



Sree Chitra Thirunal College of Engineering

Pappanamcode Thiruvananthapuram kerala -695018

principal@sctce.ac.in

Consolidated Course Outcomes Report

Batch	Sno	Subject	CO	Topic	Bloom's taxonomy level
AM 2K20	1	VECTOR CALCULUS, DIFFERENTIAL EQUATIONS AND TRANSFORMS	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)
			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)
	2	ENGINEERING PHYSICS A (FOR CIRCUIT BRANCHES)	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 the basic concept of nanoscience and technology	Understanding(U)
			CO4	Derive Maxwells equation using vector calculus for static magnetic fields.	Applying(P)
			CO5	Describe the phenomenon of superconductivity the basics of solidstate lighting devices and fibre optic communication systems	Understanding(U)
	3	ENGINEERING GRAPHICS	CO1	Solve projection of lines inclined to one of the reference planes, true length and traces	Applying(P)
			CO2	Construct Orthographic Projections of Solids with axis inclined to both the reference planes and orthographic view of combination of solids	Applying(P)
			CO3	Develop sections of solids with inclined plane and development of solids	Applying(P)
			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)
	4	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)
	5	BASICS OF ELECTRICAL & ELECTRONICS ENGINEERING	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 ac circuits in steady state conditions	Applying(P)	
6	PROGRAMMING IN C	CO1	Analyze a computational problem and develop an algorithm/flowchart to find its solution	Understanding(U)	
		CO2	Develop readable* C programs with branching and looping statements, which uses Arithmetic, Logical, Relational or Bitwise operators.	Applying(P)	
		CO3	Write 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	Applying(P)	

		CO6	Develop readable C programs with files for reading input and storing output	Applying(P)
7	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)
8	ENGINEERING PHYSICS LAB	CO1	.Apply cosine law in understanding the interference from thin films with Airwedge and Newton's ring setup.	Applying(P)
		CO2	Interpret theV-I relation in solar cell, the strain-voltage relation in strain gauge, (m/λ)relation in melde's arrangement for trans &longi. waves,analysing signal voltage and frequency using CRO.	Applying(P)
		CO3	Illustrate the phenomenon of diffraction through transmission grating-using spectrometer and find the dispersive power and resolving power of grating	Applying(P)
9	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)
10	ELECTRICAL & ELECTRONICS WORKSHOP	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)