

Date: 28.08.2024

**Call for Admissions in M.Tech (Research) at Centre For AI & Robotics,
IIT Mandi (Aug- 2024)- Spot round**

Centre for Artificial Intelligence & Robotics, IIT Mandi is inviting applications for admission in the M.Tech (Research) programme in a variety of disciplines and Interdisciplinary areas under Regular mode.

Available Program and Specializations for Admissions:

Broad Research Area	Specific Areas (but not limited to)	Branches
Drones	<ul style="list-style-type: none"> ● Aerial manipulation ● Autonomous navigation and control In GPS denied environment. ● Drone analytics ● Nano Drones ● Drone application for Surveillance and Industrial Structure Inspection ● Swarm Drones ● Novel propulsion mechanism for Drones ● Airborne sensors such as Lidar, Multispectral Cameras ● Drone Electronics ● Energy management of Drones 	Master's / Bachelor's degree in: Mechanical Engineering /Electrical and Electronics Engineering/ Electrical and Communication Engineering / Computer Science Engineering/Information Technology/ /Instrumentation and control/ Mechanical (Robotics)/ Automation Engineering/Automobile Engineering/ Industrial Engineering/Aeronautical/ Aerospace Engineering.
Multi-Agent Systems	<ul style="list-style-type: none"> ● Visual Servoing ● Visual Robot Programming ● Multi-agent Systems ● Swarm Robotics ● Formation control ● Collision Avoidance ● Autonomous navigation ● Human-Robot Collaboration 	
Robotics	<ul style="list-style-type: none"> ● Grasping and manipulation ● Collaborative manipulation ● Teleoperation ● Marine Robotics 	
Legged Robotics	<ul style="list-style-type: none"> ● Quadruped ● Humanoid 	
AI & Robotics for Biomedical Applications	<ul style="list-style-type: none"> ● Generative AI tools for Enhanced sampling of biomolecules ● Drug Target identification ● In Silico protein-protein interactions ● Machine learning for molecular/drug design ● Nano robots for sensing and diagnosis ● Image-guided surgery intervention ● Robot-assisted surgery 	

Cyber-Physical Systems (CPS) and Connected and Autonomous Vehicles (CAVs)	<ul style="list-style-type: none"> ● Driverless Cars ● Cloud-Facilitated Control of CAVs ● Optimal control of CAVs ● Intelligent control in CPS ● Electric and Hybrid Electric Vehicles 	
Cyber Security	<ul style="list-style-type: none"> ● Cyber security of connected systems ● AI/ML based threat detection and protection ● AI/ML based analysis of cyber-Attack and Deep fake Detection. ● Network Security ● Blockchain for cyber security ● Quantum cryptography 	
AIML for Robotics	<ul style="list-style-type: none"> ● Robot Learning ● Robotic Inspection and AIML based anomaly detection. ● Predictive maintenance of Industrial Structures based on data from Intelligent agents. ● NLP (LLM) integration with Robotic Agents ● Reinforcement Learning for Robotic Agents ● Generative AI for training of Robotic agents ● Deep Learning for Robotics 	
Sensors for Robotics	<ul style="list-style-type: none"> ● Developing sensors for Robotics ● Robot fabrication ● Smart materials for Robots ● Developing actuator for Robotics 	

Minimum Eligibility Criteria for Appearing in Admission Process:

The candidate must fulfill any one of the criterion mentioned below in the table:

For admission in M.Tech. (Research)	Bachelor's degree in Engineering/Technology/Master's degree in science with a valid GATE score; OR B.Tech. /B.E. from CFTI (Centrally Funded Technical Institute)/ any of the top 100 institutes according to NIRF ranking (overall category) at the time of application/ any Himachal Pradesh Govt. Institutions or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.
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Note:

- The shortlisted candidate will be called for an online interview via email.
- **Candidates who have applied in previous rounds will apply through a new email id.**
- Reservation policies as per prevailing GoI rules will be followed. IIT Mandi reserves the right to admit /not admitted for any of the advertised areas. wherever the eligibility for admission is 7.5 CGPA, to relax the criteria for OBC (NCL): 7.0 CGPA & SC/ST/PwD: 6.5 CGPA.
- For each specialization and program, candidates should submit a separate application with the application fee.
- The decision of the competent authority in all matters relating to the eligibility of the candidate, Interview and admission would be final and binding on all the candidates. In case of any dispute/ambiguity that may occur in the process of admission the decision of the Institute shall be final
- All the details furnished in the online application will be treated as final and no changes shall be entertained. Non submission of valid/required documents and/or incomplete application shall be summarily rejected.
- Industrial or Academic Institute Sponsored /Part-time/Self-sponsored M. Tech (Research) are not eligible for MHRD/HTRA scholarships.
- Employed candidates seeking admission to M. Tech (Research) must submit a "No Objection Certificate" from their current employer at the time of interview.

❖ It is kindly advised to get in touch with faculty members directly for further information regarding the different research areas and positions available with them listed at <https://research.iitmandi.ac.in/cair/faculty.php>

Link to the online application:

<https://iitmandiadm.samarth.edu.in/aug24/index.php/>

Application Fee:

Category	Amount in ₹
General/EWS/OBC/OBC(NCL)/Transgender/Foreign Nationals	200
Women/SC/ST/PD	100

Mode of Payment: Online.

Contact Details:

For any queries related to the admission process you may contact cairoffice@iitmandi.ac.in or Ph: 01905-267791

For technical problems regarding filling out online applications, please contact it_helpdesk@iitmandi.ac.in

Important Dates:

Start of online application	28th Aug. 2024
Last date for filling Online Application	30th Aug. 2024 (till 5 PM)
Tentative date of Interview	1st week of Sept (To be announced on website)

Note:

IIT Mandi reserves the right to recruit/ not recruit for any of the advertised areas and apply appropriate criteria for shortlisting candidates.
