

Subject	CO Number	CO Statements	Blooms Level
3ET200PC Electronic Devices and Circuits	3ET200PC.1	Understand the construction, working principles, Characteristics of semiconductor diodes and transistors including PN junction, Zener, LED, Photo diode, BJT, JFET, MOSFET, and UJT. (L2)	Understanding L1
	3ET200PC.2	Apply semiconductor devices in circuits such as rectifiers, voltage regulators, clippers, clampers, amplifiers, and oscillators for electronic circuit design.(L3)	Applying L3
	3ET200PC.3	Analyze the performance of various BJT configurations and MOSFET/JFET devices using characteristic curves and small signal parameters.(L4)	Analyzing L4
	3ET200PC.4	Evaluate the impact of feedback in amplifier design and determine the suitability of different oscillator circuits for given applications based on frequency and stability requirements. (L5)	Evaluating L5
3ET201PC Electromagnetic Waves	3ET201PC.1	To understand the coordinate systems and vector integrals.	Understanding L2
	3ET201PC.2	To derive all four Maxwell's equations for steady and time varying fields and apply them to find boundary conditions.	Applying L3
	3ET201PC.3	To apply the Maxwell's equations to find the characteristics of Uniform Plane Waves	Applying L3
	3ET201PC.4	To apply the Maxwell's equations to derive radiation resistance of Hertzian Dipole, Quarter wave Monopole and Half-wave Dipole antennas.	Applying L3
3ET202PC Signals and Systems	3ET202PC.1	Apply the continues time signals and systems mathematically and their classification along with the mathematical operations performed on them.	Applying L3
	3ET202PC.2	Analyze signals and systems in the frequency domain using Fourier series and Fourier transform techniques.	Analyzing L4
	3ET202PC.3	Use Laplace transform to analyze continuous-time and discrete-time systems, including system response and stability.	Analyzing L4
	3ET202PC.4	Evaluate the spectral characteristics of discrete-time signals and systems using DTFT and its properties.	Evaluating L5
3ET206OE Analog Communication	3ET206OE.1	Explain the Fundamentals of Analog Communication.	Understanding L2
	3ET206OE.2	Illustrate the working of AM Generation and Demodulation.	Applying L3
	3ET206OE.3	Explain the FM Generation and Demodulation.	Understanding L2
	3ET206OE.4	Explain the concept noise in Analog Communication.	Understanding L2
	3ET206OE.5	Illustrate the working of Radio Receivers.	Applying L3
	3ET206OE.6	Explain the Fundamental concepts of Antenna.	Understanding L2
3ET207EM Entrepreneurship Development	3ET207EM.1	Explain the fundamentals of entrepreneurship and its role in economic development.	Understanding L2
	3ET207EM.2	Apply innovation and design thinking to develop business ideas.	Applying L3
	3ET207EM.3	Prepare a feasibility study and basic business plan for entrepreneurial ventures.	Creating L6
3ME205M	3ME205M.1	Understand the properties, testing and inspection of engineering materials.	Understanding L2

Basics of Mechanical Engineering	3ME205M.2	Summarize fundamental techniques and process used in energy conversion systems.	Understanding L2
	3ME205M.3	Understand various casting techniques and the importance of various metal forming processes.	Understanding L2
3ME206OE Engineering Materials	3ME206OE.1	To illustrate the basic concepts of metallurgy and classification of materials and their applications.	Understanding L2
	3ME206OE.2	To study the various mechanical properties and applications of engineering materials.	Understanding L2
	3ME206OE.3	To explain application and properties of advanced materials like smart materials, piezoelectric materials, superconducting materials etc.	Understanding L2
	3ME206OE.4	To illustrate the properties and application of various types of steels.	Understanding L2
	3ME206OE.5	To explain features, classification, application of newer class materials like biomaterials, composite materials etc.	Understanding L2
	3ME206OE.6	To illustrate the concept of powder metallurgy and its industrial applications.	Understanding L2
3CS205MD Foundations of Computing & Programming– III	3CS205MD.1	Understand computing systems and problem-solving logic	Understanding L2
	3CS205MD.2	Apply algorithmic thinking to solve simple problems.	Applying L3
	3CS205MD.3	Implement basic programs using control structures and I/O operations.	Applying L3
3EP206OE-I Power Supply System	3EP206OE.1	Explain the working of thermal & Hydro-electric power plants.	Understanding L2
	3EP206OE.2	Understand the basics of solar and wind energy and their conversion.	Understanding L2
	3EP206OE.3	Demonstrate the knowledge of various types of substations and distribution systems.	Applying L3
	3EP206OE.4	Demonstrate the knowledge of electrical wiring installation and earthing system.	Applying L3
3IT302OE Cyber Law	3IT302OE.1	Apply basic computer and internet concepts to analyze their role in digital business and governance.	Applying
	3IT302OE.2	Apply knowledge of e-payment systems to select suitable methods for secure online transactions.	Applying
	3IT302OE.3	Identify types of cybercrimes and common techniques used by cyber offenders.	Applying
	3IT302OE.4	Categorize cybercrimes and relate them to relevant legal provisions.	Applying
	3IT302OE.5	Apply sections of the IT Act to given cyber law scenarios.	Applying
	3IT302OE.6	Describe ethical and security concerns associated with the use of digital technologies.	Understanding