

II B.Tech II semester

SUBJECT: Formal Languages and Automata Theory (CS416PC)

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C210.1	Understand basic concepts of formal languages, grammar, and automata	2
C210.2	Design finite automata and regular expressions for pattern recognition	6
C210.3	Construct context-free grammars and pushdown automata for language processing	6
C210.4	Analyze Turing machines and decidability issues in computation	4
C210.5	Apply theoretical foundations to solve problems in compiler design and software engineering	3

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SUBJECT: Software Engineering (CS417PC)

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C211.1	Understand software engineering principles, process models, and lifecycle phases.	2
C211.2	Apply requirements engineering techniques to gather, analyze, and document software specifications.	4
C211.3	Design software architectures and models using UML and other design tools.	6
C211.4	Evaluate software testing strategies, quality assurance techniques, and maintenance practices.	5
C211.5	Demonstrate teamwork, documentation, and ethical responsibility in software project development.	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C211.1	3	2	2	2							2	2	3	2	
C211.2	3	3	3	3	2						3	3	3	2	
C211.3	3	2	2	3	2						2	2	3	3	
C211.4	2	2	2	3	2						3	3	2	3	
C211.5				2							2	2	2		
Average	2.8	2.3	2.3	2.6	2						2.4	2.4	2.6	2.5	



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SUBJECT: CS403PC: OPERATING SYSTEMS

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C212.1	Understand the structure and functions of operating systems	2
C212.2	Analyze process management and CPU scheduling algorithms	4
C212.3	Apply synchronization techniques and deadlock handling methods	3
C212.4	Evaluate memory management strategies and virtual memory concepts	5
C212.5	Understand file systems, I/O systems, and protection mechanisms	2

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C212.1	2	2	2	1	1			3	2	3		1	2	2	1
C212.2	3	3	3	2	2			2	3	2		2	3	3	2
C212.3	3	3	3	3	2			1	2	2		2	3	2	2
C212.4	2	3	3	2	2			2	2	1		2	3	3	2
C212.5	3	3	3	3	3			2	2	2		3	3	3	3
Average	2.6	2.8	2.8	2.2	2			2	2.2	2		2	2.8	2.6	2

SUBJECT: CS404PC: DATABASE MANAGEMENT SYSTEMS

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C213.1	CO1: Understand database concepts, architecture, and data models	2
C213.2	CO2: Design ER models and convert them into relational schemas	6
C213.3	CO3: Apply relational algebra and SQL for data manipulation and retrieval	3
C213.4	CO4: Understand normalization techniques and apply them to optimize database design	4
C213.5	CO5: Analyze transaction management, concurrency control, and recovery techniques	4

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CSE & ECE

After going through this course, the student will be able to

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SUBJECT: CS406PC: OPERATING SYSTEMS LAB

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C215.1	Understand basic UNIX/Linux commands and shell scripting	2
C215.2	Implement process management techniques such as scheduling and synchronization	4
C215.3	Apply memory management and file system operations using system calls	3
C215.4	Develop shell scripts for automation and system administration tasks	6
C215.5	Demonstrate teamwork, debugging, and documentation skills in lab assignments	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C215.1	3	2	2						2				2	2	2
C215.2	3	3	3						2				3	3	2
C215.3	3	3	3						2				3	3	3
C215.4	3	3	3						2				3	3	2
C215.5	3	3	3						2				3	3	3
Average	3	2.8	2.8						2				2.8	2.8	2.4



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SUBJECT: CS407PC: DATABASE MANAGEMENT SYSTEMS LAB

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C216.1	Design and implement relational databases using SQL	6
C216.2	Apply normalization techniques to optimize database design	4
C216.3	Develop queries using relational algebra and SQL for data retrieval	3
C216.4	Implement transaction management and concurrency control mechanisms	4
C216.5	Demonstrate teamwork, documentation, and debugging skills in database projects	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C216.1	2	2	2		1				3				2	2	2
C216.2	3	3	3		2				3				2	2	2
C216.3	3	3	3		2				2				3	3	2
C216.4	3	3	3		3				3				3	3	2
C216.5	2	3	3		3				3				3	3	2
Average	2.6	2.8	2.8		2.2				2.8				2.6	2.6	2



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SUBJECT:

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C217.1	Apply object-oriented programming concepts using Java	3
C217.2	Implement inheritance, polymorphism, and exception handling	3
C217.3	Develop GUI applications using AWT and Swing	6
C217.4	Use multithreading and file I/O for concurrent and persistent applications	4
C217.5	Demonstrate teamwork, debugging, and documentation skills in Java projects	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C217.1	3	2	2	1	3				2						
C217.2	3	3	3	2	2				2				3		
C217.3	3	3	3	3	2				2				3	3	
C217.4	3	3	3	3	3				3				3	3	
C217.5	3	3	3	3	3				3				3	3	
Average	3	2.8	2.8	2.4	2.6				2.4				3	3	



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SUBJECT: *MC409: CONSTITUTION OF INDIA

After going through this course, the student will be able to

S.No.	COURSE OUTCOMES	BT Level
C218.1	Understand the historical background and philosophy of the Indian Constitution	2
C218.2	Comprehend the fundamental rights, duties, and directive principles	2
C218.3	Analyze the structure and functions of the legislature, executive, and judiciary	4
C218.4	Appreciate the role of constitutional provisions in promoting social justice and equality	5
C218.5	Demonstrate civic responsibility and ethical awareness in professional and personal contexts	3

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C218.1						1		3	1	2		2			3
C218.2						2		3	2	3		3			3
C218.3						2		3	2	2		3			3
C218.4						2		3	3	3		3			3
C218.5						3		3	3	3		3			3
Average						3		3	3	3		3			3