

Kamand, Himachal Pradesh - 175075

CORRIGENDUM

School of Mechanical and Materials Engineering

With reference to the advertisement for admissions in M.Tech. (Research), M.Tech.(Research) + Ph.D. (Dual Degree) and Ph.D. Programs, dated: 04.04.2025. The eligibility criteria for the admissions in Dual Degree program (MTech_R +PhD) is relaxed to **7.5 CGPA.** However, other qualifying criteria will remain the same

Revised Timeline:

Last date to apply online: 07th May 2025 (5 PM)

Admissions in M.Tech. (Research), M.Tech. (Research) + Ph.D. (Dual Degree) and Ph.D. Programs School of Mechanical and Material Engineering, Indian Institute of Technology Mandi

School of Mechanical and Materials Engineering (SMME) of IIT Mandi is inviting applications for the first round of admission process in the M.Tech. (by Research), M.Tech. (Research) + Ph.D. (Dual Degree) and Ph.D. programme in a variety of disciplines and interdisciplinary areas under Regular Full-Time, Self-Sponsored, Sponsored-Projects (as per vacancy) and Part-Time mode. Candidates from the reserved categories (OBC-NCL, SC, ST, EWS) are encouraged to apply against this advertisement to fill vacant seats in the mentioned programs.

| S.N. | Program | Discipline | Broad Research Areas |
|------|---|--|--|
| 1. | Ph.D. / M.Tech (Research) / Dual degree (M .Tech (Research) + Ph. D) | Mechanical Design | Acoustics; Solid Mechanics and Design; Computational Solid Mechanics; Continuum Mechanics; Fracture-Fatigue; Functionally Graded Materials; Mechanics of Composite Materials; Mechanics of Metamaterials; 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) / Dual degree (M .Tech (Research) + Ph. D) | 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; Turbulence modelling; Liquid- metal flows; Probes and instrumentation for two-phase flow; Experimental Nanofluidics; Liquid Phase Electron Microscopy; Machine learning and CFD; Mineral processing. |
| 3. | Ph.D. / M.Tech (Research) / Dual degree (M .Tech (Research) + Ph. D) | 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 Bio-composites; Multifunctional Composites; Recycling of Polymer Composites; Surface Engineering and Experimental Tribology; Laser-based directed energy deposition; Post-processing of metal additive manufacturing components; Joining of dissimilar metal alloys through advanced welding methods; Precision laser micromachining for microfabrication, bio-fabrication, thin-film coating. |
| 4. | Ph.D. / M.Tech (Research) / Dual degree (M .Tech (Research) + Ph. D) | Materials Engineering / Materials 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 |

Available Program and Specializations for Admissions



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| | | | 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, Multi-Material Additive Manufacturing, Food 3D printing, Additive Friction Stir Deposition, Severe Plastic Deformation (using High- Pressure Torsion and Friction Stir Processing), Grain Boundary Engineering, Hydrogen Storage, Artificial Intelligence and Machine learning in Materials Science and Additive Manufacturing, Wear and Corrosion Studies, Coatings, Extractive Metallurgy, Electronic waste Recycling and metal recovery. |
|----|-------------------|----------------------------|--|
| 5. | M.Tech (Research) | Computational Mechanics | Computational Solid Mechanics; Mechanics of Metamaterials; Finite element modeling; Computational fluid dynamics and heat transfer; Non-Newtonian fluid dynamics; Multi- phase flow; Numerical solution of partial differential equations. |

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:

| | 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 |
| | Bachelor's degree in Engineering/Technology or Master's or equivalent degree in Science |
| | with experience of two years or more in a reputed R&D Organization with a proven research record. |
| The second sector of the | B.Tech. /B.E./ B.S. (or equivalent) degree from CFTI (Centrally Funded Technical Institute) / any of the |
| For admission in | top 100 institutes according to NIRF ranking (overall category) at the time of application / any |
| Ph.D. | Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or |
| | equivalent. OR |
| | Master's or equivalent degree in Engineering/Technology |
| | * For admission through the sponsored-project mode, candidates must meet the minimum eligibility criteria |
| | as specified by the funding agency and SRIC-IIT Mandi. |
| | Bachelor's degree in Engineering/Technology or equivalent with a valid GATE score; OR |
| For admission in | Master's or equivalent degree in Science (or allied subjects) with a valid GATE score; OR |
| M.Tech. | B.Tech. /B.E./B.S. (or equivalent) degree from CFTI (Centrally Funded Technical Institute) / any of the |
| (Research) | top 100 institutes according to NIRF ranking (overall category) at the time of application / any |
| (Research) | Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or |
| | equivalent. |
| | Bachelor's degree in Engineering/Technology or equivalent with a valid GATE score; OR |
| For admission | Master's or equivalent degree in Science (or allied subjects) with a valid GATE score; OR |
| in Dual Degree | B.Tech. /B.E./ B.S. (or equivalent) degree from CFTI (Centrally Funded Technical Institute) / any of the |
| (M.Tech+ | top 100 institutes according to NIRF ranking (overall category) at the time of application / any |
| Ph. D) | Himachal Pradesh Govt. institution or universities with CGPA/CPI of at least 7.5 (on a scale of 10) or |
| | equivalent. |
| | |

Notes:

- GATE/national level exam score is exempted for the candidates applying under self-sponsored and parttime mode. However, they will not get a scholarship during the program study from the institute.
- The first choice/preference will be considered for processing the application; candidates are advised to fill a choice of discipline on the application portal accordingly.Candidates should submit separate applications for multiple disciplines/programs.
- Mode of Interview: The shortlisted candidate will be called for an interview. **Interview will be in hybrid mode** (both online and offline).



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- 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.

Application Procedure:

Candidates should submit their application on Samarth application portal link given below:

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

For any other queries related to the this admission process you may contact <u>smmeadmissions@iitmandi.ac.in</u> 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: Online (Samarth Portal)

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

Important Dates:

| Last date for filling Online Application | 07th May 2025 (5 PM) | | |
|--|-----------------------------------|--|--|
| Interview | Tentatively 20-21 May 2025 (To be | | |
| Interview | intimated via Email) | | |

*Institute reserves the right to change or amend any of the clause.
