



Sree Chitra Thirunal College of Engineering

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Consolidated Course Outcomes Report

Batch	Sno	Subject	CO	Topic	Bloom's taxonomy level		
CS 2K20	1	ENGINEERING MECHANICS	CO1	Recall principles and theorems related to rigid body mechanics	Understanding(U)		
			CO2	Describe the components of system of forces acting on the rigid body	Applying(P)		
			CO3	Apply the conditions of equilibrium to various practical problems involving different force system.	Applying(P)		
			CO4	Solve problems of mechanics by using appropriate theorems, principles or formulae	Applying(P)		
			CO5	Solve problems involving rigid bodies, applying the properties of distributed areas and masses	Applying(P)		
	2	LIFESKILLS	CO1	Outline different life skills required in personal and professional life.	Understanding(U)		
			CO2	Develop an awareness of the self and apply well defined techniques to cope with emotions and stress.	Applying(P)		
			CO3	Explain the basic mechanics of effective communication and demonstrate these through presentations.	Understanding(U)		
			CO4	Take part in group discussions.	Analyzing(A)		
			CO5	Make use of appropriate thinking and problem solving techniques to solve new problems.	Applying(P)		
			CO6	Demonstrate the basics of team work and leadership.	Understanding(U)		
	3	LINEAR ALGEBRA & CALCULUS	CO1	Solve system of linear equations, diagonalize matrices and characterise quadratic forms	Applying(P)		
			CO2	Apply the partial derivatives in extreme value problems and local linear approximations.	Applying(P)		
			CO3	Apply multiple integrals in areas and volumes of geometrical shapes, mass and central gravity of plane lamina.	Applying(P)		
			CO4	Explain the convergence and divergence of infinite series.	Understanding(U)		
			CO5	Determine the power series expansion of a given function.	Applying(P)		
	4	BASICS OF CIVIL & MECHANICAL ENGINEERING	CO6	Analyse thermodynamic cycles and calculate its efficiency	Analyzing(A)		
			CO7	Illustrate the working and features of IC Engines	Applying(P)		
			CO8	Explain the basic principles of Refrigeration and Air Conditioning	Understanding(U)		
			CO9	Describe the working of hydraulic machines	Understanding(U)		
			CO10	Explain the working of power transmission elements	Understanding(U)		
			CO11	Describe the basic manufacturing, metal joining and machining processes	Understanding(U)		
			CO1	Name the different tools and devices used for civil engineering measurements and explain the uses.	Understanding(U)		
			CO2	Demonstrate the steps involved in basic civil engineering activities of setting out operation, plot measurement and levelling.	Understanding(U)		
			CO3	Choose methods and materials required for basic civil engineering activities of masonry work and plumbing.	Understanding(U)		
			CO5	Discuss the materials, energy systems, water management and environment for green buildings.	Understanding(U)		
			CO4	Summarise the basic infrastructure facilities MEP, HVAC, elevators, escalators and ramps.	Understanding(U)		
			5	ENGINEERING CHEMISTRY LAB	CO1	Synthesize of UF resin and PF resin	Applying(P)
					CO2	Interpret the IR spectra and NMR spectra of simple organic compounds	Applying(P)
CO3	Estimate the Water Quality parameters (Hardness, DO, pH, Conductivity, Fe content)	Applying(P)					
CO4	Analyse and accurately determine the concentration of analyte in a given sample using conventional analytical laboratory techniques (Potentiometric Titration, Colorimetric, Iodometric Titrations, Complexometric Titration)	Applying(P)					
		CIVIL &	CO1	Name the different tools and devices used for civil engineering measurements and explain the uses.	Understanding(U)		

6	MECHANICAL WORKSHOP	CO2	Demonstrate the steps involved in basic civil engineering activities of setting out operation, plot measurement and levelling.	Understanding(U)
		CO3	Choose methods and materials required for basic civil engineering activities of masonry work and plumbing.	Understanding(U)
7	BASICS OF CIVIL & MECHANICAL ENGINEERING	CO6	Explain thermodynamic cycles (Carnot, Otto and Diesel cycles)	Understanding(U)
		CO7	Illustrate the working of two-stroke and four-stroke engines (petrol engines and diesel engines)	Remembering(R)
		CO8	Explain the basic principles of Refrigeration and Air Conditioning	Understanding(U)
		CO9	Describe the working of hydraulic pumps and turbines	Understanding(U)
		CO10	Explain the working of power transmission elements (belt drives, chain drives and gear drives)	Understanding(U)
		CO11	Describe the basic manufacturing processes (Metal forming, Metal joining and Machining)	Understanding(U)
8	CIVIL & MECHANICAL WORKSHOP	CO1	1. Apply appropriate safety measurements with respect to the mechanical workshop. I 2.Understanding different hand tools used in workshop and its usage.Understanding(U) Understand Understanding(U)	Understanding(U)
		CO2	1 Understand the usage of appropriate hand tools, instruments and machines with respect to the various mechanical trades Applying(P)	Applying(P)
		CO3	1 Understanding Basic Mechanical Workshop operation and making models in accordance with the materials and objects. Create(C)	Create(C)
9	ENGINEERING CHEMISTRY	CO1	Describe the basic concepts of electrochemistry and corrosion to explore its possible applications in various engineering fields.	Understanding(U)
		CO2	Interpret the spectral data from spectroscopic techniques like UV-Visible, IR, NMR and its applications or predict the Spectral data of a given structure.	Understanding(U)
		CO3	Outline the principle, classification, instrumentation, procedure and applications of TGA, DTA, Column Chromatography, TLC, Gas Chromatography, HPLC and SEM analytical instruments.	Understanding(U)
		CO4	Explain the basics of stereochemistry, its application and structure properties and applications of polymers	Understanding(U)
		CO5	Discuss the quality of water (based on hardness, DO) and water treatment methods (sewage and municipal) to develop skills for treating wastewater.	Understanding(U)