

# **School of Computing and Electrical Engineering**

Call for M. Tech (by research) / Ph.D. /Dual Degree Program (Aug.-Dec., 2024)

IIT Mandi invites applications from bright and dedicated young scholars interested in joining the full-time or part-time M. Tech (by research)/Ph.D./Dual Degree program in the **School of Computing and Electrical Engineering (SCEE)**. For this purpose, SCEE seeks applications for the Master of Technology (M. Tech) By Research, Doctor of Philosophy (Ph.D.) and Dual Degree (M.Tech + Ph.D.) programs in the following areas of computer science and electrical engineering:

Individual Specializations under SCEE	Specific Areas (but not limited to)
Systems Engineering and Theoretical CS	<ul> <li>Design of algorithms</li> <li>Modern computer architecture</li> <li>Applied Robotics</li> <li>Quantum Computing</li> </ul>
Intelligent Systems	<ul> <li>Artificial Intelligence, Machine Learning</li> <li>Cognitive Science, Human-Computer Interaction</li> <li>Computer Vision, Biomedical Imaging</li> <li>Quantum Machine Learning</li> </ul>
Control and Automation	<ul> <li>Mathematical control theory</li> <li>Precision agriculture</li> <li>Cyber-physical systems and IoT</li> <li>Intelligent Control System</li> </ul>
Microelectronics and VLSI	<ul> <li>VLSI Design</li> <li>Device and VLSI technology</li> <li>Biomedical Embedded Systems</li> </ul>
Power Engineering	<ul> <li>Electrical Machines and Drives</li> <li>Power Electronics</li> <li>Power Systems</li> </ul>
Communications and Signal Processing	<ul> <li>Communication Networks, Wireless Communication, and Information theory</li> <li>Photonics</li> <li>Machine learning for signal/image processing &amp; communications</li> <li>RF and Microwaves communications &amp; component design</li> </ul>

#### Link to the online application<sup>1, 2</sup>:

### https://iitmandiadm.samarth.edu.in/2024/index.php/

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://scee.iitmandi.ac.in/faculty.php.

#### **General Information**

Information on eligibility, minimum qualifications, and scholarship rules are briefly provided in the following pages of this document. The same can be found at the following links

#### M. Tech (by research) /PhD Ordinance and Regulations (O&R) IIT Mandi:

https://www.iitmandi.ac.in/pdf/ordinances/Ordinances\_phd\_mtech.pdf

M. Tech (by research)/PhD scholarship Rules:

https://iitmandi.ac.in/pdf/admissions/Information%20Brochure.pdf

#### For PhD applicants (Full-Time Research Scholars):

Students under this category are entitled to the Scholarship/ Assistantship from Institute / MoE if they qualify for any one of the following criteria.

- Master's degree in Sciences/ Engineering/ Technology with a good academic record
- Bachelor's degree holder in Engineering/ Technology from any CFTIs with a minimum CGPA of 7.5 on a 10.0-point scale.
- Bachelor's degree holder in Engineering/ Technology from any Non CFTIs with at least CGPA of 7.5 on a 10.0-point scale with valid GATE score.

#### For Dual Degree (M.Tech (R) + Ph.D. applicants (*Full-Time Research Scholars*):

Students under this category are entitled to the Scholarship/Assistantship from Institute / MoE if they qualify for any one of the following criteria.

• The candidate must possess BE/B.Tech or M.Sc. or equivalent Degree with a valid GATE Score

<sup>&</sup>lt;sup>1</sup>Upload self-attested documents as a single zip file (Proof of identity (Aadhar card/voter card/PAN card/any other), Class 10 certificate as proof of date of birth, Mark sheets of UG and PG degrees (rank certificate, if any), Qualifying certificate of the GATE/CSIR/UGC/other examination, Caste Certificate.)

<sup>&</sup>lt;sup>2</sup>To apply for other specific areas not listed above, kindly fill "Others" in the specific area section after selecting the Broad Research Area on the OAS portal.

• GATE Score is waived off for candidates having B.Tech/BE degree from CFTI with CGPA >=8.

# For Masters applicants (Full-Time Research Scholars):

Students under this category are entitled for the Scholarship/Assistantship from Institute / MoE if they qualify any one of the following criteria.

- Candidates with a Bachelor's Degree in Engineering/Technology or Master's Degree in appropriate Sciences. A valid GATE score is required for admission to the M. Tech (by research) program, and for availing HTRA scholarship.
- Candidate with B.Tech/BE degree from Centrally Funded Technical Institutes (CFTIs), with a minimum CGPA of 7.5 on a 10.0 point scale (or equivalent). (National Level examinations are waived off for HTRA Scholarship)

## Exemptions from mandatory requirements of Valid GATE or National Level examination:

- B.Tech/B.E./B.S. (or equivalent) degree from CFTI (Centrally Funded Technical Institute)/ any of the top 100 institutes according to NIRF ranking (overall category) at the time of application, with CGPA/CPI at least 7.5 (on a scale of 10) or equivalent
- BS-MS/M.Sc/equivalent from IITs, IISERs, IISc, IIMs or any of the top 100 institutes according to NIRF ranking (overall category) at the time of application with a CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.
- NIRF Ranking (within top 100) should be in the overall category granted for the year during which admission is sought.
- Any Himachal Pradesh Govt. Institutions/Universities, with CGPA/CPI at least 7.5 (on a scale of 10) or equivalent.

\*For complete details (modifications, addendums, etc.) regarding the eligibility criteria, kindly contact SCEE office at 0195-267133 or write us at "<u>scee-admissions@iitmandi.ac.in</u>".

**Note:** Industrial or Academic Institute Sponsored or Part-time <u>M. Tech (by research)</u>/PhD candidates are not eligible for MHRD/HTRA scholarships.

Employed candidates seeking admission to **M. Tech (by research)/PhD** must submit a "**No Objection Certificate**" from their current employer at the time of interview.

For any problems regarding filling of online applications, please contact <u>it\_helpdesk@iitmandi.ac.in</u>

For any other queries regarding M. Tech (by research)/Ph.D./Dual Degree programs in SCEE, please contact the SCEE office through email: scee-admissions@iitmandi.ac.in. We look forward to reviewing your application.

Application Fee for M. Tech (by research)/Ph.D. A
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Category	Amount in ₹
General/EWS/OBC/OBC (NCL)/Transgender/Foreign Nationals	200
Women/SC/ST/PD	100

Mode of Payment<sup>3</sup>: SBI Collect Portal.

#### **Important dates:**

Start of online application	11 March 2024
Deadline for online application	<del>10 April 2024</del>
14.04.2023	
Announcement of shortlisted candidates: week of April	<del>15 April 2024</del> Last
Interview (tentatively):	10-12 May 2024

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

<sup>&</sup>lt;sup>3</sup>Applicants should submit fee on SBI collect portal of the IIT Mandi; and submit generated transaction number to the OAS admission application portal. One application fee is valid for the single application. The application fee is non-refundable.