

**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code: **32** **M. Tech. (Computer Science & Engineering)**
 Department: **CS** **Computer Science & Engineering**
 Year: **I**

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester- I (Autumn)														
1.	CSN-501	Advanced Algorithms	PCC	4	3	1	0	3	0	25	-	25	50	-
2.	CSN-502	Advanced Operating Systems	PCC	4	3	1	0	3	0	25	-	25	50	-
3.	CSN-503	Advanced Computer Networks	PCC	4	3	1	0	3	0	25	-	25	50	-
4.	CSN-504	Lab I (Programming Lab)	PCC	2	0	0	3	0	0	-	100	-	-	-
5.	CSN-505	Lab II (Project Lab)	PCC	2	0	0	3	0	0	-	100	-	-	-
6.		Elective 1	PEC	4	3	1	0	3	0	25	-	25	50	-
		Total		20	9	3	6							
Semester-II (Spring)														
1.	CSN-506	Advanced Computer Architecture	PCC	4	3	1	0	3	0	25	-	25	50	-
5.	CSN-700	Seminar	SEM	2	-	-	-	-	-	-	-	-	100	-
2.		Elective 2	PEC	4	3	1	0	3	0	25	-	25	50	-
3.		Elective 3	PEC	4	3	1	0	3	0	25	-	25	50	-
4.		Elective 4	PEC	4	3	1	0	3	0	25	-	25	50	-
		Total		18	3	1	0							

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Program Code: **32** **M. Tech. (Computer Science & Engineering)**
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 Year: **II**

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester- I (Autumn)														
1.	CSN-701A	Dissertation Stage-I (to be continued next semester)	DIS	12	-	-	-	-	-	-	-	-	100	-
		Total		12										
Note: Students can take 1 or 2 audit courses as advised by the supervisor, if required.														
Semester-II (Spring)														
1.	CSN-701B	Dissertation Stage-II (contd. From III semester)	DIS	18	-	-	-	-	-	-	-	-	100	-
		Total		18										

Summary				
Semester	1	2	3	4
Semester-wise Total Credits	20	18	12	18
Total Credits	68			

Program Elective Courses (CSE)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Department Elective-I														
1.	CSN-510	Network Programming	PEC	4	3	1	0	3	0	25	-	25	50	-
2.	CSN-511	Advanced Data Based Management Systems	PEC	4	3	1	0	3	0	25	-	25	50	-
3.	CSN-512	Formal Methods and Software Verification	PEC	4	3	1	0	3	0	25	-	25	50	-
4.	CSN-513	Information and Network Security	PEC	4	3	1	0	3	0	25	-	25	50	-
Department Elective-II,III, IV														
5.	CSN-514	Advanced Automata Theory	PEC	4	3	1	0	3	0	25	-	25	50	-
6.	CSN-515	Data Mining and Warehousing	PEC	4	3	1	0	3	0	25	-	25	50	-
7.	CSN-516	Modeling and Simulation	PEC	4	3	1	0	3	0	25	-	25	50	-
8.	CSN-517	Advanced Topics in Software Engineering	PEC	4	3	1	0	3	0	25	-	25	50	-
9.	CSN-518	Logic and Automated Reasoning	PEC	4	3	1	0	3	0	25	-	25	50	-
10.	CSN-519	Social Network Analysis	PEC	4	3	1	0	3	0	25	-	25	50	-
11.	CSN-520	Cloud Computing	PEC	4	3	1	0	3	0	25	-	25	50	-
12.	CSN-521	Mobile and Pervasive Computing	PEC	4	3	1	0	3	0	25	-	25	50	-
13.	CSN-522	Advanced Graph Theory	PEC	4	3	1	0	3	0	25	-	25	50	-
14.	CSN-523	Computational Geometry	PEC	4	3	1	0	3	0	25	-	25	50	-
15.	CSN-475	Parallel and Distributed algorithms	PEC	4	3	1	0	3	0	25	-	25	50	-