

## HOW TO APPLY/ REGISTRATION

DateType	Date
Registration start date	01/06/2024
Last date of Registration	06/06/2024
Display of shortlisted candidates	07/06/2024
Last date for deposition of fees	09/06/2024
Commencement of training program	10/06/2024

The fee will be paid through online mode. The registration fee will include registration kit, high tea. The selection is on a first come first served basis as per the availability of seats. Registration charges are non refundable for selected participants. Online registration can be done in following three steps :

Step 1: Register by going through the following link or by scanning QR code given on next page.

Step 2: Fill the google form and upload the required documents.

Step 3: Submit the google form.

**Note:** Separate charge as per university norms will be applicable if any student is allowed for hostel accommodation during internship period.

### Eligibility:

Students of various institutions comprising of Diploma/ B.Tech / M.Tech / MSc to register.

### Account Details.

**Account No.:** 33542824744

**IFSC Code :** SBIN0002578

**Account Name:** Madan Mohan Malaviya University of Technology.

**Bank Name:** State Bank of India

## COURSE FEE

Fee Type	Registration Fee
For Other University / Institute Student	INR 3,000/-
For MMMUT Student	INR 3,000/-

## AWARDS

The participants who have completed a minimum of 3 projects and have a minimum of 75% attendance will be given "Successful Completion Certificate"

The best project from each domain from (IoT, Drone, 3D Printing, Ansys and Artificial Intelligence) will be awarded.

## SPEAKERS / INSTRUCTORS

- Prof. S. K. Soni, ECED, MMMUT, Gorakhpur
- Dr. Sudhanshu Verma, ECED, MMMUT, Gorakhpur
- Mr. Gopi Raja , CEO & Founder , Fopple DroneTech Pvt. Ltd, Vijayawada Andhra Pradesh
- Mr. Manas Upadhyay, CEO & Founder D-Town Pvt. Ltd. Greater Noida
- Mr. Sumit Singh, MED, MMMUT, Gorakhpur
- Mr. Shivam Yadav, Former Student of MMMUT, Gorakhpur
- Mr. Vivek Shukla, Unilactic Enterprises, Mumbai
- Mr. Ankit Kumar, ECED, MMMUT, Gorakhpur

## REGISTER HERE

SCAN HERE



## CONTACT US

**Mr. Vishwajeet Singh (6005400925)**  
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**Mr. Ankit Kumar (6307193440)**  
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## Six-Week Summer Internship on IoT, Drone, 3D Printing, AI & Ansys Modelling and simulation

10 June to 19 July 2024

## Organised by



**IoT AND DRONE DESIGN LAB, DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**(NBA ACCREDITED)**

**MADAN MOHAN MALAVIYA UNIVERSITY OF TECHNOLOGY, GORAKHPUR (UP)**

### Patron

Prof. J. P. Saini  
Vice Chancellor  
MMMUT, Gorakhpur

### CHAIRMAN

Prof. S. K. Soni  
HOD, Electronics and Communication Engineering, MMMUT, Gorakhpur

### Principal Coordinator

Prof. S. K. Soni  
Electronics and Communication Engineering, MMMUT, Gorakhpur

### Co-Coordinator

Dr. Sudhanshu Verma  
Electronics and Communication Engineering, MMMUT, Gorakhpur



# ABOUT SCHEDULED EVENTS

## INTERNET OF THINGS (IoT)

1.	Introduction to IoT.
2.	IoT Hardware and Platforms.
3.	IoT Programming and connectivity.
4.	IoT Communication Protocols.
5.	Implementation of two Node MCUs to act in the access point mode and the station mode using MQTT protocol.
6.	Measurement of humidity & temperature of an open environment considering DHT11/SHT20 using Raspberry pi (Microprocessor) and representing the data using google-charts API.
7.	Wi-Fi based home automation using Node MCU (ESP8266) on Blynk platform.
8.	Development of security device using IR sensor and Node MCU using Blynk platform.
9.	Development of Master-Slave model using Arduino with Arduino as a Master (i) Node MCU as a Master.
10.	IoT-based Irrigation System using the ESP8266 Node MCU Module and DHT11 Sensor.

## DRONE

1.	Introduction to drone.
2.	Drone Hardware Components.
3.	Flight mechanics and control Systems.
4.	CFD Analysis of UAV.
5.	Aerodynamic Analysis of Propulsion System of UAV.
6.	Design and Development of Drone using NAZA flight controller and frame designed in 3D printing.
7.	Development of pre-guided path UAV (Drone) using Pixhawk flight controller.
8.	Developing the medical relief UAV using NAZA V2 flight controller to pick-&-drop First-Aid Box.
9.	Development of FPV Surveillance drone using Pixhawk flight controller.

## 3D PRINTING

1.	Introduction to 3D Design and CAD Tools.
2.	Design of Quad-Copter drone frame using fusion 360 software and 3D printer.
3.	Design of IoT Node Casing in 3D printer.
4.	lightweight FPV quadcopter.
5.	Design of 2D plotter using 3D printed parts.

## ARTIFICIAL INTELLIGENCE

1.	Introduction to AI and ML
2.	Overview of AI and ML
3.	Types of ML: Supervised, Unsupervised, Reinforcement
4.	Real-world Applications
5.	Python Basics and Key Libraries
6.	Python Fundamentals: Variables, Control Flow, Functions
7.	Machine Learning Algorithms
8.	Supervised Learning: Regression, Classification Unsupervised Learning: Clustering, Dimensionality Reduction
9.	Deep Learning: Convolutional neural networks
10.	Image Classification and Object Detection using CNNs.

## ANSYS

1.	Introduction to ANSYS.
2.	Simulation of Materials.
3.	Electronics simulation.
4.	Project on Ansys