



## SCAN THE QR CODE FOR REGISTRATION FORM



**For Making Course Fee Payment NEFT, details are as below:**

**Bank A/c Name:** MNIT Innovation and Incubation Centre

**A/c Number:** 676801700527

**Bank Name:** ICICI BANK, MNIT, Branch

**IFSC Code:** ICIC0006768

### **Accommodation:**

Limited accommodation may be arranged for the students in the Boys and Girls hostels on payment basis as per Institute norms.

### **Limited Seats:**

- Preference will be given on first come first serve basis only.
- Confirmation email shall be sent to the aspiring participants only after the receipt of payment

## ORGANISING COMMITTEE

### **PATRON:**

Prof. N. P. Padhy  
Director, MNIT Jaipur

### **Program Co-PATRON:**

Prof. Jyotirmay Mathur  
Head, MIIC

### **Program Convener:**

Dr. Monica Sharma  
Associate Dean - Incubation

### **Program Coordinator:**

Dr. Sanjay Gaur  
Senior Operation Manager, MIIC

### **Contact Person:**

Ms. Divya Pareek  
Senior Executive, MIIC MNIT Campus Jaipur  
**Mob.:** 7742983512

**Email:** miic@mnit.ac.in • **Website:** miic@mnit.ac.in



## MNIT INNOVATION AND INCUBATION CENTRE (MIIC)



**Announces:**

## Summer Internship Program (SIP) 2023



**Last Date of Registration - 13 May 2023**

**Date of Commencement**

01 June 2023 to 15 July 2023 (45 Days)

16 May 2023 to 15 July 2023 (60 Days)



**MALAVIYA NATIONAL INSTITUTE OF  
TECHNOLOGY, JAIPUR  
(RAJASTHAN) 302017**

## ABOUT MIIC

MNIT Innovation and Incubation Centre (MIIC) is established since 2016 at MNIT Jaipur, as a Technology Business Incubator (TBI) by Govt. of India to provide a platform for conceiving, realizing, promoting & nurturing knowledge-based Innovation & Entrepreneurship amongst students, innovators, and budding entrepreneurs from the state of Rajasthan. MIIC has a strong and vibrant footprint of 110 start-ups. Currently, 39 start-ups are incubating their ideas physically in MIIC, besides 9 associate start-ups and are working in various domains. MIIC has to date conducted more than 169 start-up programs and activities to address the practical and business concerns of the Rajasthan ecosystem stakeholders benefitting 12,500 plus participants.

## ABOUT PROGRAM

Summer Internship Program (SIP) is an integral part of B.Tech, M.Tech, and MBA curricula. SIP is a great opportunity to gain research experience, develop project management skills and enhance knowledge through real Industrial problems. The internship runs for 6-8 weeks through the summer. Academic supervisors allocate self-contained projects, spanning a broad range of subject areas and feeding directly into current research and teaching activities. During SIP, each student is assigned a project and is trained to handle various equipment and machines available in the laboratory. The programs are industry/project-based and address the fundamental understanding and the applications related to the specific domain.

## COURSE CONTENT

### Program – I

#### Unmanned Ariel Vehicle (Drone) Solid works & 3D Printing (UAV) In Association with ZeroGravity Aero Systems Pvt. Ltd.

**Module I** - Introduction • Fundamentals of physics • Basic Aeronautics • Air frame structure  
**Module II** - Basic electronics • Basic mechanics • Model building techniques • Drones rules and regulation  
**Module III** - Scales • Plan making • Auto CAD • Solid works  
**Module IV** - Corel draw • 3d Printing • Laser Cutting • Preparation of Flight Electronics  
**Module V** - Hot Wire Cutting • Balsa Building • Wing Construction  
**Module VI** - Fuselage Construction • Tail/Fin • Model Assembly • Electronics Installation  
**Module VII** - Simulator Training • Gliding Training • Circuiting Training  
**Module VIII** - Takeoff Training • Landing Training • Solo Flight  
**Eligibility: All branches of B.Tech. (Any Semester)**  
**Course Fees:15000/-**

### Program – II

#### Application of AI and ML in Healthcare (AAMIH)

##### In Association with Svaarogym Medical Devices Pvt. Ltd.

**Module I** Python Programming • Introduction to Python • Basic language syntax • Model Building • Data Science and Analysis • Data Visualization,  
**Module II** Basics of Machine Learning • Machine Learning Concepts  
**Module III:** User-Centered Medical Device Design • User Persona • Human Factors Design • Task Analysis/Empathy Maps  
**Module IV:** Internet of Things • Basics of IoT, Concepts and Components • Sensor Interfacing using Internet of Things (IoT) : Basic Implementation.  
**Module V:** Machine Learning Approaches • Regression analysis • Basics of Classifiers • Feature Selection and Reduction techniques • Model evaluation through performance parameters  
**Module VI** • Study of Clustering Algorithms, Advance Neural Networks • Introduction to NN • Deep neural Network: Case study in healthcare.  
**Module VII** • AI in healthcare Applications • Physiological signal processing for Healthcare (ECG, EMG, EEG etc.) • Mental Disorder detection & Diabetes prediction and detection  
**Module VIII** • Prediction of Coronary Artery Detection using Fundus Images • Intelligence Prosthetic Application • Brain Tumor detection  
**Eligibility: All branches of B.Tech. (Any Semester)**  
**Course Fees: Rs. 12000/-**

### Program – III

#### Design and Development of Electric Vehicle (DDEV)

##### In Association with Rishi Agastya Technologies Pvt. Ltd.

**Module I:** Presenting your Vehicle Development Strategy Practical Session: Introduction to Computer Aided Design  
**Module II:** Introduction to Chassis Statics & Dynamics Practical Session: Introduction to Parametric Modelling & Chassis Simulation  
**Module III:** Component-based Structure of an Electric Vehicle Practical Session: a. Battery modeling (Software Based) b. Battery Management System (Software Based)  
**Module IV:** Introduction to Transmission System, Control Module of an Electric Vehicle Practical Session: a. Using Excel Techniques to calculate the Top Speed and acceleration performance. b. Using Excel Techniques to calculate the Range of the vehicle.  
**Module V:** PCB Design  
**Eligibility: All branches of B.Tech. (Any Semester)**  
**Course Fees: Rs. 9000/-**

### Program – IV

#### Design Thinking for Entrepreneurship (DTE)

##### In Association with Entrepreneurship Experts of MIIC

**Module I**- Introduction to design thinking  
**Module II**- Introduction to Entrepreneurship; Entrepreneurial Process; Opportunity Identification  
**Module III**- Idea Generation and Evaluation  
**Module IV**- Developing Prototype, Minimum Viability Product  
**Module V**- Building the Team, Leadership, Business Plan/Business Models  
**Module VI**- Valuation of a new company, Finance, Funding, and Unit Cost Identification.  
**Module VII**- Sales & Marketing, Company Growth Acquisitions, and exit strategies.  
**Module VIII**- Intellectual Property and corporate law Real-Life Association and Learning with Start-ups / Organizations in Identified Areas.  
**Eligibility: Students of B.Tech/M.Tech/MBA.**  
**Course Fees:Rs. 9000/-**

### Program – V

#### Advanced Computational & Technical Skills (ACTS)

##### In Association with Tishitu Technology And Research Pvt. Ltd.

**Module I**- Machine learning models: Learn from their past computations, analyze available data, identify hidden patterns and adapt for new data such as Quantum Computing, Tuned Recommendation Engines.  
**Module II**- Artificial Intelligence: Design human-computer interaction/ intelligent machines such as Cortana, Siri, Alexa, and Eliza.  
**Module III**- Li-Fi communication: Futuristic and eco-friendly, high-speed secure VLC wireless communication by LED/lamp.  
**Module IV**- Augmented Reality: Superimposition of computer-generated images on real-world providing a composite view such as Google Glasses, AR Gaming, Green screen, Chroma keying, VFX.  
**Module V**- Internet Of Things: Interconnection of physical devices with cyber world/cloud computing Industry 4.0, Smart city/ agriculture/ healthcare, Remote bomb detonators, drones, surgery and military operations.  
**Module VI**- Embedded Systems: Embed an idea in a microcontroller and perform a real-world application found in various consumer, commercial, industrial and military electronic devices.  
**Module VII**- Robotics: Simulation of design, construction, operation, and control, sensory feedback, and information processing by ROS and MATLAB.  
**Eligibility: 3rd/4th Year B.Tech (C.S./IT/Electronics)**  
**Course Fees:Rs. 15000/-**