

Computer Science and Engineering

Semester1

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Fundamentals of Computers & Programming	CS 101	5	3	0	4	100	0	100	200
2	Engineering Mathematics	AS 102	4	3	1	0	100	25	0	125
3	Engineering Physics	AS 103	4	3	0	2	100	0	50	150
4	Electronic Devices and Circuits	EC 104	4	3	0	2	100	0	50	150
5	English and Communication Skills	AL 105	4	3	0	2	100	0	50	150
6	ICT Workshop - I	CS 106	2	0	0	4	0	0	100	100
Total			23	15	1	14	500	25	350	875
Total Contact Hours per week				30				875		

Semester 2

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Discrete Mathematics	AS 201	4	3	1	0	100	25	0	125
2	Electrical Networks	EE 202	4	3	0	2	100	0	50	150
3	Data Structures and Algorithms	CS 203	4	3	0	2	100	0	50	150
4	Digital Logic Design	EC 204	4	3	0	2	100	0	50	150
5	Engineering Mechanics	AE 205	4	3	0	2	100	0	50	150
6	Signals and Systems	EC 206	4	3	1	0	100	25	0	125
Total			24	18	2	8	600	50	200	850
Total Contact Hours per week				28				850		

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Computer Organization	CS 301	4	3	0	2	100	0	50	150
2	Probability and Statistical Analysis	AS 302	4	3	1	0	100	25	0	125
3	Microprocessor and Interfacing	EC 303	4	3	0	2	100	0	50	150
4	Communication Engineering	EC 304	4	3	0	2	100	0	50	150
5	Automata and Formal Languages	CS 305	4	3	1	0	100	25	0	125
6	ICT Workshop - II	CS 306	2	0	0	4	0	0	100	100
Total			22	15	2	10	500	50	250	800
Total Contact Hours per week				27				800		

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Operating Systems	CS 401	4	3	0	2	100	0	50	150
2	Data Base Management System	CS 402	4	3	0	2	100	0	50	150
3	Design and Analysis of Algorithms	CS 403	4	3	1	0	100	25	0	125
4	Computer Networks	CS 404	4	3	0	2	100	0	50	150
5	System Software	CS 405	4	3	0	2	100	0	50	150
6	Object Oriented Technology	CS 406	4	3	0	2	100	0	50	150
Total			24	18	1	10	600	25	250	875
Total Contact Hours per week				29				875		

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Software Engineering	CS 501	4	3	0	2	100	0	50	150
2	Computer Graphics	CS 502	4	3	0	2	100	0	50	150
3	Artificial Intelligence	CS 503	4	3	0	2	100	0	50	150
4	Elective 1	CS 5xx	4	3	0	2	100	0	50	150
5	Elective 2	AE 5xx	3	3	0	0	100	0	0	100
6	Entrepreneurship and Ethical Practices	AE 506	3	3	0	0	100	0	0	100
Total			22	18	0	8	600	0	200	800
Total Contact Hours per week				26				800		

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Machine Learning	CS 601	4	3	0	2	100	0	50	150
2	Embedded System	EC 602	4	3	0	2	100	0	50	150
3	Information Security	CS 603	4	3	0	2	100	0	50	150
4	Elective 3	CS 6xx	3	3	0	0	100	0	0	100
5	Elective 4	EC 6xx	4	3	0	2	100	0	50	150
6	Art, Animation and Music	AL 606	4	3	0	2	100	0	50	150
Total			23	18	0	10	600	0	250	850
Total Contact Hours per week				28				850		

Semester 7	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Distributed Computing	CS 701	4	3	0	2	100	0	50	150
	2	Cryptography and Network Security	CS 702	4	3	0	2	100	0	50	150
	3	Web Engineering	CS 703	4	3	0	2	100	0	50	150
	4	Elective 5	AE 7xx	3	3	0	0	100	0	0	100
	5	Project Preliminaries	CS 705	2	0	0	4	0	0	100	100
	6	Technical Writing and Presentation	CS 706	3	2	0	2	100	0	50	150
		Total		20	14	0	12	500	0	300	800
		Total Contact Hours per week			26				800		

Semester 8	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Soft Computing	CS 801	4	3	0	2	100	0	50	150
	2	Economics and Business Management	AE 802	3	3	0	0	100	0	0	100
	3	Elective 6	AE 8xx	3	3	0	0	100	0	0	100
	4	Elective 7	CS 8xx	3	3	0	0	100	0	0	100
	5	Foreign Language	AL 805	3	3	0	0	100	0	0	100
	6	Project	CS 806	6	0	0	12	0	0	300	300
		Total		22	15	0	14	500	0	350	850
		Total Contact Hours per week			29				850		

Total Credits Semesters 1 to 8	180	
Total Contact Hours Semesters 1 to 8	223	
Total Marks Semesters 1 to 8	6650	
Credit Distribution		
Core Discipline (CSE)	56.2	102
Other Engineering (EE,EC,CE,ME)	18	32
Science and Humanities (AS)	9	16
Art and Literature (AL)	6.2	11
Applied Engineering (AE)	10.7	19
	100	180

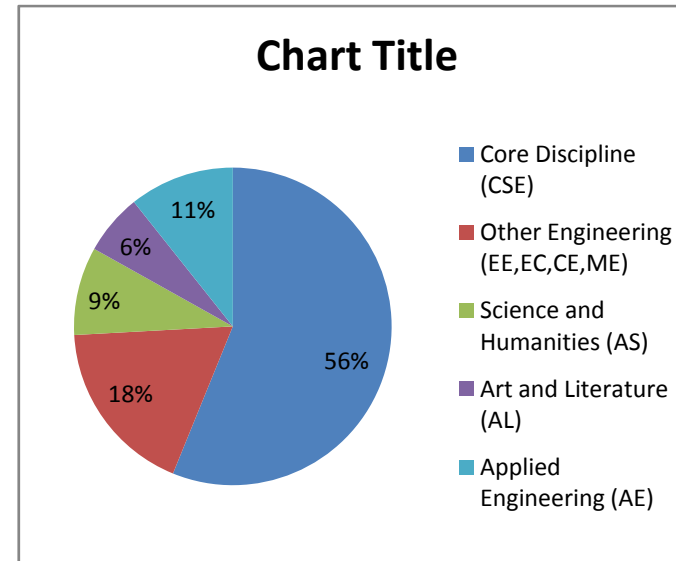
Computer Science Engineering (Core)	CS
Electronics and Communication Engineering (Core)	EC
Electrical Engineering	EE
Civil Engineering	CE
Mechanical Engineering	ME
Applied Science	AS
Art and Literature	AL
Applied Engineering	AE

Elective 1 (CS) Semester 5 (L-T-P)3-0-2

- Introduction to High Performance Computing (CS 511)
- Information Theory and Coding (CS 512)
- Principle of Programming Languages (CS 513)
- Data Science (CS 514)
- Sensor Network (CS 515)

Elective 2 (AE) Semester 5 (L-T-P) 3-0-0

- Environmental Science (AE 521)



Disaster Management (AE 522)
ICT for Rural/Urban Development (AE
523)

Elective 3 (CS) Semester 6 (L-T-P) 3-0-0

Grid Computing (CS 631)
Bio System Engineering (CS 632)
Cellular Network (CS 633)
Natural Language Processing (CS 634)
Cyber Law and Forensic (CS 635)

Elective 5 (AE) Semester 7 (L-T-P) 3-0-0

ICT for Banking Technology (AE 751)
Operational Research (AE 752)
Computer Aided Design and Manufacturing
(AE 753)
ICT for Political Science and Human Society
(AE 754)

Elective 4 (EC) Semester 6 (L-T-P) 3-0-2

Digital Signal Processing (EC 641)
Processor Architecture (EC 642)
Hardware Description Languages (EC 643)
Internet of Things Architecture and Protocols (EC 644)

Elective 6 (AE) Semester 8 (L-T-P) 3-0-0

GIS and Remote Sensing (AE
861)
Enterprise Resource Planning (AE 862)
ICT for Administration (AE 863)
E-Commerce and Mobile Computing (AE
864)

Electronics and Communication Engineering

Semester1

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Fundamentals of Computers & Programming	CS 101	5	3	0	4	100	0	100	200
2	Engineering Mathematics	AS 102	4	3	1	0	100	25	0	125
3	Engineering Physics	AS 103	4	3	0	2	100	0	50	150
4	Electronic Devices and Circuits	EC 104	4	3	0	2	100	0	50	150
5	English and Communication Skills	AL 105	4	3	0	2	100	0	50	150
6	ICT Workshop - I	CS 106	2	0	0	4	0	0	100	100
Total			23	15	1	14	500	25	350	875
Total Contact Hours per week				30				875		

Semester2

Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
				L	T	P	L	T	P	
1	Discrete Mathematics	AS 201	4	3	1	0	100	25	0	125
2	Electrical Networks	EE 202	4	3	0	2	100	0	50	150
3	Data Structures and Algorithms	CS 203	4	3	0	2	100	0	50	150
4	Digital Logic Design	EC 204	4	3	0	2	100	0	50	150
5	Engineering Mechanics	AE 205	4	3	0	2	100	0	50	150
6	Signals and Systems	EC 206	4	3	1	0	100	25	0	125
Total			24	18	2	8	600	50	200	850
Total Contact Hours per week				28				850		

Semester 3	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Computer Organization	CS 301	4	3	0	2	100	0	50	150
	2	Probability and Statistical Analysis	AS 302	4	3	1	0	100	25	0	125
	3	Microprocessor and Interfacing	EC 303	4	3	0	2	100	0	50	150
	4	Communication Engineering	EC 304	4	3	0	2	100	0	50	150
	5	Electronics Circuits	EC 305	4	3	0	2	100	0	50	150
	6	ICT Workshop - II	CS 306	2	0	0	4	0	0	100	100
	Total			22	15	1	12	500	25	300	825
	Total Contact Hours per week				28				825		

Semester 4	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Operating Systems	CS 401	4	3	0	2	100	0	50	150
	2	Digital Communication	EC 402	4	3	0	2	100	0	50	150
	3	Analog Circuits	EC 403	4	3	0	2	100	0	50	150
	4	Computer Networks	CS 404	4	3	0	2	100	0	50	150
	5	Microcontrollers	EC 405	4	3	0	2	100	0	50	150
	6	Electromagnetic Waves	EC 406	3	3	0	0	100	0	0	100
	Total			23	18	0	10	600	0	250	850
	Total Contact Hours per week				28				850		

Semester5	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Control System and Instrumentation	EC 501	4	3	0	2	100	0	50	150
	2	Digital Integrated Circuits	EC 502	4	3	0	2	100	0	50	150
	3	Artificial Intelligence	CS 503	4	3	0	2	100	0	50	150
	4	Elective 1	EC5xx	4	3	0	2	100	0	50	150
	5	Elective 2	AE5xx	3	3	0	0	100	0	0	100
	6	Entrepreneurship and Ethical Practices	AE 506	3	3	0	0	100	0	0	100
	Total			22	18	0	8	600	0	200	800
	Total Contact Hours per week				26				800		

Semester 6	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Machine Learning	CS 601	4	3	0	2	100	0	50	150
	2	Embedded Systems	EC 602	4	3	0	2	100	0	50	150
	3	Digital Signal Processing	EC 603	4	3	0	2	100	0	50	150
	4	Elective 3	EC6xx	3	3	0	0	100	0	0	100
	5	Elective 4	EC6xx	4	3	0	2	100	0	50	150
	6	Art, Animation and Music	AL 606	4	3	0	2	100	0	50	150
	Total			23	18	0	10	600	0	250	850
	Total Contact Hours per week				28				850		

Semester 7	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	Optical Communication	EC 701	4	3	0	2	100	0	50	150
	2	VLSI Design	EC 702	5	3	1	2	100	25	50	175
	3	Wireless & Mobile Communication	EC 703	4	3	0	2	100	0	50	150
	4	Elective 5	AE7xx	3	3	0	0	100	0	0	100
	5	Project Preliminaries	EC 705	2	0	0	4	0	0	100	100
	6	Technical Writing and Presentation	EC 706	3	2	0	2	100	0	50	150
	Total			21	14	1	12	500	25	300	825
	Total Contact Hours per week				27				825		

Semester 8	Sr. No.	Course	Code	Credit	Teaching Scheme			Examination Scheme			Total
					L	T	P	L	T	P	
	1	RF & Microwave	EC 801	4	3	0	2	100	0	50	150
	2	Economics and Business Management	AE 802	3	3	0	0	100	0	0	100
	3	Elective 6	AE8xx	3	3	0	0	100	0	0	100
	4	Elective 7	CS8xx	3	3	0	0	100	0	0	100
	5	Foreign Language	AL 805	3	3	0	0	100	0	0	100
	6	Project	EC 806	6	0	0	12	0	0	300	300
	Total			22	15	0	14	500	0	350	850
	Total Contact Hours per week				29				850		

Total Credits Semesters 1 to 8	180
Total Contact Hours Semesters 1 to 8	224
Total Marks Semesters 1 to 8	6725
Credit Distribution	
Core Discipline (ECE)	51.7 94
Other Engineering (EE,CS,CE,ME)	22.5 40
Science and Humanities (AS)	9 16
Art and Literature (AL)	6.2 11
Applied Engineering (AE)	10.7 19
	100 180

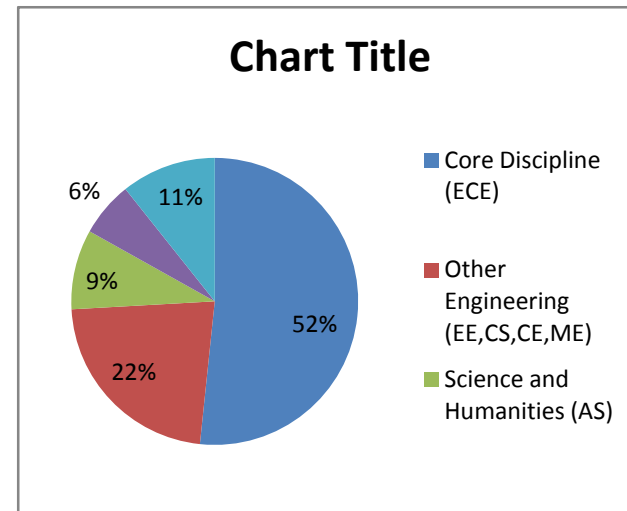
Computer Science Engineering (Core)	CS
Electronics and Communication Engineering (Core)	EC
Electrical Engineering	EE
Civil Engineering	CE
Mechanical Engineering	ME
Applied Science	AS
Art and Literature	AL
Applied Engineering	AE

Elective 1 (EC) Semester 5 (L-T-P)3-0-2

- Introduction to High Performance Computing (EC 511)
- Hardware Description Languages (EC 512)
- Information Theory & Coding (EC 513)
- Data Science (EC 514)
- Sensors & Transducers (EC 515)

Elective 2 (AE) Semester 5 (L-T-P) 3-0-0

- Environmental Science (AE 521)
- Disaster Management (AE 522)
- ICT for Rural/Urban Development (AE 523)



Elective 3 (EC) Semester 6 (L-T-P) 3-0-0

VLSI Technology (EC 631)

MEMS (EC 632)

Robotics (EC 633)

Biomedical Instrumentation (EC 634)

Fuzzy and Neural Networks (EC 635)

Elective 5 (AE) Semester 7 (L-T-P) 3-0-0

ICT for Banking Technology (AE 751)

Operational Research (AE 752)

Computer Aided Design and Manufacturing (AE 753)

ICT for Political Science and Human Society (AE 754)

Elective 4 (EC) Semester 6 (L-T-P) 3-0-2

Electronic System and Design (EC 641)

Advanced High Performance Computing (EC 642)

Processor Architecture (EC 643)

Internet of Things Architecture and Protocols (EC 644)

Elective 6 (AE) Semester 8 (L-T-P) 3-0-0

GIS and Remote Sensing (AE 861)

Enterprise Resource Planning (AE 862)

ICT for Administration (AE 863)

E-Commerce and Mobile Computing (AE 864)