



## Department of Information Technology

### IV B. Tech I Semester

#### SUBJECT: (C401) Information Security

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

S. No.	COURSE OUTCOMES	BT Level
C401.1	Understand classical encryption techniques and modern symmetric key ciphers	2-Understand
C401.2	Apply public key cryptography and authentication mechanisms	3-Apply
C401.3	Analyze hash functions, digital signatures, and message authentication codes	4-Analyze
C401.4	Evaluate security protocols for network applications (SSL, IPsec, etc.)	5-Evaluate
C401.5	Demonstrate teamwork, documentation, and ethical responsibility in secure system design	3-Apply

#### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C401.1	2	2				3		3					3	2	3
C401.2	3	3	2			3		2						3	2
C401.3	3	3	3			2		3					3	3	2
C401.4	3	3	3			2		2					2		3
C401.5	3	3	3			2							3	3	3
<b>Average</b>	<b>2.8</b>	<b>2.8</b>	<b>2.75</b>			<b>2.4</b>		<b>2.5</b>					<b>2.75</b>	<b>2.75</b>	<b>2.6</b>



## Department of Information Technology

### IV B. Tech I Semester

#### SUBJECT: (C402) CLOUD COMPUTING

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

S. No.	COURSE OUTCOMES	BT Level
C402.1	Understand cloud computing fundamentals, architecture, and service models	2-Understand
C402.2	Analyze virtualization technologies and cloud infrastructure	4-Analyze
C402.3	Apply cloud programming models and APIs	3-Apply
C402.4	Evaluate cloud resource management and scheduling techniques	5-Evaluate
C402.5	Demonstrate teamwork, documentation, and ethical responsibility in cloud-based projects	3-Apply

#### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C402.1	3	2			2								2	3	2
C402.2	3	3	3	2	3								3	3	2
C402.3	3	3	3	2	3								3	2	3
C402.4	3	3	3	2	3								2	3	2
C402.5	3	3	3	2	3								3	3	2
Average	3	2.8	3	2	2.8								2.6	2.8	2.2



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### IV B. Tech I Semester

#### SUBJECT: (C403) Professional Elective IV -Human Computer Interaction

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

S. No.	COURSE OUTCOMES	BT Level
C403.1	Understand the fundamental principles of human-computer interaction, human cognition.	2-Understand
C403.2	Apply user-centered design methodologies and conduct user research, task analysis, and usability evaluation to create effective user interfaces.	3-Apply
C403.3	Design and develop interactive prototypes using wireframing, mockups, and prototyping tools following established interaction design principles and guidelines.	6-Create
C403.4	Evaluate user interfaces through various usability testing methods, heuristic evaluation, and accessibility standards to ensure inclusive and efficient design.	5-Evaluate
C403.5	Analyze emerging interaction paradigms including mobile interfaces, voice user interfaces and virtual reality.	4-Analyze

#### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C403.1	2	2	2												
C403.2	2	3	3	3	2										
C403.3	2	3	3	2	3								2	3	
C403.4	2	3	3	3	3								3	2	
C403.5	2	3	3	2	3									3	
Average	2	2.8	2.8	2.5	2.75								2.5	2.667	



## Department of Information Technology

### IV B. Tech I Semester

#### SUBJECT: (C404) Professional Elective V - SOFTWARE PROCESS & PROJECT MANAGEMENT

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

S. No.	COURSE OUTCOMES	BT Level
C404.1	Understand software economics, life cycle phases, and project organization	2-Understand
C404.2	Analyze milestones, artifacts, and metrics from technical and managerial perspectives	4-Analyze
C404.3	Design and manage software projects using planning and control techniques	6-Create
C404.4	Apply risk management, quality assurance, and configuration management practices	3-Apply
C404.5	Demonstrate teamwork, documentation, and communication in project environments	3-Apply

#### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C404.1	2	3	2	2	2	2			2	2	3	2	3	2	
C404.2	2	3	3	2	2	2		2	2	2	3		3	2	
C404.3	2	3	3	2	2	2		3	3		3	2	3	2	3
C404.4	2	3	2	3	2	2		2	3	3	3		3	3	2
C404.5	2	3	3	2	3	2		2	3	3	3	3	3	2	2
<b>Average</b>	<b>2</b>	<b>3</b>	<b>2.6</b>	<b>2.2</b>	<b>2.2</b>	<b>2</b>		<b>2.25</b>	<b>2.6</b>	<b>2.5</b>	<b>3</b>	<b>2.333</b>	<b>3</b>	<b>2.2</b>	<b>2.333</b>



**Department of Information Technology**

**IV B. Tech I Semester**

**SUBJECT: (C405) Open Elective-II - AI APPLICATIONS**

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

S. No.	COURSE OUTCOMES	BT Level
C405.1	Understand the fundamental concepts of organizational behavior, individual differences, personality.	2-Understand
C405.2	Analyze group dynamics, team formation, leadership styles, and communication patterns to foster effective collaboration.	4-Analyze
C405.3	Evaluate organizational culture, structure, and change management.	5-Evaluate
C405.4	Apply motivational theories and conflict-resolution techniques to enhance employee satisfaction.	3-Apply
C405.5	Examine contemporary issues in organizational behavior including workplace diversity, ethics.	4-Analyze

**CO-PO MAPPING**

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C405.1	3	2	2	2										2	2
C405.2	3	3	2	3									2	2	3
C405.3	3	3	3	2									3	2	3
C405.4	3	3	3	2									3	3	3
C405.5	3	3	3	2									3	3	3
<b>Average</b>	<b>3</b>	<b>2.8</b>	<b>2.6</b>	<b>2.2</b>									<b>2.75</b>	<b>2.4</b>	<b>2.8</b>

**SUBJECT: (C406) Information Security Lab**



## Department of Information Technology

### IV B. Tech I Semester

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

S. No.	COURSE OUTCOMES	BT Level
C406.1	Implement classical encryption techniques and symmetric key algorithms	3-Apply
C406.2	Apply public key cryptography and digital signatures	3-Apply
C406.3	Use hashing and message authentication codes for integrity and authentication	3-Apply
C406.4	Analyze secure communication protocols like SSL and IPsec	4-Analyze
C406.5	Demonstrate teamwork, documentation, and ethical responsibility in security projects	3-Apply

### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C406.1	3	2	2	2	3								2	3	2
C406.2	3	3	3	3	2								3	2	3
C406.3	3	3	3	3	2									3	2
C406.4	3	3	3	3	3								3		3
C406.5	3	3	3	3	3								3	2	3
Average	3	2.8	2.8	2.8	2.6								2.75	2.5	2.6

**SUBJECT: (C407) Cloud Computing Lab**



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### IV B. Tech I Semester

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

S. No.	COURSE OUTCOMES	BT Level
C407.1	Understand the fundamental principles of distributed computing	2-Understand
C407.2	Create virtual machines and virtual templates.	6-Create
C407.3	Create Cloud platform using Virtual machines	6-Create
C407.4	Identify suitable business models of cloud computing.	2-Understand
C407.5	Analyze various cloud programming models and apply them to solve problems on the cloud.	4-Analyze

### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C407.1	3	2	2		3								3	3	
C407.2	3	3	3		3								3	3	
C407.3	3	3	3		3								3	3	
C407.4	3	3	3		3								3	3	
C407.5	2	2	2		2								2	2	
<b>Average</b>	<b>2.8</b>	<b>2.6</b>	<b>2.6</b>		<b>2.8</b>								<b>2.8</b>	<b>2.8</b>	

**SUBJECT: (C408) Project Stage - I**



## Department of Information Technology

### IV B. Tech I Semester

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

S. No.	COURSE OUTCOMES	BT Level
C408.1	Identify and define a real-world problem suitable for project development	2-Understand
C408.2	Conduct literature survey and feasibility analysis to support project planning	4-Analyze
C408.3	Design system architecture and select appropriate tools and technologies	6-Create
C408.4	Work effectively in teams and demonstrate professional ethics and responsibility	3-Apply
C408.5	Document project objectives, methodology, and expected outcomes clearly and professionally	3-Apply

### CO-PO MAPPING

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C408.1	3	3	2	3	2			2		2	2	3	3	2	
C408.2	3	3	3	3	2			2		2	3	2	3	3	
C408.3	3	3	3	2	3			2		2	3	2		3	
C408.4	3	3	3	2	3			2			3	2	3		
C408.5	2	2	2	2	2			2	3	3	3	2	3	2	
<b>Average</b>	<b>2.8</b>	<b>2.8</b>	<b>2.6</b>	<b>2.4</b>	<b>2.4</b>			<b>2</b>	<b>3</b>	<b>2.25</b>	<b>2.8</b>	<b>2.2</b>	<b>3</b>	<b>2.5</b>	