

TENTATIVE AREAS FOR PH.D. ADMISSIONS 2023-2024

Faculty of Technology and Engineering (Part-Time)

	Area	Number of Seats
Chemical Engineering	<ul style="list-style-type: none"> • Catalysis, Biofuels, Green Processes, Gasification & Pyrolysis • Abatement of Industrial Pollution, Nanotechnology for environmental applications • Process Integration, Process Simulations, Process Design, Phase Equilibrium • Polymer Technology, polymers in drug delivery • Green Chemical Engineering • Wastewater Treatments 	38
Civil Engineering	<ul style="list-style-type: none"> • Structural Engineering • Construction Materials, Technology and Management • Geo-Technical Engineering • Geomatics • Concrete Technology 	26
Computer Engineering	<ul style="list-style-type: none"> • Machine Learning and Deep Learning, Optimization, Data and Web Mining, Natural Language Processing • Networks, D2D Communication, Wireless Networks • Network Security, Blockchain Technology, Cyber Security • Big Data Analytics, Community Detection and Prediction, Medical Image Processing, • Human Computer Interaction (BCI and Eye Tracking), AR/VR, Audio and Speech Processing • Internet of Things and Cloud Computing • Healthcare, Image Processing, Satellite Image Analysis 	86
Electrical Engineering	<ul style="list-style-type: none"> • Power Electronics Devices, Converters, Drives, and Power Quality Improvement, Artificial Intelligence based Power Electronic Systems • Electrical Power System Analysis; Power System Dynamics, Modelling, Optimization and Intelligent techniques in Power Systems, Solar and Wind based Renewable integration with Grid, Smart Grid, High Voltage Engineering • Design, Modelling, Performance analysis, and Optimization of Conventional and Advanced Electrical Machines • Electrical Vehicles, On-board and off-board Electric Vehicle Chargers, Battery Management System, etc. 	26

	<ul style="list-style-type: none"> • Applications of IoT, Data Analytics, Load and Generation Forecasting in Electrical Engineering, etc. • Generation of Electricity by Waste Water Treatment, Applications of Plasma, Recent topics and innovation in Electrical Engineering 	
Electronics & Instrumentation Engineering	<ul style="list-style-type: none"> • Control Engineering, Soft computing Applications, Industrial Control System Design • Industrial Automation & Robotics, Biomedical Instrumentation, Industrial Applications of Machine Learning, Sensors & Measurement Techniques • Image and Signal Processing • Embedded system for automation, Power electronics 	16
Mechanical Engineering	<ul style="list-style-type: none"> • Thermal Engineering • Renewable Energy • Manufacturing Engineering, Additive Manufacturing, Sustainable manufacturing • Metal Joining, Metal Casting, Microwave based melting, Friction stir processing • Stress Analysis, Finite Element Analysis • Fracture Mechanics and Bio Mechanics • Advanced Materials • Composite materials • Robotics • Design Engineering • Production and Industrial Engineering • Thermal and Fluid Science • Design and Dynamics, Vibration, Condition monitoring of mechanical equipment • Thermo-chemical Conversion of biomass/coal - pyrolysis, gasification, combustion • Processing and Characterization of Composite Materials • Sustainable Machining • Machine Learning and manufacturing • Fluid flow and heat transfer • Quality Engineering 	71
Electronics & Communication Engineering	<ul style="list-style-type: none"> • VLSI Design, Test and Verification • Embedded Systems • Wireless Communication and Networking • Signal and Image Processing • Machine Learning and Computer Vision • Cyber Physical System 	36
Mathematics and Humanities	<ul style="list-style-type: none"> • Mathematics • Economics • English 	9 3 1
	Total Seats	310

Faculty of Pharmacy (Part-Time)

Areas of Research	Number of Seats
Pharmaceutics	5
Pharmacology	4
Pharmaceutical Analysis	3
Pharmaceutical Chemistry	8
Pharmacognosy	5
Total Seats	25

Faculty of Law (Part-Time)

Areas of Research	Number of Seats
Environmental Law	2
Economics	6
Constitution, Administrative Law & Human Rights	2
Total Seats	10

Faculty of Architecture & Planning (Part-Time)

Areas of Research	Number of Seats
Architecture (Urban Planning, Urban Design, Nature Based Solutions, Environmental Management)	04
Total Seats	04

Faculty of Management (Part-Time)

Areas of Research	Number of Seats
Finance	10
Total Seats	10