About MBM Engineering College

M.B.M Engineering College is the first college in India established post-independence on 15 August 1951, by the Government of Rajasthan. MBM offers more than 25 courses of study in engineering leading to the degrees of Bachelor of Engineering, Master of Engineering, Doctor of Philosophy (Ph.D.), and Post Graduate Diploma.

ECE Department was started in 1972 and currently running 3 U.G. /B.E. programs (ECE, EEE, ECC), M.E. in Digital communication & PHD programs.

The college & department is committed to providing its students & teachers a quality education environment that combines rigorous academic study and developing a far more ambitious, integrated and influential environment that will best serve the nation.

Prologue

- The Internet of Things (IoT) refers to the ever-growing network of physical objects that feature an IP address for internet connectivity and the communication that occurs between these objects and other Internet-enabled devices and embedded systems.
- This is a 6-day Faculty Development program on familiarization with Raspberry PI, Python scripting language and applications of IoT in embedded systems.

Objective of FDP

This FDP is designed to meet the following objectives:

- To prepare faculty to be able to guide/train students for project and Lab based on IoT applications.
- To provide a bridge between the industry and academic institution to update their knowledge.
- To provide a platform for Faculty, Research Scholar, Engineers and Students to interact on various aspect of cutting edge technologies in IoT.
- To enhance faculty skills for academic growth and also make them to conductive research activity in the field of IoTs.

Course Contents

FDP will cover:

- Overview of IoT: Architecture and Protocols, such as: JSON, CoAP, XAMPP, RESTFULL, MQTT, AMQP, HTML5, WebSocket.
- Hands-on Training on MSP 430 Programming environment with IAR tool and setup.
- Embedded System sensor Interfacing design-MSP 430 Architecture/Pi3/Arduino Basics of Programming Raspberry Pi3.
- Interfacing with Sensors (Temp,Humidity, Gas and Accelerometer/PM2.5, PIR and Ultrasonic) & connecting with mobile apps.
- FPGA and ASIC Basics, HDL Programming Concepts, Implementation with Xilinx FPGA, running hardware in loop simulation, Writing complex Structures and Basic flavor of reconfiguration techniques.
- Emerging Applications in medical & agriculture area.
- Industrial internet of Things.
- Role of IoT in Smart Cities.

Course Outcomes

- This FDP is designed specially for the faculty members to acquire their skills in the IoT based platform and various cutting-edge technologies in this emerging area.
- FDP includes theory and Hands-on Practices.
- Facilitate insight to different research models & their application in teaching.
- To make the participants realize the importance of IoT and its applications in various fields as well as to demonstrate some demo projects on specific applications.
- Participants can learn to build their own IoT products for various applications, and it also enables them to convert their product ideas into a working prototype.
- The other part of course will enhance the real time design and implementation aspects of XILINX-FPGA/MATLAB/Modelsim Tools.
- Certificate of participation will be given.

Registration Form

TEQIP-III FDP on

"IoT Applications in Emerging Engineering"

08^{th}–13^{th} April, 2019

Name : ……...

Designation : ……

Department : ……

Institute/Organisation:……

……...

Qualification : ……

Address : ……

Mob No.: ……..

E-mail: ……

The above information provided is true and to the best of my knowledge. I agree to abide by the rules and regulation of the program.

Signature of Candidate

Resource Person

- Dr. Kota Solomon Raju, Senior Principal Scientist, CSIR-CEERI, Pilani.
- Dr. S. C. Bose, Chief Scientist, CSIR-CEERI, Pilani.
- Dr. K. J. Rangra, Chief Scientist, CSIR-CEERI, Pilani.
- Dr. Sunil Joshi, Professor & Head, ECE Dept., CTAE, Udaipur.
- Mr. Basavaraj Hooli, Director, Graceful Growth Consulting (India) Pvt. Ltd., Pune.
- Mr. Pramod Kumar, Senior Scientist, CSIR-CEERI, Pilani.
- Mr. Gaurav Purohit, Scientist, CSIR-CEERI, Pilani

Dates to Remember

- Last Date of Registration: 6th April, 2019.
- Course duration: 08th –13th April, 2019.

Eligibility Criteria

- Faculties of TEQIP Engineering Institutions.
- Ph.D. Scholars in area of Electronics/Electrical/Computer/IT.
- Seats limited (up to 35), on first come first served basis. However, department reserves right to increase or reduce seats.

Registration

- Free, however NO TA/DA or other expenses will be provided to participants.

Contact for Registration
Dr. Raju Patel, 9672996466
Dr. Mukesh Kumar Gupta, 9509712083
Department of Electronics and Communication Engg.
MBM Engineering College,
JNV University, Jodhpur
E-mail:ecembmfdp@gmail.com

Committees

CHIEF PATRON
Prof. G. S. Chouhan
Hon'ble Vice Chancellor, JNV University, Jodhpur

Patron
Prof. S.K. Ojha, Dean
Prof. S.K. Parihar, Coordinator TEQIP

Program Chair
Prof. Rajesh Bhadada, Prof. & Head (ECE)

Coordinator
Prof. Rajendra Bhansali, Associate Professor (ECE)
Dr. Raju Patel, Assistant Professor (ECE)

Co-Coordinator
Dr. Mukesh Kumar Gupta, Assistant Professor (ECE)
Prof. K. K. Arora (ECE)

Program Advisors
Prof. Rajat Bhagwat, Professor
Prof. V.S. Chouhan, Professor
Prof. Anil Gupta, Professor
Prof. Renu Bhardwaj, Associate Professor
Prof. S. R. Meena, Associate Professor
Prof. Anil Vyas, Associate Professor

Organizing Committee
Kapil Parihar, Assistant Professor
Naginder Singh, Assistant Professor
Kayenat Shahid, Assistant Professor
Vinod Netad, Assistant Professor
T. S. Manu, Assistant Professor
Er. M.K. Gaur
S. K. Joshi
G.P. Pandey
Vijay Pandey
Pulkit Arora

Note: The registration may be done online on:
https://goo.gl/forms/KnFqxTrM60Ax21ui2

TEQIP-III

One Week Faculty Development Program On

IoT Applications in Emerging Engineering

08th – 13th April, 2019

Organized by

Dept. of Electronics and Communication
MBM Engineering College
JNV University, Jodhpur

In Collaboration with:

CSIR-CEERI, Pilani