



**The Mahindra Edge**

Ph.D. students at Mahindra University would have great opportunities for interdisciplinary research by working closely with our faculty, some of who are at the forefront of their fields (may like to check faculty profiles on our website). Our research infra-structure in terms of state-of-the-art laboratories in science and engineering are of high quality and are being continually upgraded. Government of India funding agencies like SERB, BRNS, DRDO, MeitY, etc., have already funded several research projects as well as international collaboration projects granted by DST’s International Division.

Ph.D. programs are offered in Engineering and Applied Sciences. For those who wish to pursue liberal arts at Ph.D. level, we have a strong Humanities and Social Sciences program, which is backed by high-quality Media and Design Thinking laboratories and Entrepreneurship cell.

**Specialized areas in which Ph.D. students, if found suitable, would be admitted in Spring 2024 semester**

**Physics:**

Quantum Optics & Quantum Information Science  
 Nanophotonics & Plasmonics  
 Ultrafast Spectroscopy & Laser Physics  
 Condensed Matter Physics & Superconductivity  
 Biophysics & Soft Matter Physics

**Civil Engineering: Geotechnical Engineering - Foundation Engineering**

Soil Mechanics & Foundation Design  
 Earthquake Engineering & Seismicity  
 Slope Stability & Retention Systems  
 Geotechnical Investigation & Remediation  
 , Environmental Geotechnical Engineering & Geotechnical  
 , Geotechnical Engineering & Construction  
 Geotechnical Engineering & Geotechnical Engineering  
 Geotechnical Engineering & Geotechnical Engineering  
 Geotechnical Engineering & Geotechnical Engineering  
 Geotechnical Engineering & Geotechnical Engineering

x **Electrical and Computer Engineering: s/Power Electronics & Drives**

Power Electronics & Drives  
 WPM & MCM (Power Electronics)  
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- **Chemistry:** Hybrid polymers and nanomaterials, Responsive polymers
- **Mathematics:** Numerical Analysis; Differential Equations; Analysis of Partial Differential Equations; Image Processing; Stochastic Control; Probability and Statistics; Fluid Dynamics; Operations Research; Scheduling and Timetabling in Industry and Education; Finite Group Theory; Numerical Linear Algebra; and Machine Learning, Financial Mathematics
- **Mechanical and Aerospace Engineering:** Computational Mechanics, Theoretical solid mechanics, Solar Thermal Power, Refrigeration and Air-Conditioning, Battery thermal management, Heat transfer, Microfluidics, Biofluid Dynamics, Biomechanics Modelling and Simulation, Nano materials, Cyber-Physical Systems, Advanced manufacturing systems, Robotics, Cable-Driven Robotics, Exoskeletons, Exosuits, Unmanned Aerial Vehicles, Sheet metal forming of Titanium Alloy Ti6Al4V, Forming, Rolling of Aerospace materials, Manufacturing process simulation for aerospace materials, Additive manufacturing, Laser manufacturing methods, Numerical Modelling and Simulation of additive manufacturing, advance finishing process etc. , Smart Manufacturing, i4.0, Industrial Engineering, Computer Aided Design, Turbulence modelling, Combustion modelling, Large Eddy Simulation, Direct Numerical Simulation, Turbulence-chemistry interaction, Tribology, Laminar to turbulent transition in Hypersonic, scramjet propulsion with hydrogen and hydrogen fuel, regenerative cooling in high speed flow, Computational turbomachinery, CFD code development in high speed reacting and non-reacting flows.
- **Computer Science and Engineering:** High-Performance Computing; Social Network Analysis; Artificial Intelligence; Machine Learning; Deep Learning; Cyber-Physical Systems; Computer Vision and Image Processing; Natural Language Processing; Computational Intelligence; Theoretical Computer Science; Big Data Computing; Computer Architecture; Computer Networks; Network Security; Cyber Security; Wireless Sensor Networks; Generative AI, Neuroscience, Brain-Computer interface.
- **Entrepreneurship:** Innovation and Entrepreneurship; Start-ups and Technology Entrepreneurship, Family Business Management, Start-ups-Scaling up & Growth, Incubation processes and models
- **Humanities and Social Sciences:** Indian Ocean History; Economic Anthropology; Political Scienc
- **Life Sciences:** Chemistry of Biomolecules, Computational Biology, Plant Molecular Biology

**Eligibility:**

Programme	Minimum qualification required for admission	Admission Process
<b>Ph.D. (Full Time)</b>	<p>Master's degree in Engineering/Technology/Science/Humanities/Social Sciences with a minimum CGPA of 6.00 on a 10-point scale or 60% marks in aggregate. Full time students who do not possess M.Tech. or equivalent degree and instead possess B.Tech. or equivalent degree with a minimum CGPA of 7.00 on a 10-point scale or 70% aggregate marks are required to have a valid GATE score or UGC/CSIR/DBT/INSPIRE Fellowship Examination for Sciences/Humanities and Social Sciences disciplines.</p> <ul style="list-style-type: none"> <li>- The requirement of GATE/National examination can be waived off for possible admission to Ph.D. programs for all graduates from Centrally Funded Technical Institutes with a B.Tech./B.E./Integrated M.Sc. (or any other program of minimum four years duration, admission to which was on the basis of JEE) with CGPA of 8.00 and above at the time of graduation.</li> <li>- The requirement of GATE/National Examination can be also waived off for M.Sc. graduates from IITs with a CGPA of 8.00 and above.</li> </ul>	Interview

**FEE STRUCTURE & Ph.D. ASSISTANTSHIP ( Free Boarding & Lodging ):**

**INR 50000/-  
PER ANNUM**

**INR 20000/-  
SECURITY DEPOSIT  
(ONE TIME PAYMENT)**

**Ph.D. Assistanship**  
(for full time scholars)  
**INR 30000/- PER MONTH\* (plus Boarding & Lodging)**

\*8 hours/week TA duty mandatory.

**Important Dates (\* Subject to revision):**

<b>Last Date for submission of applications – 1<sup>st</sup> Round</b>	<b>12<sup>th</sup> Dec, 2023</b>
<b>Shortlisting of candidates for interview</b>	<b>15<sup>th</sup> Dec, 2023</b>
<b>Online interviews for selection</b>	<b>20<sup>th</sup> -22<sup>nd</sup> Dec, 2023</b>
<b>Announcement of Results</b>	<b>8<sup>th</sup> Jan, 2024</b>
<b>Commencement of the Spring 2024 Semester Teaching</b>	<b>22<sup>nd</sup> Jan,2024</b>

[Please click here to view Application Procedure for Ph.D. Program](#)

[Please click here to download Ph.D. Application Form](#)