Tentative Course List (December 2024 - May 2025 Semester)									
1st Year	Fluid Dynamics	**Electrical Engineering**	**Chemical Engineering**	Applied Vector Calculus and Differential Equations	Biophysical Techniques	Learning and Memory	Biodiversity Conservation and Sustainable Development	**Humanities and Social Science**	Mixed Methods in Research
Ordinary Differential Equations	Vibrations	Communication Systems	Colloidal Domain: Where Science Meets Engineering	Introduction to de Rham Cohomology	Neurophysiological Basis of Movement	Emotion and Cognition	Engineering Seismology and Seismic Hazard Analysis	French Studies	Special Topics in HSS: Decolonizing Social Sciences
Data-Centric Computing	Introduction to Computational Materials Engineering	**Mechanical Engineering**	Design of Experiments	Real Analysis of Several Variables	Molecular Basis of Neurodegenerative Diseases	Special Topics in Cognitive Science: Analysis and Modelling of Locomotion	Statistical Seismology	Urdu Script & Poetry	Sociology of Indigenous Peoples
Probability, Statistics, and Data Visualization	Mechanical Behavior of Materials	Synthesis and Analysis of Mechanisms	Particulate Solids: Processing & Surface Engineering	Numerical Analysis	Molecular Oncology	**Electrical Engineering**	Ocean and Global Change	Urdu Poetry Interpretation	**Management**
Principles and Applications of Electrical Engineering	Physics of Materials	Mechanical Systems Design	Fundamentals of Aerosol Science	Number Theory	Bioinformatics and Computational Biology	Microprocessors and Embedded Systems	Special Topics in Earth Sciences: Atmospheric Physics	Advance Japanese Learning	Special Topics in Management: Business Ethics and Responsible Leadership
The World of Engineering	Microstructural Engineering	Energy Systems	Liquid State Theory	Stochastic Differential Equations	Cellular Communication	High Voltage DC and Flexible AC Transmission Systems	**Mechanical Engineering**	Japanese Language for Beginners	Special Topics in Management: Essentials of Finance and Trade Laws
Undergraduate Science Laboratory	Power Systems	**Materials Engineering**	Catalyst Design for Heterogeneous Reactions	Algebra II	Special Topics in Biological Engineering: Analysis and Characterization of Biologicals	Advanced Signal Processing	Integrated Design and Manufacturing I	Mandarin for Beginners	Business Communication
Introduction to Writing II	Control Systems	Corrosion and Degradation of Materials	Molecular Simulations – Theory and Applications	Special Functions	Special Topics in Biological Engineering: Animal Cell Culture Techniques	Artificial Intelligence	Modern Control Theory	Mandarin for Beginners - II	Neuromarketing
2nd Year	Data Structures and Algorithms II	Materials and Environment	**Chemistry**	Nonlinear Functional Analysis	Novel Drug Delivery Technologies: Fundamental Principles and Engineering	Microelectronics Lab	Human-Robot Interaction	Sanskrit Literature	**Design**
Theory of Computing	Structural Analysis	**4th Year**	Fundamentals and Applications of Spectroscopy	**Physics**	**Computer Science and Engineering**	Special Electrical Machines	Advanced Fluid Mechanics	Harappan Civilization	Creativity, Design and Doing
Introduction to Electrodynamics	Mathematical Foundations for AI	**Civil Engineering**	Reactions and Mechanisms in Organic Chemistry	Quantum Mechanics II	Incentives in ML	Power Electronic Converters	Control of Nonlinear Dynamical Systems	Introduction to Linguistics	Information Design for e-learning
Chemical Engineering Thermodynamics	**3rd Year**	Construction Technology & Management	Analytical and Computational Chemistry Laboratory	Methods of Experimental Physics	Compilers	Analog IC Design Lab	Convective Heat Transfer	Creative Writing in Practice	
Software Tools & Techniques	**Chemical Engineering**	**Additional Courses**	Physical Chemistry Laboratory	Statistical Mechanics	Introduction to Data Science	Electronic Instrumentation	Elastodynamics and Vibrations	Special Topics in HSS: Understanding and Designing Comics and Graphic Novels	
Software Tools & Techniques for AI	Separation Processes - II	**Civil Engineering**	Organometallic Chemistry	Computational Physics	Software Engineering and Testing	Special Topics in Electrical Engineering: Regulation of Electric Sector	Introduction to Turbulence	Humanism, Antihumanism, Posthumanism	
Introduction to Materials	Process Synthesis, Design, and Simulation	Networks and Complex Systems	Chemistry of Natural Products	Topics in Quantum and Statistical Mechanics	Human-Computer Interaction	IC Design Laboratory	Computational Inelasticity	Indian Knowledge Systems - Buddhism in India and Beyond	
Digital Systems	Transport Phenomena	Finite Element Methods	Electrochemistry	Tools of Theoretical Physics	Advanced Algorithms	Heterostructure Devices	Energy Systems	Political Thought	
Process Fluid Mechanics	Integrated Chemical Engineering Lab-II	Analysis and Design of Foundation Systems	Fluorescence Spectroscopy for Chemists and Biologists	Quantum Field Theory II	Parallel and Distributed Systems	Medical Imaging Systems	Mechanics of composite materials	Perspectives in History	
Heat Transfer	**Civil Engineering**	Structural Design for Fire	Medicinal Chemistry for Life	Physics of Two-dimensional Materials	Computational Complexity Theory	VLSI System Design	**Materials Engineering**	History, Concepts and Theories of Development	
Numerical Methods	Design of Reinforced Concrete Structures	Applied Hydraulic Transients	Catalytic Chemistry	Quantum Optics	Linear Algebra and Computation	Memory Device Technologies and Applications	Surface Engineering	Quantiative Research Methods	
Partial Differential Equations	Environmental Science and Engineering	Geosynthetics	Solid State Chemistry and Applications	Quantum Computing and Information	Deep Learning	Power Management IC Design	Thin Film Processing and Characterization	Digital Cultures and New Media	
Chemical Reaction Engineering - I	Geotechnical Engineering	Advanced Concrete Design	Electronic Structure Theory	Tools of Experimental Physics	Special Topics in Computer Science: Learning for Social Good	Advanced Transportation Electrification Technology	Biomaterials for Tissue Regeneration	India Through the Writer's Eye	
Principles of Manufacturing Processes	**Computer Science & Engineering**	Traffic and Roadway Engineering	Advanced Main Group Chemistry	**Biological Engineering**	**Cognitive Science**	**Earth Sciences**	Process Plant Design – How to Set Up a Process Industry	Structures and Hydrology in Ancient India	
Mechanics of Solids	Software Tools & Techniques	Special Topics in Civil Engineering: Design for Dynamic Loads	**Mathematics**	Introduction to Biomedical Engineering	Experimental Techniques in Cognitive Science	Drone Data Acquisition, Processing and Interpretation	Biomolecular Materials Science	Literature, Theory and Social Contexts	
Fluid Mechanics	Operating Systems	Special Topics in Civil Engineering: Geotechnical Infrastructure Projects	Complex Analysis	Stem Cells: Science and Applications	Introduction to Cognitive Linguistics	River Morphology and Ecology	Interfaces in Materials	Critical Perspectives in Anthropology	
Sustainability and Environment	Computer Networks	Special Topics in Civil Engineering: Engineering practices in Drinking Water Treatment	Ordinary Differential Equations	Introduction to Cell Biology	Phenomenology, Embodiment, and Consciousness	Quantitative Geomorphology	Semiconductor Materials and Fabrication Process	Academic Communication: Explanation and Paraphrasing	