B.Tech (Computer Science and Engineering)
OVERALL CREDIT STRUCTURE

Undergraduate Core (UC)		**Undergraduate Elective (UE)**	
Category	Credit	Category	Credit
DC	59	DE	25 (minimum)
BC	19	HM	6(minimum)
ES	20	OC	25 (balance)
HM	6	UN	00 (Courses)
Total	**104**	**Total**	**56**
Grand Total UC+UE			**160**

Course Code	**Course**	**L-T-P**	**Credit**
Basic Sciences (BS)			
SCL102	Applied Mathematics -I	3-2-0	4
SCL103	Applied Mathematics-II	3-2-0	4
SCL203	Probability & Numerical Methods**	3-0-0	3
SCL104	Applied Physics	3-0-2	4
SCL105	Applied Chemistry	3-0-2	4
Total			**19**

Engineering Arts and Sciences (ES)		**L-T-P**	**Credit**
CEL101	Engineering Mechanics	3-0-2	4
EEL101	Elementary Electrical Engineering	3-0-2	4
MEL101	Engineering Drawing	3-0-2	4
CSL101	Computer Programming	3-0-2	4
MEP101	Mechanical Workshop	0-0-2	1
EEP101	Electrical Workshop	0-0-2	1
CEL102	Environmental Science	2-0-0	2
Total			**20**

Humanities and Management (Core) (HM)		**L-T-P**	**Credit**
HMP102	Spoken English	1-0-2	2
HMP103	Written English	1-2-0	2
HML101	Social Science	2-0-0	2
Total			**6**

Non Credit Requirement		**L-T-P**	**Credit**
NCN101	NCC#	-	0
NCN102	NSS#	-	0
NCN103	NSO#	-	0
SPB101	Sports-1#	0-0-4	0
SPB102	Sports-II#	0-0-4	0
CSD201	Project	-	0
CSD301	Literature Review Paper Writing	-	0
CST201	Practical Training	-	0
HMD201	Community Project	-	0

A student has to opt at least one from NCC, NSS, NSO and sports (I & II both).
Note: Students are required to opt the core courses in the order (*,**,***)

Departmental Core (DC)		**L-T-P**	**Credit**
ECL202	Digital Circuits *	3-0-2	4
CSL201	Data Structures and Program Design*	3-0-2	4
CSL202	Computer Organization*	3-2-0	4
CSL203	Concepts in Programming Languages**	3-0-2	4
CSL204	Introduction to Object Oriented Methodology**	3-0-2	4
CSL301	Theory of Computation*	3-2-0	4
CSL302	Operating Systems*	3-0-2	4
CSL303	Computer Networks***	3-0-2	4
CSL304	System Programming*	3-0-2	4
CSL305	Database Management Systems***	3-0-2	4
CSL306	Language Processors***	3-0-2	4
CSL307	Software Engineering***	3-0-2	4
CSL308	Analysis of Algorithms**	3-2-0	4
SCL202	Electronic and Electromagnetic Material*	3-0-0	3
SCL204	Discrete Mathematics *	3-2-0	4

Departmental Elective (DE)		**L-T-P**	**Credit**
ECL305	Microcontroller and interfacing	3-0-2	4
CSL309	Neuro-Fuzzy Techniques	3-0-2	4
CSL310	Computer Graphics	3-0-2	4
CSL311	Internet Technologies	3-0-2	4
CSL312	Topics in Graph Theory	3-2-0	4
CSL401	Real-Time Systems	3-0-2	4
CSL402	Artificial Intelligence	3-0-2	4
CSL403	Fundamental Algorithms in Computational Biology	3-0-2	4
CSL404	Network Security	3-0-2	4
CSL405	Data Mining and Data Warehousing	3-0-2	4
CSL406	Advanced Computer Architecture	3-0-2	4
CSL407	Distributed System	3-0-2	4
CSL408	Information Retrieval	3-0-2	4
CSD401	Major Project Part-I	-	1
CSP401	Software Lab	0-0-2	1
CSD402	Major Project Part-II	-	3
SCL402	Linear Algebra	3-0-0	3

M. Tech. (Computer Science and Engineering) specialization in Artificial Intelligence
OVERALL CREDIT STRUCTURE

S. No	Category	Symbol	M. Tech (2-Year) (Credits)
1	**PG Core**	**PC**	**30**
1.1	Departmental Core	DC	13
1.2	Project phase-I	P1	05
1.3	Project phase-II	P2	10
1.4	Seminar	SM	02
2	**PG Elective**	**PE**	**25**
2.1	Specialization Electives	SE	19
2.2	Open Courses	OC	06
	TOTAL REQUIREMENT		**55 (Minimum)**

Postgraduate Core (PC)		**L-T-P**	**Credit**
CSD501	Project Phase –I	-	05
CSD502	Project Phase-II	-	10
CSD503	Seminar	-	02
CSL413	Advanced Computer Networks	3-0-0	03
CSL414	Advanced Automata Theory	3-0-0	03
CSL415	Statistical Models for Computer Science	3-0-0	03
CSL416	Advanced Algorithms	3-0-2	04
Specialization Elective (SE)		**L-T-P**	**Credit**
CSL402	Artificial Intelligence	3-0-2	04
CSL403	Fundamental Algorithms in Computational Biology	3-0-2	04
CSL405	Data Mining and Data Warehousing	3-0-2	04
CSL408	Information retrieval	3-0-2	04
CSL418	Pattern Recognition and Machine Learning	3-0-0	03
CSL419	Computer Vision and Image Processing	3-0-0	03
CSL420	Optimization Techniques	3-0-0	03
CSL421	Research Methodology	3-0-0	03

M. Tech. (Computer Science and Engineering) specialization in Computing Systems
OVERALL CREDIT STRUCTURE

S. No	Category	Symbol	M. Tech (2-Year) (Credits)
1	**PG Core**	**PC**	**30**
1.1	Departmental Core	DC	13
1.2	Project phase-I	P1	05
1.3	Project phase-II	P2	10
1.4	Seminar	SM	02
2	**PG Elective**	**PE**	**25**
2.1	Specialization Electives	SE	19
2.2	Open Courses	OC	06
	TOTAL REQUIREMENT		**55 (Minimum)**

Postgraduate Core (PC)		**L-T-P**	**Credit**
CSD501	Project Phase –I	-	05
CSD502	Project Phase-II	-	10
CSD503	Seminar	-	02
CSL413	Advanced Computer Networks	3-0-0	03
CSL414	Advanced Automata Theory	3-0-0	03
CSL415	Statistical Models for Computer Science	3-0-0	03
CSL416	Advanced Algorithms	3-0-2	04
Specialization Elective (SE)		**L-T-P**	**Credit**
CSL401	Real Time Systems	3-0-2	04
CSL404	Network Security	3-0-2	04
CSL407	Distributed Systems	3-0-2	04
CSL420	Optimization Techniques	3-0-0	04
CSL421	Research Methodology	3-0-0	03
CSL422	Wireless and Mobile Communication	3-0-0	03
CSL423	Cloud Enabled Technologies	3-0-0	03
CSL425	Introduction to Virtualization and Cloud Computing	3-0-0	03
CSL427	Embedded Systems	3-0-0	03