

Department of Computer Engineering
Curricular Structure (B.Tech Computer Engg.)

Semester III

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	III	CST201	Logic in Computing	PC	Theory	3	3-0-0
2	III	CST203	Data Structures and Algorithms	PC	Theory	4	3-1-0
3	III	CST205	Digital Logic Design	PC	Theory	4	3-1-0
4	III	CST207	Programming Methodology	PC	Theory	3	3-0-0
5	III	CST209	Introduction to Signals and Communication	PC	Theory	4	3-1-0
6	III	HST201	Effective Communication	PC	Theory	3	2-1-0

1	III	CSP211	Programming Lab	PC	Lab	2	0-0-4
2	III	CSP213	Digital Logic Design Lab	PC	Lab	2	0-0-3
						25	29

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Hour
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Semester IV

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	IV	CST202	Computer Organization and Microprocessors	PC	Theory	3	3-0-0
2	IV	CST204	Discrete Structures	PC	Theory	4	3-0-0
3	IV	CST206	Formal Languages and Automata Theory	PC	Theory	4	3-1-0
4	IV	CST208	Design and Analysis of Algorithms	PC	Theory	4	3-1-0
5	IV	CST210	Systems Programming	PC	Theory	3	3-0-0
6	IV	HST202	Economic Environment	PC	Theory	3	2-1-0

1	IV	CSP212	Assembly Language Programming Lab	PC	Lab	2	0-0-3
2	IV	CSP214	Algorithms Lab	PC	Lab	2	0-0-3
3	IV	CSP216	System Programming Lab	PC	Lab	2	0-0-3

							27	29	Cont act Hour s
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Semester V

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	V	CST301	Computer Architecture	PC	Theory	3	3-0-0
2	V	CST303	Concurrent and Parallel Programming	PC	Theory	3	3-0-0
3	V	CST305	DBMS	PC	Theory	4	3-1-0
4	V	CST307	Computer Networks	PC	Theory	3	3-0-0
5	V	CST309	Compiler Design	PC	Theory	3	3-0-0
6	V	CST311	Software Engineering	PC	Theory	3	3-0-0

1	V	CSP313	DBMS Lab	PC	Lab	2	0-0-3	
2	V	CSP315	Concurrent Programming Lab	PC	Lab	2	0-0-3	
3	V	CSP317	Computer Network Lab	PC	Lab	2	0-0-3	
						25	28	Cont act Hour s

Semester VI

S.No.	Semester	Course Code	Course Name	Category	Type	Credit	L-T-P
1	VI	CST302	Operating System	PC	Theory	3	3-0-0
2	VI	CST304	Embedded Systems	PC	Theory	3	3-0-0
3	VI	CST306	Object Oriented Analysis and Design	PC	Theory	3	3-0-0
4	VI	CST308	Computer and Network Security	PC	Theory	3	3-0-0
5	VI	CST310	Computer Graphics	PC	Theory	3	3-0-0
6	VI	CST312	AI and Expert System	PC	Theory	3	3-0-0

1	VI	CSP314		OS and Security Lab	PC	Lab	2	0-0-3	Cont act Hour s
2	VI	CSP316		Graphics Lab	PC	Lab	2	0-0-3	
3	VI	CSP318		Advanced Programming Lab	PC	Lab	2	0-0-3	
4	VI	CSP320		Embedded System Design Lab	PC	Lab	2	0-0-3	
							26	30	

* Letter grades to be awarded.

Semester VII

S.No.	Semester	Course Code		Course Name	Category	Type	Credit	L-T-P
1	VII	CSS401		Training Seminar	PC	Theory	2	0-2-0
2	VII			Management	PC	Theory		
3	VII			Open Elective I	OE	Theory		
4	VII			Open Elective II	OE	Theory		
5	VII			Program Elective I	PE	Theory	4	3-0-2
6	VII			Program Elective II	PE	Theory	4	3-0-2

Semester VIII

S.No.	Semester	Course Code		Course Name	Category	Type	Credit	L-T-P
1	VIII			Management	PC	Theory		
2	VIII	CSD402		Major Project	Projec	Theory		
3	VIII			Open Elective III	OE	Theory		

4	VIII			<i>Open Elective IV</i>	OE	Theory		
5	VIII			Advanced Program Elective I	AEC	Theory	4	3-0-2
6	VIII			Advanced Program Elective II	AEC	Theory	4	3-0-2

Advanced Elective Courses

S.No.		Course Code		Course Name				
		CST432		Topics in Data Structures and Algorithms				
		CST434		Parallel and Distributed Computing				
		CST436		Selected Topics in Operating System				
		CST438		Advanced Topics in Computer Graphics				
		CST440		Advanced Topics in Databases				
		CST442		Network Performance Modelling				
		CST444		Software Testing and Validation				
		CST446		Topics in SOC Design				
		CST448		Advances in Compiler Design				
		CST450		Wireless Sensor Networks				
		CST452		Digital Image Analysis				
		CST454		Data Mining and Data Warehousing				
		CST456		Topics in High Speed Networking				
		CST458		E-Commerce				
		CST460		High Level Synthesis of Digital Systems				
		CST462		Parallelizing Compiler				
		CST464		Public Key Infrastructure and Trust Management				
		CST466		Selected Topics in Cryptography				
		CST468		Robotics and Control				
		CST470		FPGA based System Design				
		CST472		Security in Computing				
		CST474		Intelligent Agents				
		CST476		Critical Systems				
		CST478		Pattern Recognition				

		CST480	Biometric Security				
		CST482	Computer Forensics				
		CST484	Semantic Web				
		CST486	Intrusion Detection				
		CST488	Internet Security				
		CST490	Malware Analysis and Detection				

Program Electives

S.No.		Course Code	Course Name				
		CST433	Wireless Communications				
		CST435	VHDL				
		CST437	Neural Networks				
		CST439	Speech Recognition				
		CST441	Software Project Management				
		CST443	Data Compression				
		CST445	Natural Language Processing				
		CST447	Wireless & Ad-hoc Networks				
		CST449	Real Time Systems				
		CST451	Cryptography				
		CST453	VLSI Algorithms				
		CST455	Digital Image Processing				
		CST457	Evolving Architectures				
		CST459	Topics in Computing				
		CST461	Machine Learning				
		CST463	Modelling and Simulation				
		CST431	Programming in Java				
		CST465	Python Programming				
		CST467	Multimedia Technology				
		CST469	Computer Human Interaction				