



## 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
<b>Average</b>	<b>3</b>	<b>2.8</b>	<b>3</b>	<b>2</b>	<b>2.8</b>								<b>2.6</b>	<b>2.8</b>	<b>2.2</b>



## Department of Information Technology

### 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	
<b>Average</b>	<b>2</b>	<b>2.8</b>	<b>2.8</b>	<b>2.5</b>	<b>2.75</b>								<b>2.5</b>	<b>2.667</b>	



## 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>

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



## 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
C405.1	Understand the fundamental concepts of organizational behavior, individual differences, personality traits, and their impact on workplace performance and decision-making.	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 processes to adapt to evolving business environments and technological advancements.	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
<b>Average</b>	<b>3</b>	<b>2.8</b>	<b>2.8</b>	<b>2.8</b>	<b>2.6</b>								<b>2.75</b>	<b>2.5</b>	<b>2.6</b>

**SUBJECT: (C407) Cloud Computing 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
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>	