

Mahindra University

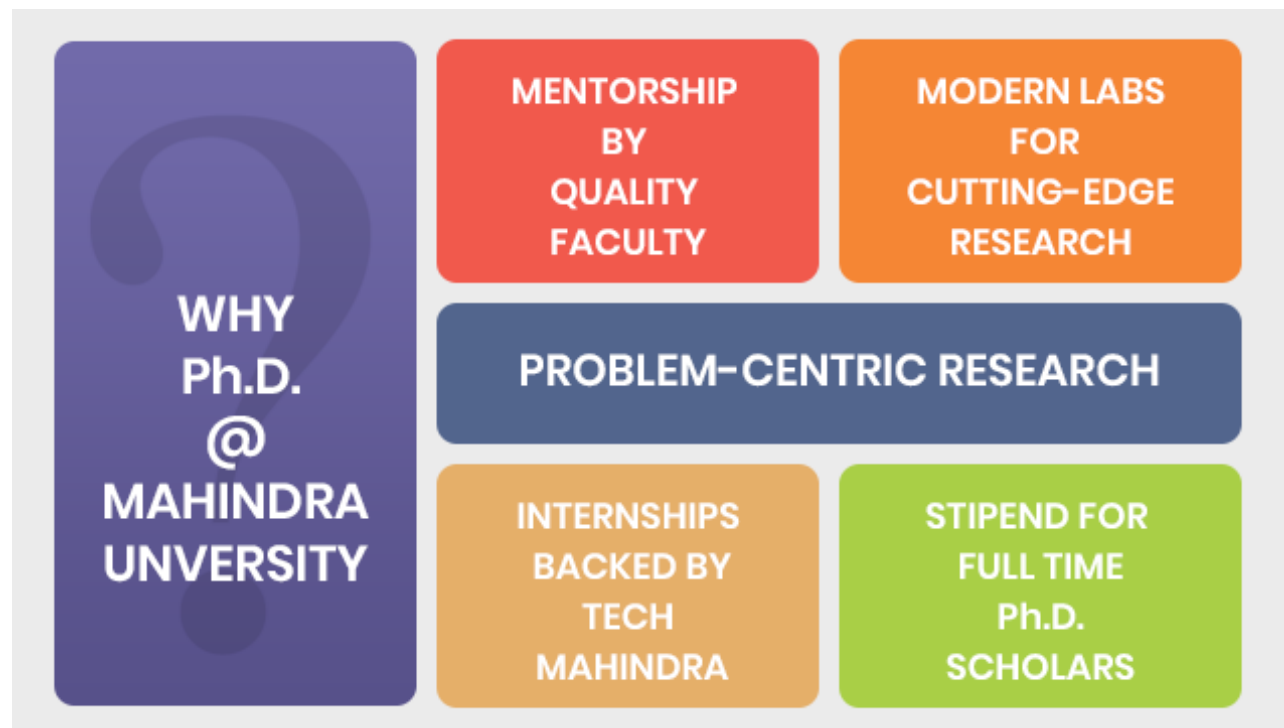
www.mahindrauniversity.edu.in

Ph.D. Program Admission Notification (Spring 2023 Semester starting in Jan, 2023)

Mahindra University, notified by the Government of Telangana vide Telangana Ordinance No. 1 of 2020 dated 20th May 2020, announces the launch of its 6th Batch of **Ph.D. admissions** in the Spring 2023 Semester starting in January, 2023.

The Doctor of Philosophy (Ph.D.) degree is acknowledged to be the highest university degree that is conferred on a doctoral student, who successfully defends her/his Ph.D. thesis in front of a panel of experts in the field appointed by the University after having spent a stipulated time and having achieved publications in reputed international journals and conferences.

The first year would require the Ph.D. candidate to go through a set of prescribed course work followed by initiation to research and comprehensive examination and carrying out actual research with the Ph.D. Adviser. The journey to earning Ph.D. degree typically goes through a cycle of four phases involving preparation, challenges, small and big successes and ultimate joy of successful defense of the written thesis. Completion of a thesis, depending on individual performance, typically may take about 4 years.



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 PhD students, if found suitable, would be admitted in Spring 2023 semester

Ph.D. Specializations for Spring 2023 semester

- **Physics:** Solar Cell; Spintronic Devices; Dielectric Metasurfaces, Integrated Quantum devices, Liquid crystal microfluidics, Multifunctional materials and devices, Quantum Computing; and Neutrino Physics, Guided Wave Photonics and Fiber Optics, Terahertz metasurfaces, Terahertz magnetotransport, Active metamaterials
- **Civil Engineering:** ***Geotechnical Engineering*** - Sustainable/recycled/secondary pavement materials; ***Transportation Engineering*** - Transportation Planning- pedestrian and travel behavior modelling, traffic safety analysis, Urban mobility, Shared mobility, Mobility as a Service (MaaS); ***Environmental engineering*** – Waste Water treatment, Air pollution, Solid waste management, biorefinery; ***Water Resources Engineering*** – Surface and vadose zone hydrology, Hydrological Modelling; ***Structural Engineering*** - Geopolymer concrete, Structural Engineering of Heritage Structures and Civil Structural Health Monitoring with sensors, Advanced Structural Cementitious Composites, Earthquake proof civil structures, Seismic Risk Assessment, Engineering seismology, ground motion modelling, impacts of earthquake source, path and site effects on ground motions, Engineered Bamboo, Monitoring corrosion of Infrastructure, Sustainable materials, Engineered nano cementitious composites, Ultra high performance concrete composites, Structural distress and strengthening systems
- **Electrical and Electronic Engineering/Electronic and Computers Engineering:** VLSI Design, Renewable Energy System & Smart Grid, Power Electronics and Electric Drives, Sensor less Electric Drives, Electric Vehicle Charging Infrastructure, Cyber Security, Cyber-physical systems, DC and AC microgrids

- **Chemistry:** Computational biophysical chemistry for peptide mimetics; Machine learning in chemistry; Hybrid polymers based supramolecular materials; 2D Nanomaterials for energy applications; Multifunctional nanomaterials for targeted catalysis
- **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.
- **Mechanical and Aerospace Engineering:** Computational Mechanics, Theoretical solid mechanics, Solar Thermal Power, Refrigeration and Air-Conditioning, Heat transfer, Microfluidics, Biofluid Dynamics, Combustion, LES, Turbulence-chemistry interaction, Robotics, Advanced Materials
- **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; Evolutionary Algorithms; Game Theory; Computational Creativity; Theoretical Computer Science; Big Data Computing; Computer Architecture; Computer Networks; Network Security; Cyber Security; Wireless Sensor Networks.
- **Entrepreneurship:** Innovation and Entrepreneurship; Start-ups and Technology Entrepreneurship, Family Business Management, Start-ups-Scaling up & Growth, Incubation processes and models
- **Life Sciences:** Human Genetics & Genomics, Host-Pathogen Interactions, Microbial Genomics, Metabolic Disorders, Stem Cell Biology, Plant Metabolic Engineering, AI in Healthcare, Computational Drug Discovery, CRISPR Gene Editing, Bioprocessing Green Products

Eligibility:

Programme	Minimum qualification required for admission	Admission Process
Ph.D. (Full Time)	<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"> - 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. - 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. 	Interview

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

INR 50000/-
PER ANNUM

INR 20000/-
SECURITY DEPOSIT
(ONE TIME PAYMENT)

Ph.D. Assistantship
(for full time scholars)
INR 25000/- Per Month* (plus Boarding & Lodging)

*8 hours/week TA duty is mandatory.

Important Dates (* Subject to revision):

Last Date for submission of applications	27th Dec, 2022
Shortlisting of candidates for interview	30th Dec, 2022
Online interviews for selection	4th -8th Jan, 2023
Announcement of Results	12th Jan, 2023
Commencement of the Spring 2023 Semester Teaching	23rd Jan,2023

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

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