the requirements. The B.Tech Program under Department of Electronics & Communication Engineering was accredited by the NBA of All India Council for Technical Education (AICTE). The mission of the Department is to enable the students to innovate and excel as eminent academicians, technocrats and entrepreneurs.

E Certificate

Certificate will be issued to only those participants having minimum of 80% attendance in the FDP with 60% marks in the Test. A Test will be conducted at the end of the FDP.

Feedback link of the FDP will be given at the end of the program. All the participants must submit the online feedback to avail the participation certificate.

Program Schedule

Date	10.00AM – 10.45AM	Session 1 11.00AM - 12.30PM	Session 2 2.00PM – 3.30PM	Session 3 3.30PM- 4.30PM
Day 1 6 th Feb 2023 Tuesday	Inauguration Session Ceremony	Fundamental of Embedded system and its Recent Trends.	Introduction to advanced Embedded Architecture	Stress management
Day 2 7 th Feb 2023 Wednesday	10.00AM – 11.30AM Session on Real Time Operating System	11.30AM- 1.00PM Comprehensive session on Memory Organization	2.00PM – 3.30PM Embedded software development tools and programming	3.30PM- 5.00PM Attainment of CO, PO and Continuous Quality Improvement
Day 3 8 th Feb 2023 Thursday	Basics of Sensor and transducer technology	Introduction to fabrication methods involved in sensor/transducer development Basic of MEMS	Development of smart instrumentation for sensor interfacing--	Outcome-based NBA Accreditation and SAR
Day 4 9 th Feb 2023 Thursday	Introduction to design and development of UAV	Design of the Structure And Designing of Quadcopter	Quad copter control Flow Stability & Control of Drones Algorithm of the control systems	Design of Outcome based Question Paper and CO & PO Mapping
Day 5 10 th Feb 2023 Friday	Basic concepts and features of the Internet of Things. Build projects utilizing the Arduino platform.	IoT Architecture and Protocols	ML & IoT Applications in Healthcare, Industries and Smart Cities	Mapping Outcomes, Assessment and Rubrics

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