

Department of Information Technology
Course Outcomes of all courses of B Tech 4th semester IT

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C210- Data Structures	C210.1	<i>Define</i> Abstract Data Types, Arrays implementation and Operations on a Linked List (<i>Level 1</i>)
	C210.2	<i>Evaluate</i> Prefix and Postfix Expressions, stack operations(push & pop) (<i>Level 4</i>)
	C210.3	<i>Construct</i> Binary Trees, Binary Tree Representation, Tree Traversal algorithms: Inorder, Preorder and Postorder (<i>Level 3</i>)
	C210.4	<i>Create</i> Graphs, Adjacency Matrices, Adjacency List, Adjacency Multi list, Graph Traversal : Depth First Search and Breadth First Search, (<i>Level 6</i>)
	C210.5	<i>Apply</i> Prim's and Kruskal algorithm. Shortest Path algorithm: Warshall Algorithm and Dijkstra Algorithm. (<i>Level 3</i>)

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Course	COURSE OUTCOMES	
C211- Database Management System	C211.1	Will be able to Define the basic concepts of RDBMS and relational data model
	C211.2	Be familiar with the relational database theory, and construct relational algebra expressions for queries. (<i>Level 3</i>)
	C211.3	Understand DML, DDL and will be able to construct queries using SQL by knowing the importance of data & its requirements in
	C211.4	Analyze the basic issues of transaction, its processing and concurrency control. (<i>Level 4</i>)
	C211.5	To develop translate DB designs from relational notation to ER notation & can Perform normalization once redundancies have been eliminated. (<i>Level 6</i>)

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Course	COURSE OUTCOMES	
C212- Analog Electronic Circuits	C212.1	To clearly understand and demonstrate the knowledge of semiconductor diode and transistors and its applications (<i>Level 2</i>)
	C212.2	To clearly understand and demonstrate the knowledge of amplifiers at low frequencies.
	C212.3	To Analyze the concepts of multistage amplifiers and their applications. (<i>Level 4</i>)
	C212.4	To Classify the basics of feedback in amplifiers. (<i>Level 4</i>)
	C212.5	To gain a thorough understanding of oscillators, their applications. (<i>Level 2</i>)

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Course	COURSE OUTCOMES	
C213- Operating System	C213.1	Define the general architecture of computers and operating system (<i>Level 1</i>)
	C213.2	Illustrate concept of Process, Operations on Processes and CPU Scheduling.
	C213.3	Examine Prevention, avoidance and detection, Recovery from dead lock combined approach
	C213.4	Analyze memory management and Multiprogramming with fixed partitions. (<i>Level 4</i>)
	C213.5	Understand Virtual Memory concept, Demand Paging, Performance, Page Replacement algorithms, Allocation of frames (<i>Level 2</i>)

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C214 -Internet of Things	C214.1	To understand Concepts, design and characteristics of IoT. (<i>Level 2</i>)
	C214.2	To understand Architecture and basic protocols of IoT. (<i>Level 2</i>)
	C214.3	To understand challenges and applications of IoTs. (<i>Level 2</i>)
	C214.4	To develop IoT applications using Tools. (<i>Level 6</i>)
	C214.5	Analyze basic protocols in wireless sensor network (<i>Level 4</i>)

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C215 -Data Structures Lab	C215.1	Identify the appropriate data structure for a given problem.(level-3)
	C215.2	Design various data structure algorithms and estimate their time and space complexity. (level-6)
	C215.3	Apply appropriate algorithm for better utilization of memory. (.level-3)
	C215.4	Apply practical knowledge on the applications of data structures. (.level-3)
	C215.5	Solve real world problems using sorting and searching techniques. (.level-3)

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Course	COURSE OUTCOMES	
C216 -Data Structures Lab	C216.1	Utilize typical data definitions and manipulation commands.(level 3)
	C216.2	Design applications to test Nested and Join Queries.(level 6)
	C216.3	Develop simple applications that use Views.(level 6)
	C216.4	Develop applications that require a Front-end Tool. .(level 6)
	C216.5	Critically analyze the use of Tables, Views, Functions and Procedures.(level 4)

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Course	COURSE OUTCOMES	
C217 Operating System (UNIX) Lab	C217.1	Demonstration of Basic UNIX Commands.(level 2)
	C217.2	Develop Shell Script for Files and Directory.(level 3)
	C217.3	Create Program for File I/O. (level 6)
	C217.4	Develop Shell Script using loops. (level 3)
	C217.5	Create Program with Shell script for math operations. (level 6)

On successful completion of this course, students should be able to

Course	COURSE OUTCOMES	
C218- Virtual Lab (IoT Laboratory)	C218.1	Define what IoT is and how it works today.(level 1)
	C218.2	Recognize the factors that contributed to the emergence of IoT, Design and program IoT devices.(level 6)
	C218.3	Use of real IoT protocols for communication, secure the elements of an IoT device.(level 3)
	C218.4	Design an IoT device to work with a Cloud Computing infrastructure.(level 6)
	C218.5	Analyze data to the cloud and in between cloud providers.(level 4)



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Chhatrapati Shivaji Institute of Technology

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