

Department-wise Research area

Department of Civil Engineering	Department of EEE
<ul style="list-style-type: none"> • Water Resources • Experimental Hydraulics • Hydrological Modelling • Ground Improvement Techniques • Environmental Geo- Transportation • Urban & Rural Transportation • Structural members-Connections in Cold-Formed Steel, Composite Members • Bitumen modification with nanomaterials Conflict point analysis • Pavement design & analysis • Water & waste water Treatment • Industrial Wastewater Treatment 	<ul style="list-style-type: none"> • Control Systems • Power Systems • Electrical Vehicle • Renewable Energy • Converted Transformer • Battery Management System • High Voltage Engineering • Power Electronics and Drives & PLC • VLSI and Embedded Systems • Green Energy Technology
Department of Mechanical Engineering	Department of ECE
<ul style="list-style-type: none"> • Metal Matrix Composite • Forming operation • Coatings & Tribology • IC Engines • Surface Engineering • Sustainable machining techniques • Optimization techniques for any process • Welding techniques • Thermal & Robotics • Energy & Design • Thermal-Fluid (Turbomachines) • Biofuels • 3D printing • Materials & Design 	<ul style="list-style-type: none"> • Optical Wireless Communication • Visible Light Communication • Energy storage and ML • VLSI Design • Nano electronics • Instrumentations and control • AI, IoT, wireless networks • RF and Microwave • Wireless Communication/Networks • Image Processing • Smart Grid • Antennas • Automotive Embedded System • 5G Network • Semiconductor Optical Device • Solar Cell • Micro Electronics for Low Power Devices • Control Systems • Biomedical instrumentation • Microwave Imaging • Communication and Networking • Renewable energy • Embedded Systems • Telecommunications (Reconfigurable Intelligent Surfaces, NOMA) • Cognitive Radio

Department of CSE	Department of CST
<ul style="list-style-type: none"> • ML • MANET, IoT • Wireless Body Area Network • Software Process Improvement • Video Compression • Deep Learning • Image Processing • Mobile Ad hoc Network • IT in Education • Cybersecurity • Cloud computing • Computer Vision • Wireless sensor networks • Data Visualization • WSN • Software Testing • networks • Cryptography • Networking • Edge computing 	<ul style="list-style-type: none"> • Machine Learning • Dimensionality Reduction • Sensors • Cyber Security • Optimization algorithms • Wireless Sensor Networks • Complex System • Deep Learning • Computer Vision • Data Mining • Network Security • IoT • Edge Computing • Information Technology • Big Data Analytics • NLP • Cloud Computing
Department of Artificial Intelligence	Department of Cyber Security
<ul style="list-style-type: none"> • Network Traffic • Machine learning • Deep Learning • IoT Security • Artificial Intelligence • Data Science • Natural Language Processing • Computer Networks • Image Processing • Wireless Sensor Networks • Cloud Computing • Data Mining • Computer Vision • Cloud Computing • Streaming Data Analysis • Data Science 	<ul style="list-style-type: none"> • Data Mining • Network Security • Cryptography • NLP • Machine Learning • Cloud Computing • Combinatorial optimization • Deep Learning • Machine Learning

<p align="center">Department of Data Science</p>	<p align="center">Department of Mathematics (Basic Sciences & Humanities)</p>
<ul style="list-style-type: none"> • Wireless Sensor Networks • Machine learning • Deep learning • IOT • Data Analytics • IOT • Cloud computing • Cyber Security • Blockchain Technology • Image processing 	<ul style="list-style-type: none"> • Fluid Dynamics: Nanofluid flows • Chemical Graph Theory • Fractional differential equation • Mathematical Biology • Graph Theory: Algebra • Multivariate Analysis • Stability Theory • Control Theory • Neural Networks • Inventory Management • Supply Chain Management • Stochastic Modeling
<p align="center">Department of Physics (Basic Sciences & Humanities)</p>	<p align="center">Department of Chemistry (Basic Sciences & Humanities)</p>
<ul style="list-style-type: none"> • Materials science – Supercapacitors, Batteries, Sensors • Thin film science - Photodetectors • Condensed Mater Physics - Thin film deposition for Photovoltaic and photocatalytic applications • Optics, Lasers, Photonics - Ultrafast laser spectroscopy - Laser induced plasma applications • Applied Spectroscopy - Glass and Glass substrates • Nuclear Physics - Relativistic mean field theory. • Condensed Mater Physics - Multiferroic materials • Molecular spectroscopy - Chemometric studies • Theoretical condensed matter physics - Non-Hermitian system 	<ul style="list-style-type: none"> • Chemistry and Organic Chemistry • Computational and theoretical Chemistry • Thin Films • Analytical chemistry & Inorganic Chemistry • Nano Materials & Materials Chemistry • Electro chemistry • Nano Chemistry • Polymer Chemistry • Nano chemistry • Nano materials & Spectroscopy
<p align="center">Department of English and FL (Basic Sciences & Humanities)</p>	<p align="center">Department of Management Studies</p>
<ul style="list-style-type: none"> • African American Literature • Diasporic literature • commonwealth literature • ELT • American Literature • Indian Writing in English • Film Studies • Emotive Writing • British Literature • English Language Teaching • English Literature and Language 	<ul style="list-style-type: none"> • Marketing • Finance • Entrepreneurship • OB • General Management • Human Resource • Analytics

Department of MCA

- Image Processing
- Data Mining
- Cloud computing
- Cyber Security
- Machine Learning
- Computer Science
- Deep Learning
- Data Science
- AI & ML
- NLP
- Computer Applications
- Blockchain
- Computer Networks