



## ABOUT MNIT, JAIPUR

The college was established in 1963 with the name as Malaviya Regional Engineering College, Jaipur as a joint venture of the Government of India and the Government of Rajasthan, Subsequently; on June 26, 2002 the college has been given the status of National Institute of Technology and on 15 August 2007, Proclaimed Institute of National Importance through Act of Parliament. The Institute is fully funded by Ministry of Human Resource Development (MHRD), Government of India. More than 12,000 students have already been graduated since its establishment.

Our Campus Extending into an area of over 317 acres of lush greenery, the campus of the Institute is imaginatively laid-out with a picturesque landscape. It presents a spectacle of harmony in modern architecture, and natural beauty which enthralls and inspires.

## ABOUT COURSE

IoT is a wide and rapidly developing area with expected strong and growing implications for the industry. Numerous IoT research and application projects have been done by universities or in joint industry-university consortia in recent years. However an important question is on value creation for industry. IoT applications in the sense of this industry workshop are solutions using IoT technologies to improve industrial manufacturing processes, enable new and efficient ways to do operate production plants, create new service or supervision means for industrial installations, offer an optimized infrastructure, reduce operational cost or improve human safety in industrial areas. From an industry point of view value creation from IoT applications and sustainability are essential. How these problems will be addressed and solved will influence the use of IoT technologies in the industry, on a larger scale, in the coming years. The workshops intends to bring together experts from around the world to discuss and stimulate ideas.

## AGENDA

### DAY I.....

- Introduction to Embedded IOT System
- Developer Suit Overview, OS installation and Architecture
- Introduction to Python and I-o Interfacing
- Interfacing sensors and motor

### DAY II.....

- Introduction to IOT
- Impact of IOT
- Designing web page Basic of HTML and PHP
- Controlling Devices and Reading input Status from sensors using webpage
- Creating text to speech Using python
- Creating applications with weather updates

### DAY III.....

- Introduction to API and web services
- Designing SMS API and security OTP app
- Matlab simulink & interfacing sensors
- Camera Interfacing using sensors
- Basic SMTP protocol and Mail server and
- Sending Mail (Security application) mail based Automation

### DAY IV.....

- Introduction to OpenCV
- Basic Image processing Techniques(read, write, show image & image properties)
- Image Thresholding , Erosion & Dilation
- Finding Contours in Images
- Color identifying, tracking and drawing to create a sample digital art

### DAY V.....

- Importance of Image Processing In Security and artificial Intelligence
- Watermarking to images (Logo and Text)
- Face Detection and Matching
- Object detection and implementation with IOT

## Venue Contact Details and Date



## Malaviya National Institute of Technology, Jaipur

28.01.2017 to 01.02.2017

## Organizing Committee

### Patron

Prof. Dr. Uday Kumar R Y, Director

### E & ICT Academy Chair

Prof. V. Sinha

### E & ICT Chief Investigator

Prof. Vineet Sahula

### Head of the Departments

Dr.K.K.Sharma

Dr. Vikas Gupta

## Course Coordinators

Dr. Periasamy C

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## Contact Details

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## How to apply

Participants can apply through the following <https://goo.gl/forms/TGtokidya43ZVmr92>  
You may request the registration link via email or visit MNIT website (upcoming events).