



Indian Institute of Technology, Mandi

भारतीय प्रौद्योगिकी संस्थान, मंडी

PRAYAS 3.0

**1 Month Residential Program at IIT Mandi Campus
on**

ROBOTICS, AI & IoT

About PRAYAS 3.0

PRAYAS 3.0 is a unique 1-month residential program designed to provide hands-on experience in Robotics & Artificial Intelligence (AI). Organized by IIT Mandi, this initiative aims to empower students with cutting-edge knowledge and practical skills in the field of intelligent automation.

Key Highlights

- Hands-on Learning: Work on real-world robotics and AI projects
- Expert Mentorship: Learn from IIT Mandi faculty and industry experts
- Advanced Tools & Technologies.
- Certification: Receive an official IIT Mandi certificate upon completion

Eligibility

- Open to School, undergraduate and postgraduate students from engineering and science disciplines

Program Dates & Location

- Duration: 9th June - 4th July 2025
- Venue: IIT Mandi Campus
- Accommodation: IIT Mandi Hostel

For Any Queries and Fees Instalments

Whatsapp: 9910943386, 8800014887



**REGISTRATION
OPEN**



Center of Continuing Education
Indian Institute of Technology, IIT Mandi



BSATES EdTech Foundation
Training Implementation Partner



Indian Institute of Technology, Mandi

भारतीय प्रौद्योगिकी संस्थान, मंडी

PRAYAS 3.0

1 Month Residential Program at IIT Mandi Campus

on

ROBOTICS, AI & IoT

Course Module

1. Embedded Systems & Arduino Basics

- Overview of embedded systems and applications
- Arduino C programming and simulator
- Understanding Arduino Uno and components
- Programming basics: operators, functions, and loops

2. Advanced Arduino & Sensor Integration

- Arrays, conditional statements, and control structures
- Analog & digital concepts
- Working with sensors (Temperature, LDR, DHT)
- Data collection and processing

3. Python & AI Fundamentals

- Python programming essentials: loops, functions, and data visualization
- Basics of AI and machine learning
- Neural networks and perceptron models
- Practical Python exercises for ML applications

4. Computer Vision & Project Implementation

- Image classification using CNN
- Object detection with YOLO
- Hands-on AI/Robotics project demonstrations
- Final project submission and evaluation

Learning Outcomes

Students will:

- Develop a strong foundation in Arduino, Python, and AI
- Integrate sensors and process real-time data
- Build machine learning models and apply computer vision
- Gain practical experience through hands-on projects This curriculum ensures a balanced mix of theory and application, preparing students for future opportunities in technology and innovation.

Registration Process

Please Visit

www.cce.iitmandi.ac.in

Fill the form and Pay the registration fees in online mode

Amount: Rs 62,400/-

Account Name: IIT Mandi CCE Digital Course

Bank Name: Punjab National Bank

Account No: 7315000100042997

IFSC Code: PUNB0731500

Note: There will be limited seats and they will be filled on first come first serve basis.

The fees includes the Hostel, mess charges as well



Center of Continuing Education
Indian Institute of Technology, IIT Mandi

For Any Queries and Fees Installments

Whatsapp: 9910943386,8800014887