Sree Chitra Thirunal College of Engineering

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Consolidated Course Outcomes Report

Batch	Slno	Subject	CO	Topic	Bloom's taxonomy level
BT 2K20	1	ENGINEERING PHYSICS B	CO1	Describe the characteristics of different types of oscillations and waves in engineering systems	Understanding(U)
			CO2	Apply cosine law of thin film interference to wedge shaped films and diffraction phenomena in gratings.	Applying(P)
			CO3	Explain the behavior of matter in atomic level through the principle of quantum mechanics and basic concepts of nanoscience and technology	Understanding(U)
			CO4	Discuss the methods of production,detection, uses of ultrasonics and factors affecting acoustic design and their remedies.	Understanding(U)
			CO5	Explain the working of different lasers,concept of holography,basic concepts of optical fibres and their uses in various engineering systems .	Understanding(U)
	2	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING	CO4	Summarize the specifications, working and applications of passive and active electronic components.	Understanding(U)
			CO5	Explain the working of dc power supply and voltage amplifier.	Understanding(U)
			CO6	Outline the principles of electronic instrumentation and communication systems.	Understanding(U)
			CO1	Solve resistive electrical circuits by mesh current and node voltage method	Applying(P)
			CO2	Solve magnetic circuits using Faraday's laws and Ampere's Circuital law	Applying(P)
			CO3	Solve simple AC circuits in steady state condition.	Applying(P)
	3	ENGINEERING GRAPHICS	CO1	Draw the projection of points and lines located in different quadrants.	Applying(P)
			CO2	Prepare multiview orthographic projections of objects by visualizing them in different positions.	Applying(P)
			CO3	Draw sectional views and develop surfaces of a given object.	Applying(P)
			CO4	Prepare pictorial drawings using the principles of isometric and perspective projections to visualize objects in three dimensions.	Understanding(U)
			CO5	Convert 3D views to orthographic views.	Create(C)
			CO6	Obtain multiview projections and solid models of objects using CAD tools.	Applying(P)
	4	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 teamwork and leadership.	Understanding(U)
	5	LINEAR ALGEBRA & CALCULUS	CO1	solve systems of linear equations, diagonalize matrices and characterise quadratic forms	Applying(P)
			CO2	Apply partial derivatives in extreme value problem and local linear approximations.	Applying(P)
			CO3	Apply multiple integrals in areas and volumes of geometrical shapes, mass and centre of gravity of plane laminas.	Applying(P)
			CO4	Explain the convergence of infinite series	Understanding(U)
			CO5	Determine the power series expansion of a given function.	Applying(P)
	6	ENGINEERING PHYSICS LAB	CO1	Apply cosine law in understanding the interference from thin films with Airwedge and Newton's ring setup	Applying(P)
			CO2	Illustrate the phenomenon of diffraction through transmission grating-using spectrometer and find the dispersive power and resolving power of grating	Applying(P)

			CO3	Interpret theV-I relation in solar cell, the strain-voltage relation in strain gauge, (m/l2)relation in melde's arrangement for trans &longi. waves,analysing signal voltage and frequency using CRO	Applying(P)
	7	**ELECTRICAL & ELECTRONICS WORKSHOP**	**CO4**	Identify and test various electronic components	Understanding(U)
			CO5	Draw circuit schematics with EDA tools	Understanding(U)
			CO6	Assemble and test electronic circuits on boards	Understanding(U)
			CO1	Demonstrate safety measures against electric shocks	Understanding(U)
			CO2	Identify the tools used for electrical wiring, accessories,wires,cables,batteries and standard symbols	Understanding(U)
			CO3	Develop the connection diagram,identify the suitable accessories and materials necessary for wiring simple lighting circuits for domestic buildings	Applying(P)