

TENTATIVE AREAS FOR PH.D. ADMISSIONS – December- 2025

Faculty of Technology and Engineering (Part-Time)

	Area	Number of Seats
Chemical Engineering	<ul style="list-style-type: none"> • Catalysis, Biofuels, Gasification & Pyrolysis • Abatement of Industrial Pollution, Nanotechnology for environmental applications, Advanced Oxidation Processes • Process Integration, Process Simulations, Process Design, Phase Equilibrium • Polymer Technology, polymers in drug delivery • Cleaner production, Green Chemical Engineering, Hydrogen Energy • Multiphase flow, Transport Phenomena, Process Optimization • Air quality monitoring, Climate change 	21
Civil Engineering	<ul style="list-style-type: none"> • Structural Engineering • Construction Materials, Technology and Management • Geo-Technical Engineering • Geomatics • Concrete Technology • Transportation Engineering • Water Resources Engineering • Environmental Engineering 	20
Computer Engineering	<ul style="list-style-type: none"> • Machine Learning and Deep Learning, Generative AI, 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, ML/DL, Graph mining • Human Computer Interaction (BCI and Eye Tracking), AR/VR, Audio and Speech Processing, Computer Vision • Internet of Things, Geospatial Data Analytics • Healthcare, Image Processing, Satellite Image Analysis • Cloud computing and its applications, Quantum Computing, and Cyber Security 	52

	<ul style="list-style-type: none"> • IoT and Wireless Networks • Audio and Speech Processing, Machine Learning, Information Retrieval Systems • Natural Language Processing, Machine Learning/Deep Learning, Medical Image Processing, Hyperspectral Image Processing • Wireless Communications, Network Security • AI/ML, Blockchain, EV, Big Data • Analytics, Cyber Security, etc. • Information Retrieval, Machine Learning • Medical image analysis, Medical imaging, AI in healthcare • Remote Sensing, Quantum Technology, AI Security 	
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. • 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 • Power electronic converters, On-board and off-board electric vehicle charger, battery management system for electric vehicle, renewable integration with grid, generation of electricity by waste water treatment • Electrical Power Systems 	20

<p>Electronics & Instrumentation Engineering</p>	<ul style="list-style-type: none"> • Control Engineering, Soft computing Applications, Industrial Control System Design • Vision Systems, Deep Learning, Industrial Automation • Industrial Automation & Robotics, Biomedical Instrumentation, Industrial Applications of Machine Learning, Sensors & Measurement Techniques • Image and Signal Processing • Embedded system for automation, Power electronics • Signal, image and Video Processing, Machine Learning/Deep Learning, Healthcare Data processing, IoT, and WSN 	<p>18</p>
<p>Mechanical Engineering</p>	<ul style="list-style-type: none"> • Thermal and Fluid Engineering • Renewable Energy • Thermo-chemical Conversion of biomass/coal -pyrolysis, gasification, combustion • I. C. Engine and Alternate fuels • Multiphase flow • Microfluids • Turbomachine • Computational Fluid Dynamics and Heat Transfer • Heat Exchangers • Rarefied gas flow • Production and Industrial Engineering • Manufacturing processes and their analysis • Sheet metal forming • Additive Manufacturing, Sustainable manufacturing • Metal Joining and Casting • Microwave based melting • Friction stir processing • Sustainable Machining • Sheet Metal Forming • Advanced Materials • Supply Chain Management • Quality Engineering and Management • Design Engineering • Stress Analysis • Fracture Mechanics and Bio Mechanics • Multibody Dynamics and Robotics • Vibration and Condition monitoring of mechanical equipment • Material Science 	<p>46</p>

	<ul style="list-style-type: none"> • Smart Materials & Structures 	
Electronics & Communication Engineering	<ul style="list-style-type: none"> • Hardware Security • VLSI Design, Test and Verification • RF MEMS Design, Analog VLSI Design, • Embedded System • Wireless Communication and Networking • Signal and Image Processing, Computer Vision • Machine Learning, Artificial Intelligence and Applications • Cyber Physical System • Digital Communication, • Satellite Communication, Remote sensing and Applications • Wireless, Networks, Internet of Things • Analog and Mixed signal VLSI design • Biological Process based analog circuits design, • Chip design for healthcare device application 	21
Mathematics	<ul style="list-style-type: none"> • Mathematics 	09
Humanities and Social Science	<ul style="list-style-type: none"> • Economics 	03
	Total Vacant Seats	210

Faculty of Pharmacy (Part-Time)

Areas of Research	No. of seats
Pharmaceutical Analysis	1
Pharmaceutical Chemistry	4
Pharmaceutics	2
Pharmacognosy	3
Total Vacant Seats	10

Faculty of Law (Part-Time)

Areas of Research	Number of Seats
Economics	02
Law	06
Total Vacant Seats	08

Faculty of Science (Part-Time)

Areas of Research	Number of Seats
Life Science	01
Physics	04
Chemistry	03
Total Vacant Seats	08

Faculty of Management (Part-Time)

Areas of Research	Number of Seats
Economics	02
Finance & Accounting	07
Marketing	01
Operations Management & Decision Science	03
Total Vacant Seats	13