



# 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	GRAPH THEORY	CO1	Explain vertices and their properties, types of paths and classification of graphs	Understanding(U)
			CO2	Apply the fundamental theorems on Eulerian and Hamiltonian graphs	Applying(P)
			CO3	Use Prim's and Kruskal's algorithms for finding minimum cost spanning tree and Dijkstra's and Floyd- Warshall algorithms for finding shortest paths.	Applying(P)
			CO4	Apply Euler's formula for finding the number of regions in any planar graph and Kuratowski's theorems for nonplanarity.	Applying(P)
			CO5	Apply Greedy colouring algorithm for proper colouring and representation of a graph in matrix form.	Applying(P)
	2	COMPUTER ORGANISATION AND ARCHITECTURE	CO1	Recognize and express the relevance of basic components, I/O organization and pipelining schemes in a digital computer	Understanding(U)
			CO2	Explain the types of memory systems and mapping functions used in memory systems	Understanding(U)
			CO3	Demonstrate the control signals required for the execution of a given instruction	Applying(P)
			CO4	Illustrate the design of Processor Unit	Applying(P)
			CO5	Explain the implementation aspects of arithmetic algorithms in a digital computer	Applying(P)
			CO6	Develop the control logic for a given arithmetic problem	Applying(P)
	3	DATABASE MANAGEMENT SYSTEM	CO1	Summarize fundamental nature and characteristics of database systems	Understanding(U)
			CO2	Model real word scenarios given as informal descriptions, using Entity Relationship diagrams.	Applying(P)
			CO3	Model solutions for efficiently representing and querying data using relational model	Applying(P)
			CO4	Demonstrate the features of indexing and hashing in database applications	Applying(P)
			CO5	Discuss the aspects of Concurrency Control and Recovery in Database systems and no sql databases	Understanding(U)
	4	OPERATING SYSTEM	CO1	Explain the relevance,structure and fuctions of Operating System in computing devices.	Understanding(U)
			CO2	Illustrates the concept of Process management and process scheduling mechanisms employed in OS.	Applying(P)
			CO3	Explain process synchronization in OS and illustrate process synchronization mechanisms using Mutex Locks,Semaphores and Monitors.	Applying(P)
			CO4	Explain any one method for detection, prevention, avoidance and recovery for managing deadlocks in OS.	Understanding(U)
			CO5	Implement the memory management algorithms in OS.	Applying(P)
			CO6	Explain the security aspects and algorithms for file and storage management in OS.	Understanding(U)
	5	CONSTITUTION OF INDIA	CO1	Explain the background of the present constitution of India and features.	
			CO2	Utilize the fundamental rights and duties	
			CO3	Understand the working of the union executive, parliament and judiciary	
			CO4	Understand the working of the state executive, legislature and judiciary	
			CO6	Show national and patriotic spirit as responsible citizens of the country	
CO5			Utilize the special provisions and statutory institutions.		
6	DESIGN AND	CO1	Explain the different concepts and principles involved in design engineering.	Understanding(U)	
		CO2	Apply design thinking while learning and practicing engineering.	Applying(P)	

	<b>ENGINEERING</b>	<b>CO3</b>	Develop innovative, reliable, sustainable and economically viable designs incorporating knowledge in engineering.	Applying(P)
<b>7</b>	<b>DIGITAL LAB</b>	<b>CO1</b>	Design and implement combinational logic circuits using Logic Gates	Applying(P)
		<b>CO2</b>	Design and implement sequential logic circuits using Integrated Circuits	Applying(P)
		<b>CO3</b>	Simulate functioning of digital circuits using programs written in a Hardware Description Language	Applying(P)
<b>8</b>	<b>OPERATING SYSTEM LAB</b>	<b>CO1</b>	Illustrate the use of systems calls in Operating Systems.	Applying(P)
		<b>CO2</b>	Implement Process Creation and Inter Process Communication in Operating Systems.	Applying(P)
		<b>CO3</b>	Implement First Come First Served, Shortest Job First, Round Robin and Priority- based CPU Scheduling Algorithms.	Applying(P)
		<b>CO4</b>	Illustrate the performance of First In First Out, Least Recently Used and Least Frequently Used Page Replacement Algorithms.	Applying(P)
		<b>CO5</b>	Implement modules for Deadlock Detection and Deadlock Avoidance in Operating Systems.	Applying(P)
		<b>CO6</b>	Implement Memory Allocation Methods First Fit , Worst Fit, Best Fit and Disk Scheduling algorithms FCFS ,SCAN ,C-SCAN in Operating Systems.	Applying(P)