Mahindra University

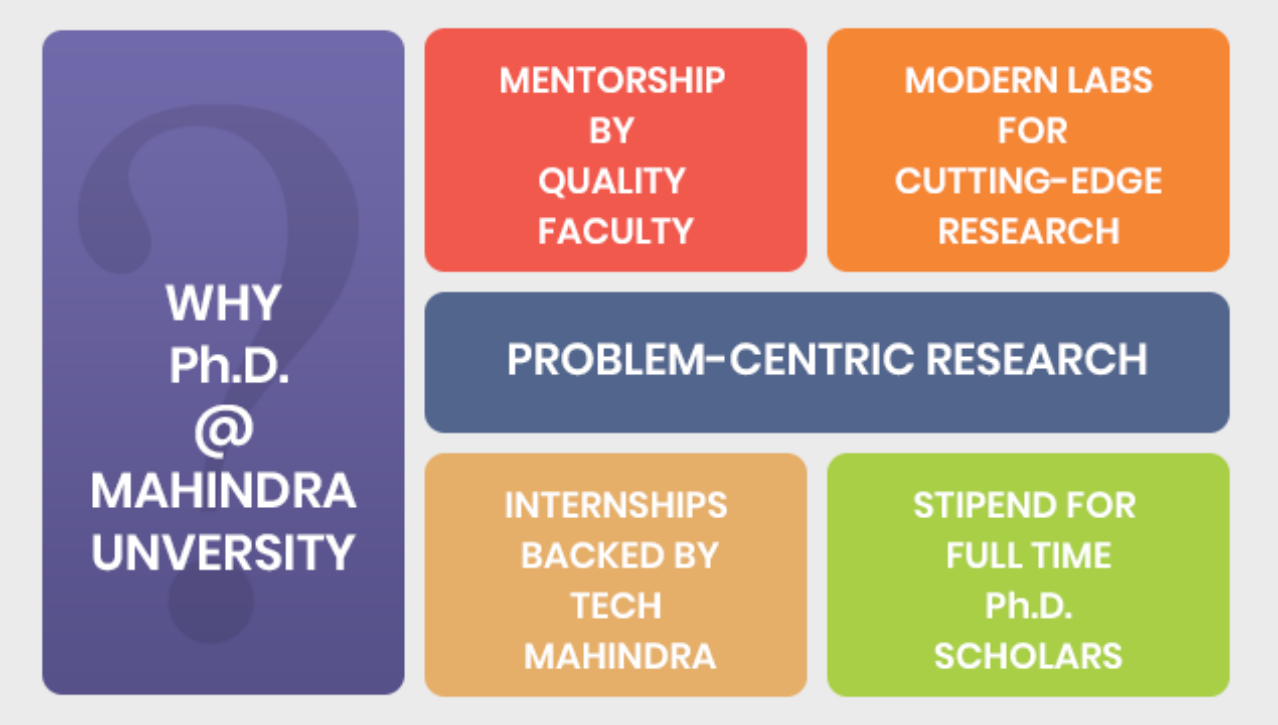
www.mahindrauniversity.edu.in

Ph.D. Program Admission Notification
(Fall 2023 Semester starting in Aug, 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 7th Batch of Ph.D. admissions in the Fall 2023 Semester starting in August, 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 Fall 2023 semester

Ph.D. Specializations for Fall 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, Terahertz photonics, 5G/6G communications, Topological photonic insulators, Metamaterials and metasurfaces

- **Civil Engineering**: ***Geotechnical Engineering*** - Sustainable/recycled/secondary pavement materials; ***Transportation Engineering*** - Transportation Planning- pedestrian and travel behavior modelling, traffic safety analysis; ***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, Engineered Bamboo, Monitoring corrosion of Infrastructure, Sustainable materials, Engineered nano cementitious composites, Ultra high performance concrete composites, Structural distress and strengthening systems

- **Electrical and Computer Engineering**: VLSI Design, Renewable Energy System & Smart Grid, Power Electronics and Electric Drives, Sensorless Electric Drives Biomedical Signal Processing, Biometrics and Computer vision, VLSI designs beyond CMOS, Wireless communications, 5G, and massive IoT

- **Chemistry:** Computational biophysical chemistry for peptide mimetics; Machine learning in chemistry; Hybrid polymers materials and nanoconjugates; Novel transition metal oxynitrides for electrocatalytic applications

- **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, Combustion, LES, Turbulence-chemistry interaction, Tribology, Nano materials, Cyber-Physical Systems, Advanced manufacturing systems, Robotics, Unmanned Aerial Vehicles

- **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.

- **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:** English Literature; American Literature; Indian Writing in English; Indian Writings in Translation; Post- Colonial Studies; Women's Writing; Cultural Studies; English Language Education (ELE); English as Second Language Education (ESL); Intercultural and International Communication; Strategic Management; Gandhian Ethics; Professional Ethics, Philosophical Logic; Philosophy of Science and Technology.

- **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, Systems Biology, Anti-Microbial Resistance

Eligibility:

Programme	Minimum qualification required for admission	Admission Process
Ph.D. **(Full Time)**	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. - 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):

Important Dates (* Subject to revision):

Last Date for submission of applications – 2nd Round	**21st Jun, 2023**
Shortlisting of candidates for interview	**28th Jun, 2023**
Online interviews for selection	**3rd – 8th Jul, 2023**
Announcement of Results	**14th Jul, 2023**
Commencement of the Fall 2023 Semester Teaching	**14th Aug, 2023**

Please click here to view Application Procedure for Ph.D. Program

Please click here to download Ph.D. Application Form