

Date: 18.01.2024

2nd Round of Admissions in Ph.D, Dual Degree (M.Tech(R)+Ph.D) & M.Tech (Research) at Centre For AI & Robotics, IIT Mandi

Centre for AI & Robotics, IIT Mandi is inviting applications for admission in the Ph.D., Dual Degree (M.Tech (R)+Ph.D.) & M.Tech (Research) programme in a variety of disciplines and Interdisciplinary areas under Regular Full-Time 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 ● Legged Robotics ● Marine Robotics 	
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 	
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 	

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 Ph.D.	<p>I. Master's degree in Engineering/Technology. OR</p> <p>II. B.Tech. /B.E. from Centrally Funded Technical Institutes (CFTIs), with a minimum CGPA of 7.5 on a 10.0 point scale (or equivalent). OR</p> <p>III. B.Tech. /B.E. from Non-CFTIs with a valid GATE score or other equivalent national exam qualification (Validity required at the time of joining) and CGPA of at least 7.5 out of 10.0 (or equivalent). OR</p> <p>IV. Any Himachal Pradesh Govt. Institutions or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.</p>
For admission in M.Tech. (Research)	<p>Bachelor's degree in Engineering/Technology with a valid GATE score; OR</p> <p>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.</p>
For admission in Dual degree (M.Tech(R) + Ph. D)	<p>Bachelor's degree in Engineering/Technology with a valid GATE score; OR</p> <p>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 8.0 (on a scale of 10) or equivalent.</p>

Notes:

- **Mode of Interview:** The shortlisted candidate will be called for an interview. **Interview will be online mode).**
- Reservation policies as per prevailing GoI rules will be followed. IIT Mandi reserves the right to admit / not admit for any of the advertised areas.
- 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, written test/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.

Link to the online application:

<https://iitmandiadm.samarth.edu.in/2024/index.php/site/index>

Application Fee:

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

Mode of Payment: SBI Collect Portal.

For any problems regarding filling out online applications, Please contact it_helpdesk@iitmandi.ac.in

Important Dates:

Last date for filling Online Application	24th January 2024 (5:00 PM)
Tentative date of Interview (online)	27th January 2024

Note:

The Interview link will be sent to shortlisted candidates.

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

For any queries related to the admission process you may contact cairoffice@iitmandi.ac.in

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