

Department of Mechanical Engineering

Indian Institute of Technology Indore

Khandwa Road, Simrol Indore 453 552

Madhya Pradesh, India



Ph.D. Program in Department of Mechanical Engineering

The Department of Mechanical Engineering, IIT Indore invites applications from high caliber, sincere and research-oriented students for admission to the Ph.D. Program under the Fellowship Awardee (FA) Category only. Fellowship awardees are those students who have received a formal fellowship award letter from funding agencies such as CSIR, UGC, NBHM, DST-INSPIRE or Sponsored Project etc., for pursuing PhD in the institute of higher education in India.

Eligible FA category candidates are strongly advised to visit the website of the faculty members at <http://people.iiti.ac.in/~meiiti/index.php/about/> before applying for the Ph.D Program.

For more details, refer to the main Ph.D. Advertisement of the Institute available at <http://academic.iiti.ac.in/phdadvt.php>

A. Eligibility for Indian Students:

Minimum Educational Qualifications (MEQs) and Qualifying Examination (QE) for Indian applicants	Minimum Educational Qualifications (MEQs) and Qualifying Examination (QE) for International applicants
BE/ B. Tech. in Mechanical Engineering, Metallurgy, Automobile Engg; Marine Engineering; Ceramic Engineering; Materials Engineering, Manufacturing Engineering, Industrial Engineering, Reliability Engineering Production Engineering, Materials Science Engineering, Aerospace Engineering, Chemical Engineering, Biotechnology, Bioengineering, Biomedical Engineering or any other related field of Engineering and Masters' degree in the Mechanical Engineering/ Technology/ Metallurgy Engineering/ Energy Systems	<input type="checkbox"/> MEQ: Masters' degree in the Mechanical Engineering (with first division as defined by the awarding Institute/ University) <input type="checkbox"/> QE: Valid TOEFL/IELTS OR equivalent qualification

<p>Engineering; Energy and Environment; Energy Engineering; Automobile Engineering; Thermal Engineering; Heat Power; Energy Materials, Fluids & Thermal Engineering, Cryogenics & Vacuum Technology, Hydraulic Engineering, Material Science and Engineering, Manufacturing Engineering, Industrial Engineering, Production Engineering, Reliability Engineering, Machine Design, Biotechnology, Bioengineering, Biomedical Engineering. CAD/CAM with first division as defined by the awarding Institute/ University) or other related fields of engineering AND GATE qualification</p> <p>OR</p> <p>Four-year Bachelors' degree OR five-year integrated degree in the Mechanical Engineering (with first division as defined by the awarding Institute/ University) AND valid GATE qualification</p>	<p>OR Valid GATE qualification</p>
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B. Last date of online application : 12 March 2023

Last date of Online Application through http://academic.iiti.ac.in:8080/nregistration.jsp (for both Indian and International Applicants)	12 March 2023
Shortlisted candidate intimated	Last week of March 2022
Last date of receiving recommendations of two referees (to be sent by referees to admission-me@iiti.ac.in) (for both Indian and International Applicants)	20 March 2023
Date of Interview (both Indian and International Applicants)	Last week of March 2023
Interview Schedule & Mode	
Interviews for the Ph.D. admission would be conducted in the Last week of March 2023 through the Google Meet platform or offline. A detailed schedule regarding the interview will be intimated to the eligible/shortlisted candidates later.	

C. Application Procedure and General Information for Indian Students:

- [1] Candidates must apply ONLINE through the website (<http://academic.iiti.ac.in:8080/nregistration.jsp>). This will generate a unique application number for each applicant.
- [2] Application Fee:
 - Indian Applicants: 100/- Indian Rupees (non-refundable) to be paid through State Bank Collect.
 - International Applicants: US \$ 30 (non-refundable) through RTGS. Kindly refer to the main Ph.D. Advertisement of the Institute at <http://academic.iiti.ac.in/phdadvt.php> for more details about the payment procedure and course fee structure.

Please refer to the main Ph.D. Advertisement of the Institute for more details.

- [3] The application must be submitted online on or before the date mentioned above.
- [4] There is no need to send hard copies of the application form and supporting documents through POST or COURIER.
- [5] Mere fulfillment of the eligibility criteria will not entitle any applicant to be called for a written test/interview. The Institute/department reserves its rights to set higher norms for short-listing and call a limited number of candidates for the written test/interview.
- [6] The shortlisted applicants will be called for a written test/interview via email only so mention your email id carefully.
- [7] The candidates must arrange recommendation letters (in the given format only) at least two referees well before appearing for a written test/interview. A sample of the recommendation letter is provided in Word format, which can be downloaded for further use. Candidate letters of recommendation must be sent by referees to admission-me@iiti.ac.in.
- [8] Candidates who are Fellowship Awardees (FA) should send a combined pdf with a letter of the fellowship award (i.e., from CSIR, UGC, DST, PMRF, etc.) along with the application form generated after applying online (form should be signed and past the photograph) to admission-me@iiti.ac.in within the online application deadline.
- [9] No interim correspondence whatsoever will be entertained from applicants regarding conduct and result of the selection process and reasons for not being called for an interview or selection.
- [10] Mere fulfillment of the essential qualifications does not guarantee admission to PhD program in the Department of Mechanical Engineering. The selection will be based on the overall performance, which may include a written test, interview, academic background, suitability for research in the chosen field/area, research aptitude, communication skills, and others.

The candidates can contact the DPGC convener for further information at the following address:

admission-me@iiti.ac.in

For any further queries, please contact: PhD Admission Cell, Indian Institute of Technology Indore, Indore-453552, Indore, Madhya Pradesh, India. Email: phdadmission@iiti.ac.in	For queries specific to the Department, emails can be sent to admission-me@iiti.ac.in
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Annexure

Vacancies are available in the following areas:

Sr. No.	Specialization	Research Areas
1	Design Engineering# (Dr. Pavan Kumar Kankar)	<ul style="list-style-type: none">• Vibration• Vibration and force analysis in biomechanical preparation of root canals• Fault diagnosis of mechanical components• Condition based maintenance• Machine learning• Signal processing
2.	Manufacturing/Materials/Production (Prof. Neelesh Kumar Jain)	<ul style="list-style-type: none">• Solid-State Additive Manufacturing• Development of Biocompatible Materials (for Orthopaedic Implant applications), High/Medium Entropy Alloys, Functionally Graded Materials (FGM), Shape Memory Materials (SMM) by Micro-Plasma based Metal Additive Manufacturing Process• Modeling and Optimization of Additive Manufacturing and Other Manufacturing Processes• Finishing and Flank Modifications of Gears by Non-contact Advanced Finishing Processes• Sustainable Machining of Gears• Net-shape Machining of Non-Circular and Miniature Gears• Analytical, Functional Performance, and Noise and Vibration Testing of Gears• Advanced/Unconventional Machining and Finishing Processes• Micro-joining of Dissimilar Materials
3	Production/Manufacturing/Materials/Metallurgy (Dr. Kazi Sabiruddin)	<ul style="list-style-type: none">• Surface Engineering• Thermally sprayed ceramic coatings• Tribo-mechanical applications
4	Thermal Engineering (Dr. Harekrishna Yadav)	<ul style="list-style-type: none">• Fluid Dynamics and Heat Transfer• Fluid-Structure Interaction• Shear Flow, Supersonic Flow, Flow and Turbulence Measurement using Optical Techniques• Heat Transfer Enhancement

		<ul style="list-style-type: none"> • Renewable and Sustainable Energy.
5	Thermal and Materials Engineering (Dr. Satyanarayan Patel)	<ul style="list-style-type: none"> • Energy conversion, storage and harvesting materials • Solid-State Refrigeration • Piezoelectric, Pyroelectric and ferroelectric materials • Energy Engineering
6	Thermal Engineering# (Dr. Ankur Miglani)	<ul style="list-style-type: none"> • Combustion and Propulsion: Combustion of next-generation fuels (Gel and nanofluid fuels); • Heat Transfer, micro/nanofluidics: Thermal management of high-heat-flux electronics; • Soft matter: Instabilities in drying colloidal droplets
7	Thermal Engineering (Prof. Santosh Kumar Sahu)	<ul style="list-style-type: none"> • Fluid Dynamics • Heat Transfer • Thermal Science
8	Thermal Engineering (Prof. S. Dhinakaran)	<ul style="list-style-type: none"> • CFD • Biofluid Mechanics & Bioheat Transfer

#Funding is available via sponsored project under FA.

Faculty members and their research profiles: To gain more insight, interested applicants are encouraged to visit the below-mentioned website of a faculty member.

Dr. Pavan Kumar Kankar: <https://scholar.google.co.in/citations?hl=en&user=eN63O5AAAAAJ>

Prof. Neelesh Kumar Jain: <http://people.iiti.ac.in/~nkjain/>

<https://scholar.google.co.in/citations?user=NHW6zSQAAAAJ&hl=en>

Dr. Kazi Sabiruddin: <https://www.iiti.ac.in/people/~skazi/index.html>

Prof. Santosh K. Sahu: <http://people.iiti.ac.in/~santosh/>

Prof. Dhinakaran Shanmugam: <http://people.iiti.ac.in/~sdhina>

Dr. Harekrishna Yadav: <http://people.iiti.ac.in/~meiiti/index.php/dr-harekrishna-yadav-2/>

Dr. Satyanarayan Patel: <https://sites.google.com/view/satyanarayan-patel>

Dr. Ankur Miglani: <https://scholar.google.co.in/citations?user=6ABZdEoAAAAJ&hl=en>