ORGANISING COMMITTEE

Patron
Prof. N. P. Padhy
Director, MNIT Jaipur

Program Co-Patron
Prof. Monica Sharma
Head & Secretary, MIIC

Program Convener
Prof. Amar Patnaik
Treasurer, MIIC

Program Coordinator
Dr. Sanjay Gaur
Senior Operations Manager, MIIC

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

SCAN THE QR CODE FOR REGISTRATION FORM

Accomodation:
Limited accomodation 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 fist serve basis only.

• Confirmation email shall be sent to the aspiring participants only after the receipt of payment

Contact Person
Mr. Dishanshu Chauhan, **Mob.: 8946879871**

MALAVIYA NATIONAL INSTITUTE OF TECHNOLOGY JAIPUR

MNIT INNOVATION AND INCUBATION CENTRE

Announces:

Summer Internship Program (SIP) 2025

Last Date of Registration
28-05-2025

Date of Commencement :
02-06-2025 (I Batch- For 60 days)
16-06-2025 (II Batch- For 15/45 days)

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

ABOUT MIIC

MNIT Innovation and Incubation Centre (MIIC) is established since 2016 at MNIT Jaipur, as a sector agnostic 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 **131** start-ups and currently **41** start-ups are their ideas physically in MIIC as incubatee and associate start-ups working in various domains. MIIC has to date conducted more than **244** start-up programs and activities to address the practical and business concerns of the Rajasthan ecosystem stakeholders, benefitting **24,000 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 15 days/ 45 days/ 60 days 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, students work on a project and are 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.

Experience certificate shall be provided for 15/45/60 days based on the participation of the candidate.

COURSE CONTENT

Program – I
Application of AI & ML in Healthcare (AAMIH)
(45DAYS/60DAYS)
In Association with Svaarogym Medical Devices Pvt. Ltd.

Module 1: Python • Introduction to Python • Basic language syntax • Model Building • Data Science and Analysis • Data Visualization

Module 2: Basics of Machine Learning • Machine Learning Concepts • Machine learning Models • Supervised Learning • Unsupervised Learning/Reinforcement learning • Deep Learning

Module 3: Internet of Things • Basics of IoT, Concepts and Components • Internet of Things (IoT) : Basic Implementation on open source • IoT in Healthcare: Challenges and Opportunities • Healthcare Cyber Physical System • Applications and Case study of Cyber Physical Systems in Healthcare

Module 4: User-Centered Medical Device Design • Introduction and Importance of User-Centered Design • Low & High Fidelity Modeling • User Persona • Human Factors Design • Task Analysis/Empathy Maps

Module 5: Data Analysis • Linear Regression • Naive Bays • SVM • PCA, NFM • Clustering

Module 6: Neural Networks • Introduction to NN • Deep neural Network: Case study in healthcare • Convolution Neural Network: Case study in healthcare • Recurrent Neural Network: Case Study in healthcare • Auto Encoders: Case study in healthcare

Module 7: Smart Healthcare Applications • Physiological signal processing for Healthcare (ECG, EMG, EEG etc.)• Smart Healthcare: Concepts and applications • Intelligent Healthcare applications • Embedded Intelligence System • Regulatory, Standardization, Risk Management, Ethics for Medical Devices.

Eligibility: 2nd / 3rd / 4th Year B.Tech / BCA / MCA

Course Fee: 8,000/- (For all modules)   Seats: 40

Basic Concept to Application in Machine Learning (BCAML)
(15 DAYS)

Module 1: Basics of Machine Learning and Python • Introduction to Python • Basic language syntax • Machine Learning Concepts • Supervised Learning • Unsupervised Learning & Reinforcement learning

Module 2: • Basics of IoT, Concepts and Components • Internet of Things (IoT) : Basic Implementation on open source • Physiological signal processing for Healthcare (ECG, EMG, EEG, etc.) • Smart Healthcare: Concepts and applications5Wearable Technologies and Applications

Eligibility: 01st Year B.Tech / BCA • Course Fee: 3000/- (For both modules) • Seats: 70

Program – II
Unmanned Ariel Vehicle (Drone) Solid works & 3D Printing (UAV)
(45DAYS/60DAYS)
In Association with Hogwarts School of Drones.

Module 1 : Introduction • Fundamentals of physics • Basic Aeronautics • Air frame structure

Module 2 – Basic electronics • Basic mechanics • Model building techniques • Drones rules and regulation

Module 3 – Scales • Plan making • Auto CAD • Solid works

Module 4 – Corel draw • 3d Printing • Laser Cutting • Preparation of Flight Electronics

Module 5 – Hot Wire Cutting • Balsa Building • Wing Construction

Module 6 – Fuselage Construction • Tail/Fin • Model Assembly • Electronics Installation

Module 7 – Simulator Training • Gliding Training • Circuiting Training

Module 8 – Takeoff Training • Landing Training • Solo Flight

Eligibility: All branches of B.Tech. (Any Semester) • Course Fee: 15000/- • Seats : 20

Program – III
Design and Development of Electric Vehicle (DDEV)
(45DAYS/60DAYS)
In Association with Rishi Agastya Technologies Pvt. Ltd.

Module 1: Presenting your Vehicle Development Strategy, Practical Session: Introduction to Computer Aided Design

Module 2: Introduction to Chassis Statics & Dynamics, Practical Session: Introduction to Parametric Modelling & Chassis Simulation

Module 3: Component based Structure of an Electric Vehicle, Practical Session: Battery modelling (Software Based), Battery Management System (Software Based)

Module 4: Introduction to Transmission System, Practical Session: Using Excel Techniques to calculate the Top Speed and acceleration performance, Using Excel Techniques to calculate the Range of the vehicle.

Module 5: Control Module of an Electric Vehicle

Module 6: PCB Design, Practical Session

Module 7: Introduction to the Suspension System

Module 8: Understanding the Suspension Dynamics, Practical Session

Module 9: Introduction to Steering System, Practical Session

Module 10: Understanding the concepts of Braking Dynamics

Module 11: Basic Structure Development, Practical Session

Module 12: Project Development and Testing

Eligibility: Any Branch of B.Tech. • Course Fee: 9,000/- (For all modules) • Seats : 25