Second Round of Admissions in M.Tech (Research) and Ph. D. Programs at School of Mechanical and Material Engineering, IIT Mandi

School of Mechanical and Materials Engineering of IIT Mandi is inviting applications for admission in the M.Tech (by Research) and Doctor of Philosophy (PhD) programme in a variety of disciplines and interdisciplinary areas under Regular Full-Time mode. Candidates may also apply for dual degree (MTech + PhD) program as per their eligibility.

Available Program and Specializations for Admissions:

S.No	Program	Discipline	Broad Research Areas
1.	Ph.D. / M.Tech (Research)	Mechanical Design	Acoustics; Solid Mechanics and Design; Computational Solid Mechanics; Continuum Mechanics; Fracture-Fatigue; Functionally Graded Materials; Mechanics of Composite Materials; High Technology Materials and Structures; Machine Design; Vibration; Smart material/Structure; Piezoelectric Energy Harvesting; Finite Element Method; Modeling & Control; Biomechanics; Orthopedic Biomechanics; Implant Design; Bone & Biomaterial Fracture; Deformation induced emissions; Structural health monitoring; Smart materials and structures; Vibration energy harvesting.
2.	Ph.D. / M.Tech (Research)	Fluid Thermal	Alternative Fuels; IC Engines; Emissions Control; Experimental Fluid Dynamics; Spray Atomization & Combustion; Advance Laser Diagnostics & Image Processing; Snow avalanche dynamics; Multiphase flows; Computational fluid dynamics; Population balance modelling; Non-Newtonian fluids; Fluid Mechanics; Thermal Science and Engineering; Thermal Radiation; Solar Radiation; Collimated Beam Radiation; Non-gray Radiation; Interface capturing; Mesoscale simulations; Probes and instrumentation for two-phase flow; Experimental Nanofluidics; Liquid Phase Electron Microscopy
3.	Ph.D. / M.Tech (Research)	Manufacturing	Additive Manufacturing (Metal, Polymer – Particulate; Short and Continuous fiber; Ceramics); Cyber Security in Additive Manufacturing; AI and Machine learning in Manufacturing ; Design and development of Composites for specified application ; Waste utilization; Additive manufacturing (Extrusion based Metal and Continuous Fiber); Reinforced composites 3D printing; Highly filled (metal, short fibre filament production); LCA; Advanced Manufacturing; Perovskite Solar Cells; Solar Thermal utilization; Energy Storage; Advanced Manufacturing Processes for Polymer Composites; Sustainable Biocomposites; Recycling of Polymer Composites; Surface Engineering and Experimental Tribology
4.	Ph.D. / M.Tech (Research)	Materials Engineering/Science	Glasses for Electrical Applications; Solid State Refrigeration; Pyroelectric Energy Harvesting Materials and Methods; Piezoelectric Energy Harvesting Materials and Methods; Carbon based micro/ nano devices; Microstructure and crystallinity of sp2 carbons; Waste-derived carbon; Nano-manufacturing for Electronics Sensor and Micro supercapacitor applications; Vapor Phase Growth(CVD, PVD & ALD) of Functional Nanostructures and Thin films; Phase Transition in Functional Oxide Materials and Thin Films; Nano-mechanics of Phase Change Materials and 2D Materials; Analytical Microscopy and Imaging; Drug Delivery System; Biosensors; Micro porous membranes; Multifunctional hybrid material; Condensed Matter Physics and Materials Science; Carbon materials and applications

For more details about the Programme at IIT Mandi, please visit:

https://www.iitmandi.ac.in/pdf/ordinances//Ordinances_Ph.D.pdf

https://www.iitmandi.ac.in/pdf/ordinances/Ordinances_MTech(R).pdf

Minimum Eligibility Criterion for Appearing in Admission Process:
The candidate must fulfil any one of the criterion mentioned below in the table:

For admission in Ph.D.	Master's or equivalent degree in Engineering/Technology
For admission in M.Tech. (Research)	Bachelor's degree in Engineering/Technology or equivalent with a valid GATE score; OR
	Master's or equivalent degree in Science (or allied subjects) with a valid GATE score; OR
	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/ any Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.
For admission in dual degree	Bachelor's degree in Engineering/Technology or equivalent with a valid GATE score; OR
	Master's or equivalent degree in Science (or allied subjects) with a valid GATE score; OR

(M .Tech + Ph. D)	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/ any Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or equivalent.

Notes:

- **Mode of Interview:** The shortlisted candidate will be called for interview. Interview will be in hybrid mode (both online and offline). Candidate should submit their choice for the interview mode in the Google form (https://forms.gle/acETJ5r3uVzgCJRRA)
- 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, candidate 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.
- You are also requested to bring following documents, if appearing in offline mode (Original & Photocopies) or submit on Google form (if appearing in online mode):

  ☐ All your original certificates and also self-attested photo copies of the certificates (from Class X onwards).

  ☐ Qualifying certificate of the GATE/NET/CSIR/UGC/JEST examination.

  ☐ Those who belong to SC/ST/OBC/OBC-NCL/General-EWS category must produce a certificate of the same. Certificates related to OBC-NCL/EWS should be issued in the current financial year.

  ☐ Any other relevant documents (eg. experience certificate, etc.)

  ☐ One updated Resume & passport size photograph

Application Procedure:

Candidates should submit their academic details on Google form link given below:

https://forms.gle/acETJ5r3uVzgCJRRA

For any other queries related to the this admission process you may contact smmeadmissions@iitmandi.ac.in or 01905-267138

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.

Applicant should submit fee on SBI collect portal (https://www.onlinesbi.com/sbicollect/icollecthome.htm) of the IIT Mandi and submit generated transaction number to the Google application portal (https://forms.gle/acETJ5r3uVzgCJRRA)

One application fee is valid for the single application. The application fee is non-refundable.

Important Dates:

Last date for filling Online Application	10 January 2024
Interview	To be announced on IIT Mandi webpage

*****