

(Approved by AICTE, New Delhi, DTE (EN/ME/MB/MC-3147), Recognized by Govt. of Maharashtra, Affiliated to University of Mumbai)

DEPARTMENT OF FIRST YEAR ENGINEERING

2.6.1. Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website and attainment of POs and COs are evaluated (SEM – I - C - SCHEME)

2022 REGULATION-COURSE OUTCOMES

SEMESTER	COURSE	COURSE NAME	COURSE	COURSE OUTCOME
	CODE		ID	
Ι	FEC101	Engineering Mathematics-I	CO 1	Illustrate the basic concepts of Complex numbers.
			CO 2	Apply the knowledge of complex numbers to solve problems in hyperbolic functions and logarithmic function.
			CO 3	Illustrate the basic principles of Partial differentiation.
			CO 4	Illustrate the knowledge of Maxima, Minima and Successive differentiation.
			CO 5	Apply principles of basic operations of matrices, rank and echelon form of matrices to solve simultaneous equations
			CO 6	Illustrate SCILAB programming techniques to the solution of linear and simultaneous algebraic equations.
Ι	FEC102	Engineering Physics-I	CO 1	Illustrate the fundamentals of quantum mechanics and its application.
			CO 2	Explain peculiar properties of crystal structure and apply them in crystallography using X-ray diffraction techniques.
			CO 3	Comprehend the concepts of semiconductor physics and applications of semiconductors in electronic devices.
			CO 4	Employ the concept of interference in thin films in measurements.
			CO 5	Discuss the properties of Superconductors and Supercapacitors to apply them in novel applications.
			CO 6	Compare the properties of engineering materials for their current and futuristic frontier applications.
			CO 1	Explain the concept of microscopic chemistry in terms of atomic and molecular orbital theory and relate it to diatomic molecules.
Ι	FEC103	Engineering Chemistry-I	CO 2	Describe the concept of aromaticity and interpret it with relation to specific aromatic systems.
			CO 3	Illustrate the knowledge of various types of intermolecular forces and relate it to real gases.
			CO 4	Interpret various phase transformations using thermodynamics.
			CO 5	Illustrate the knowledge of polymers, fabrication methods, conducting polymers in various industrial fields.

Saraswati Education Society's YADAVRAO TASGAONKAR INSTITUTE OF ENGINEERING AND TECHNOLOGY

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			CO 6	Analyze the quality of water and suggest suitable methods of treatment.				
Ι	FEC104	Engineering Mechanics	CO 1	Illustrate the concept of force, moment and apply the same along with the concept				
			CO 2	Demonstrate the understanding of Centroid and its significance and locate the same.				
			CO 3	Correlate real life application to specific type of friction and estimate required force toovercome friction.				
			CO 4	Establish relation between velocity and acceleration of a particle and analyze the motion byplotting the relation				
			CO 5	Illustrate different types of motions and establish Kinematic relations for a rigid body				
			CO 6	Analyze particles in motion using force and acceleration, work-energy and impulse- momentum principles				
I			CO 1	Apply various network theorems to determine the circuit response / behavior.				
	FEC105	Basic Electrical	CO 2	Evaluate and analyze $1-\Phi$ circuits.				
		Engineering	CO 3	Evaluate and analyze 3-Φ AC circuits.				
			CO 4	Understand the constructional features and operation of $1-\Phi$ transformer.				
			CO 5	Illustrate the working principle of $3-\Phi$ machine.				
			CO 6	Illustrate the working principle of $1-\Phi$ machines.				