

Tentative Courses List Sem II AY 2025-26 (Jan 2026 -May 2026)									
1st Year	Fluid Dynamics	Compilers	Design of Experiments	Non-linear Spectroscopy and its Applications	Quantum Optics	Environmental Economics and Natural Resource Management	Advanced Algorithms	Quantum Error Correction	Thin Film Processing and Characterization
Ordinary Differential Equations (half -sem)	Vibrations	Introduction to Data Science	Particulate Solids: Processing & Surface Engineering	Mathematics	Tools of Experimental Physics	Human Evolution	Distributed Systems and Cloud Computing	Classical Information Theory	Biomaterials for Tissue Regeneration
Data-Centric Computing	Mechanics of Materials	3rd Year Electrical Engineering	Fundamentals of Aerosol Science	Complex Analysis	Advanced General Relativity	Japan Studies	Computational Complexity Theory	Earth Sciences	Process Plant Design – How to Set Up a Process Industry
Probability, Statistics, and Data Visualization	Structural Analysis	Microprocessors and Embedded Systems	Liquid State Theory	Ordinary Differential Equations	HSS, MS, Design, IN	Creativity, Design and Doing	Deep Learning	Drone Data Acquisition, Processing and Interpretation	Biomolecular Materials Science
Principles and Applications of Electrical Engineering	Mathematical Foundations for AI	3rd Year Mechanical Engineering	Catalyst Design for Heterogeneous Reactions	Differential Topology	Writing Course in Chemistry	Game Apreciation and Game Aesthetics	Matrix Methods for Signal Processing, Data Science, and Machine Learning	Earth Surface Processes in the Anthropocene	Semiconductor Materials and Fabrication Process
Principles and Applications of Electrical Engineering	Introduction to Computational Materials Engineering	Mechanical Systems Design	Pharmaceutical Crystallization	Real analysis of several variables	Writing Course in Physics	Visual Design for Academia	Ethics of AI	Quantitative Geomorphology	
The World of Engineering	Mechanical Behavior of Materials	Energy Systems	Molecular Simulations – Theory and Applications	Numerical Analysis	Urdu script and poetry	Special Topics in Design: Designing Learning environments for science and engineering	Computer and Network Security	Biodiversity Conservation and Sustainable Development	
2nd Year	Physics of Materials	3rd Year Materials Engineering	Chemistry	Stochastic Differential Equations	Urdu poetry interpretation	Biological Engineering	Databases	Engineering Seismology and Seismic Hazard Analysis	
Theory of Computing	Structure of Materials	Materials and Environment	Fundamentals and Applications of Spectroscopy	Algebra II	World Civilizations and Cultures	Introduction to Biomedical Engineering	Electrical Engineering	Ocean and Global Change	
Introduction to Electrodynamics	Microstructural Engineering	Corrosion and Degradation of Materials	Fundamentals of Analytical Chemistry	Applied Statistics	Sanskrit Literature	Biomolecular Forensics	Advanced Signal Processing	Physics of the Lithosphere	
Solid State Physics	Power Systems	4th Year Civil Engineering	Reactions and Mechanisms in Organic Chemistry	Theory of partitions	Perspectives in History	Introduction to Plant Biotechnology	Artificial Intelligence	Climate of the Past	
Chemical Engineering Thermodynamics	Control Systems	Construction Technology & Management	Inorganic Chemistry Laboratory	Algebraic Number theory	Sociology of Tourism	Biophysical Techniques	Microelectronics Lab	Stratigraphic Evolution of Indian Continent	
Software Tools & Techniques for AI	Data Structures and Algorithms II	Additional Courses:	Organic Chemistry Laboratory	Matrix Lie Groups	The Politics of the Environment	Molecular Basis of Neurodegenerative Diseases	Special Electrical Machines	Ceramics in Archaeology	
Process Fluid Mechanics	Computer Organization & Architecture	Civil Engineering	Analytical and Computational Chemistry Laboratory	Matrix Analysis	Philosophy, Cognition and Psychoanalysis	Molecular Oncology	Power Electronic Converters	Harappan Civilisation	
Heat Transfer	Communication Systems	Networks and Complex Systems	Physical Chemistry Laboratory	Elliptic cruves and surfaces	Linguistic Anthropology	Bioinformatics and Computational Biology	Lasers	Atmospheric Physics	
Numerical Methods (Half Sem)	3rd Year Artificial Intelligence	Finite Element Methods	Group theory and spectroscopy	Commutative Algebra - II	Quantitative Research Methods in Social Sciences	Cellular Communication	IC Design Laboratory	Interpreting animals in the Human past	
Introduction to Partial Differential Equations (half-sem)	Machine Learning	Analysis and Design of Foundation Systems	Organometallic Chemistry	Physics	Critical Journey through Select Thoughts and Theories	Special Topics in Biological Engineering: Analysis and Characterization of Biologicals	Analog IC Design Lab	Mechanical Engineering	
Chemical Reaction Engineering - I	Introduction to Data Science	Remote Sensing of Land and Water Resources	Chemical biology in space (Special topics course)	Introduction to Astronomy and Space Science	India Through the Writer's Eye	Special Topics in Biological Engineering: Animal Cell Culture Techniques	Electronic Instrumentation	Modern Control Theory	
Principles of Manufacturing Processes	3rd Year Chemical Engineering	Applied Hydraulic Transients	Chemistry of Natural Products	Advanced Condensed Matter Physics	Structures and Hydrology in Ancient India	Novel Drug Delivery Technologies: Fundamental Principles and Engineering	Regulation of Electricity Sector	Human Robot Interaction	
Thermodynamics	Separation Processes - II	Geosynthetics	Electrochemistry	Quantum Mechanics II	Critical Perspectives in Anthropology	Cognitive Science	Medical Imaging Systems	Mechanics of Composite Materials	
Mechanics of Solids	Process Synthesis, Design, and Simulation	Advanced Concrete Design	Fluorescence Spectroscopy for Chemists and Biologists	Methods of Experimental Physics	Critical Perspectives in Sociology	Experimental Techniques in Cognitive Science	VLSI System Design	Integrated Design and Manufacturing	
Fluid Mechanics	Transport Phenomena	Traffic and Roadway Engineering	Medicinal Chemistry for Life	Statistical Mechanics	Academic Communication: Explanation and Paraphrasing	Introduction to Cognitive Linguistics	Memory Device Technologies and Applications	Advanced Fluid Mechanics	
Discrete Mathematics	Integrated Chemical Engineering Lab-II	Special Topics in Civil Engineering: Design for Dynamic Loads	Catalytic Chemistry	Computational Physics	Decolonizing Social Sciences	Motor Learning and Memory	Power Management IC Design	Energy Systems	
IC Fabrication Processes	3rd Year Civil Engineering	Special Topics: Geotechnical Infrastructure Design	Solid State Chemistry and Applications	Electronic Devices & Digital Systems for Physicists	Haunting, Spectrality and Cinema	Learning and Memory	Advanced Transportation Electrification Technology	Special Topics in Mechanical Engineering: Mathematical Methods for Mechanical Engineers II	
Unveiling the Semiconductor World	Environmental Science and Engineering	Special Topics: Drinking Water Treatment : Engineering Practices	Single Molecule Spectroscopy	Topics in Quantum and Statistical Mechanics	Storytelling for the Digital Era	Emotion and Cognition	Smart Power Distribution System	Aircraft and Rocket Propulsion	
Semiconductor Devices	Design of Reinforced Concrete Structures	Chemical Engineering	Introduction to Molecular Dynamics	Tools of Theoretical Physics	Understabding and Designing Comics and Graphic Novels	Human Brain Mapping	Physics inspired Machine Learning for Engineering Design	Vapor Liquid Phase Change Phenomena	
CMOS Circuit Design	Geotechnical Engineering	Colloidal Domain: Where Science Meets Engineering	Electronic Structure Theory	Quantum Field Theory-II	Drawing Conccetions: Environmental Perception and Visula Anthropology	Computer Science and Engineering	Advanced Radiating Systems	Materials Engineering	
Sustainability and Environment	3rd Year Computer Science and Engineering	Introduction to Process Safety	Advanced Main Group Chemistry	Physics of two-dimensional materials	Ethnoarchaeology	Machine Learning	Fundamentals of Wireless Localization	Surface Engineering	