

Faculty of Engineering, School of Computer Science & Engineering
Department of Computer Science & Engineering
Degree- B. Tech. CSE Total Credit: 160

Third Semester						Fourth Semester					
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
MAS21XX / MEE22XX ⁱ	Statistics & Probability/ Engineering Economics	3	0	0	3	MAS21XX / MEE22XX	Statistics & Probability/ Engineering Economics	3	0	0	3
MBB21XX	Management of Technology	3	0	0	3	CSE2201	Design and Analysis of Algorithms	3	1	0	4
CSE2101	Data Structures and Algorithms	3	1	0	4	CSE2202	Operating Systems	3	1	0	4
CSE2102	Relational Database Management System	3	1	0	4	CSE2221/CS E2222	Cryptography/ High Performance Computing	3	1	0	4
CSE2103	Computer Organization & Architecture	3	1	0	4	CSE22XX	Program Elective 1	3	0	0	3
CSE2121/ CSE2122	Object Oriented Programming using Java/ Object Oriented Programming using Python	3	0	1	4	CSE00XX	Open Elective 1	3	0	0	3
CSE2131	Data Structures and Algorithms Lab	0	0	2	1	CSE2231	Design and Analysis of Algorithms Lab	0	0	2	1
CSE2132	Relational Database Management System Lab	0	0	2	1	CSE2232	Operating Systems Lab	0	0	2	1
CSE2170	Project-based Learning 1	0	0	2	1	CSE2270	Project-based Learning 2	0	0	2	1
		18	4	6	25			18	3	6	24
	Total Contact Hours (L+T+P)	28				Total Contact Hours (L+T+P)	27				
Fifth Semester						Sixth Semester					
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
CSE3101	Computer Networks	3	1	0	4	CSE3201	Machine Learning	3	1	0	4
CSE3102	Software Engineering	3	1	0	4	CSE32XX	Program Elective 4	3	0	0	3
CSE3121/ CSE3122	Artificial Intelligence & Soft Computing / Visual Computing	3	1	0	4	CSE32XX	Program Elective 5	3	0	0	3
CSE31XX	Program Elective 2	3	0	0	3	CSE32XX	Program Elective 6	3	0	0	3
CSE31XX	Program Elective 3	3	0	0	3	CSE00XX	Open Elective 3	3	0	0	3
CSE00XX	Open Elective 2	3	0	0	3	CSE3230	Professional Practice	0	0	2	1
CSE3131	Computer Networks Lab	0	0	2	1	CSE3231	Machine Learning Lab	0	0	2	1
CSE3132	Software Engineering Lab	0	0	2	1	CSE3232	Emerging Tools & Technology	0	0	2	1
CSE3170	Project-based Learning 3	0	0	2	1	CSE3270	Project-based Learning 4	0	0	6	3
		18	3	6	24			15	1	12	22
	Total Contact Hours (L+T+P)	27				Total Contact Hours (L+T+P)	28				
Seventh Semester						Eighth Semester					
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
CSE41XX	Program Elective 7	3	0	0	3	CSE4271	Major Project	0	0	24	12
CSE41XX	Program Elective 8	3	0	0	3						
CSE00XX	Open Elective 4	3	0	0	3						
CSE00XX	Open Elective 5	3	0	0	3						
CSE4171	Internship (Industry or Research)	0	0	2	1						
		12	0	2	13						12
	Total Contact Hours (L+T+P)	14				Total Contact Hours (L+T+P)	24				

Flexi Core		
Flexi Core 1 (III Sem)	Flexi Core 2 (IV Sem)	Flexi Core 3 (V Sem)
CSE2121: Object Oriented Programming using Java. CSE2122: Object Oriented Programming using Python	CSE2221: Cryptography CSE2222: High Performance Computing	CSE3121: Artificial Intelligence & Soft Computing CSE3122: Visual Computing

Program Electives			
IV	V	VI	VII
PE1 CSE2240: Automata and Compiler Design CSE2241: Data Visualization Techniques	PE2 CSE3140: Cloud Infrastructures & Virtualization CSE3141: Predictive Analytics CSE3147: Essential of Cyber Security CSE3148: User Experience Design PE3 CSE3142: Android App Development CSE3143: Advanced Java CSE3144: Advanced Data Structures CSE3145: Game Theory CSE3146: Software Testing & Automation	PE 4 CSE3240: Cloud Applications CSE3241: Computer Vision CSE3242: Web Framework CSE3243: Ethical Hacking PE5 CSE3244: Secure Programming CSE3245: Cloud Security and Privacy CSE3246: Natural Language Processing CSE3247: Agile Methodology CSE3248: Explainable AI PE6 CSE3249: Digital Forensics and Cyber Crimes CSE3250: Fog and Edge Computing CSE3251: Deep Learning CSE3252: UI/UX Design CSE3253: DevOps CSE3254: Analytics Insights (PWC)	PE 7 CSE4140: Blockchain Technologies CSE4141: Cloud Automation Tools CSE4142: Social Network Analysis CSE4143: Recommender Systems CSE4149: Software Verification and Testing PE8 CSE4144: Information Retrieval CSE4145: Virtual & Augmented Reality CSE4146: Quantum Computing CSE4147: Cognitive Computing CSE4148: Reinforcement Learning

Minor Specialization Track in B.Tech CSE Curriculum from the 2023–24 Academic Year Onwards

CSE Specialization Tracks (PE-2, PE-4, PE-5 and PE-7)			
Cloud Computing Track	Software Engineering Track	Artificial Intelligence and Machine Learning Track	Cyber Security Track
CSE3140: Cloud Infrastructures & Virtualization (V Sem, PE-2) CSE3240: Cloud Applications (VI Sem, PE-4) CSE3245: Cloud Security and Privacy (VI Sem, PE-5) CSE4141: Cloud Automation Tools (VII Sem, PE-7)	CSE3148: User Experience Design (V Sem, PE-2) CSE3242: Web Framework (VI Sem, PE-4) CSE3247: Agile Methodology (VI Sem, PE-5) CSE4149: Software Verification and Testing (VII Sem, PE-7)	CSE3141: Predictive Analytics (V Sem, PE-2) CSE3241: Computer Vision (VI Sem, PE-4) CSE3246: Natural Language Processing (VI Sem, PE-5) CSE4143: Recommender Systems (VII Sem, PE-7)	CSE3147: Essential of Cyber Security (V Sem, PE-2) CSE3243: Ethical Hacking (VI Sem, PE-4) CSE3244: Secure Programming (VI Sem, PE-5) CSE4140: Blockchain Technologies (VII Sem, PE-7)