



## 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	PROGRAMMING IN C	CO1	Analyze a computational problem and develop an algorithm/flowchart to find its solution.	Understanding(U)
			CO2	Develop readable C program with branching and looping statements, which uses Arithmetic, Logical, Relational or Bitwise operators	Remembering(R)
			CO3	Write a readable C programs with arrays, structure or union for storing the data to be processed.	Applying(P)
			CO4	Divide a given computational problem into a number of modules and develop a readable multi-function C program by using recursion if required, to find the solution to the computational problem.	Applying(P)
			CO5	Write readable C programs which use pointers for array processing and parameter passing	Understanding(U)
			CO6	Develop readable C programs with files for reading input and storing output.	Applying(P)
	2	ENGINEERING GRAPHICS	CO1	Solve projection of lines inclined to one of the reference planes, true length and traces	Understanding(U)
			CO2	Construct Orthographic Projections of Solids with axis inclined to both the reference planes and orthographic view of combination of solids	Understanding(U)
			CO3	Develop sections of solids with inclined plane and development of solids	Understanding(U)
			CO4	Construct isometric views of solids and perspective projection of solids	Applying(P)
			CO5	Construct orthographic view of objects from given 3D view	Applying(P)
			CO6	Model 2D and 3D objects using software	Applying(P)
	3	ENGINEERING PHYSICS A (FOR CIRCUIT BRANCHES)	CO1	Compute the quantitative aspects of waves and oscillations in engineering systems	
			CO2	Apply the interaction of light with matter through interference, diffraction and identify these phenomena in different natural optical processes and optical instruments	
			CO3	Analyze the behaviour of matter in the atomic and subatomic level through the principles of quantum mechanics to perceive the microscopic processes in electronic devices.	
			CO4	Classify the properties of magnetic materials and apply vector calculus to static magnetic fields and use Maxwell's equations to diverse engineering problems	
			CO5	Analyze the principles behind various superconducting applications, explain the working of solid state lighting devices and fibre optic communication system	
	4	PROFESSIONAL COMMUNICATION	CO1	Develop vocabulary and language skills relevant to engineering as a profession	Applying(P)
			CO2	Analyze a variety of textual content	Analyzing(A)
			CO3	Create effective technical presentations	Create(C)
			CO4	Discuss a given technical/non-technical topic in a group setting and arrive at generalizations/consensus	Understanding(U)
CO5			Identify drawbacks in listening patterns and apply listening techniques for specific needs	Applying(P)	
CO6			Create professional and technical documents that are clear and adhering to all the necessary conventions	Create(C)	
	VECTOR CALCULUS, DIFFERENTIAL	CO1	Explain the theory of derivatives and integrals of vector valued functions.	Understanding(U)	
		CO2	Apply calculus of vector valued functions in the evaluation of line integral, surface integral and volume integral.	Applying(P)	

5	<b>EQUATIONS AND TRANSFORMS</b>	CO3	Solve homogeneous and non-homogeneous linear differential equations with constant coefficients.	Applying(P)
		CO4	Explain the concept of Fourier Transforms and Laplace Transforms.	Understanding(U)
		CO5	Solve ordinary differential equations using Laplace Transforms.	Applying(P)
6	<b>BASICS OF ELECTRICAL &amp; ELECTRONICS ENGINEERING</b>	CO1	Solve resistive electrical networks by Mesh Current and Node Voltage method.	Applying(P)
		CO2	Solve magnetic circuits using Faradays laws and Amperes Circuital law	Applying(P)
		CO3	Solve simple A C circuits in steady state condition	Applying(P)
		CO4	Summarise 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)
7	<b>ELECTRICAL &amp; ELECTRONICS WORKSHOP</b>	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)
		CO7	Work in a team with good interpersonal skills	Applying(P)
8	<b>ELECTRICAL &amp; ELECTRONICS WORKSHOP</b>	CO1	Demonstrate safety measures against electric shocks	Understanding(U)
		CO2	Identify the tools used for electrical wiring, electrical 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)
9	<b>ENGINEERING PHYSICS LAB</b>	CO1	Develop analytical/experimental skills and impart prerequisite hands on experience for engineering laboratories	
		CO2	Understand the need for precise measurement practices for data recording	
		CO3	Understand the principle, concept, working and applications of relevant technologies and comparison of results with theoretical calculations	