

COURSE CONTENT for Computer Science & Engineering [CSE]

1st Semester							
A. Theory							
Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	HU 101	English Language & Communication	2	1	0	3	3
2	PH 101	Engineering Physics	3	1	0	4	4
3	M 101	Mathematics	3	1	0	4	4
4	ME 101	Mechanical Sciences	3	1	0	4	4
5	EE 101	Basic Electrical Engineering	3	1	0	4	4
6	CH 101	Environment & Ecology	3	0	0	3	3
Total Theory						22	22
B. Practical							
7	PH 191	Engineering Physics Lab	0	0	3	3	2
8	EE 191	Electrical Engineering Lab	0	0	3	3	2
9	ME 191	Engineering Graphics	0	0	3	3	2
10	ME 192	Workshop Practical	0	0	3	3	2
Total Practical						12	8
Total of Semester						34	30

2nd Semester							
A. Theory							
Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	PH 201	Engineering Physics	4	0	0	4	4
2	M 201	Mathematics	3	1	0	4	4
3	ME 201	Mechanical Sciences	3	0	0	3	3
4	CS 201	Introduction to Computing	2	1	0	3	3
5	EC 201	Basic Electrical Engineering	3	1	0	4	4
6	CH 201	Engineering Chemistry	3	0	0	3	3
Total Theory						21	21
B. Practical							
7	PH 291	Engineering Physics Lab	0	0	3/2	3/2	1

8	CH 291	Engineering Chemistry Lab	0	0	3/2	3/2	2
9	CS 291	Computing Lab	0	0	3	3	2
10	EC 291	Electronics Engineering Lab	0	0	3	3	2
11	ME 291	Engineering Graphics	0	0	3	3	2
12	ME 292	Workshop Practical	0	0	3	3	2
Total Practical						15	10
Total of Semester						36	31

3rd Semester

A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	M-301	Mathematics	3	1	0	4	4
2	CS-302	Data Structure & Algorithms	3	1	0	4	4
3	EE-301	Circuit Theory & Networks	3	1	0	4	3
4	CS-303	Computer Organization	3	0	0	3	3
5	EC-312	Digital Electronics & Logic Design	3	1	0	4	4
6	CS-301	Principles of Programming Language	3	0	0	3	3
Total Theory						22	22
B. Practical							
7	CS-392	Data Structures Lab	0	0	3	3	2
8	EC-382	Digital Electronics and Logic Design Lab	0	0	3	3	2
9	CS-391	Programming Practice Lab	0	0	3	3	2
10	EE-391	Circuits & Networks Lab	0	0	3	3	2
Total Practical						12	8
Total of Semester						34	30

4th Semester

A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	M-401	Mathematics	3	1	0	4	4
2	CS-401	Formal Language & Automata Theory	3	1	0	4	4

3	CS-402	Operation Research & Optimization	3	1	0	4	4
4	EC-411	Techniques	3	0	0	3	3
5	CS-403	Principles of Communication Engineering	3	1	0	4	4
Total Theory						19	19
B. Practical							
6	CS 492	Operation Research Lab	0	0	3	3	2
7	CS 493	Computer Architecture & Organization Lab	0	0	3	3	2
8	EC 481	Communication Engineering Lab	0	0	3	3	2
Total Practical						9	6
C. Sessional							
10	HU481	Technical Report writing & / Language Practice Lab	0	0	0	3	2
Total of Semester						31	27

5th Semester							
A. Theory							
Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	CS-501	Operating System	3	0	0	3	3
2	CS-502	Database Management System	3	0	0	3	3
3	CS-503	Design & Analysis of Algorithm	3	1	0	4	4
4	EI-502	Microprocessor & Microcontrollers	3	1	0	4	4
5	EE-503	Control System	3	1	0	4	4
Total Theory						18	18
B. Practical							
6	CS-591	Operating System Lab	0	0	3	3	2
7	CS-592	Database Management System Lab	0	0	3	3	2
8	EI-592	Microprocessor & Microcontrollers Lab	0	0	3	3	2
9	EE-593	Control System Lab	0	0	3	3	2
Total Practical						12	8
C. Sessional							
			0	0	0	0	0
Total of Semester						30	26

6th Semester

A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	CS 601	Computer network	3	1	0	4	4
2	CS 602	Software Engineering	3	1	0	4	4
3	CS 603	Computer Graphics & Multimedia	3	0	0	3	3
4	CS 604	System Software and Administration	3	0	0	3	3
5	CS 605	Object Technology & UML	3	0	0	3	3
Total Theory						17	17
B. Practical							
6	CS 691	Computer network Lab	0	0	3	3	2
7	CS 693	Computer Graphics & Multimedia Lab	0	0	3	3	2
8	CS 694	System Software & Administration Lab	0	0	3	3	2
9	CS 695	Object Technology Lab	0	0	3	3	2
Total Practical						12	8
C. Sessional							
10	CS 682	Gr. Discussion & seminar	0	0	0	3	2
Total of Semester						32	27

7th Semester

A. Theory

Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	CS 701	Language Processor	3	0	0	3	3
2	CS 702	Artificial Intelligence	3	0	0	3	3
3	CS 703	Visual Programming and Web technology	3	0	0	3	3
4	HU 701	Financial Management and accounts	3	0	0	3	3
5	CS 704	Elective I	3	0	0	3	3
Total Theory						15	15
B. Practical							
6	CS 792	Artificial Intelligence lab	0	0	3	3	2
7	CS 793	Visual Programming and Web	0	0	3	3	2

		Technology Lab					
8	CS 795	Assigned Project	0	0	0	6	4
Total Practical						12	8
C. Sessional							
9	CS 781	Practical Training Evaluation	0	0	0	0	2
10	CE 782	Seminar on Assigned /Selected Topic	0	0	0	3	2
Total of Sessionals						3	4
Total of Semester						30	27

8th Semester							
A. Theory							
Sl. NO.	Course Code	Topic	Contacts Periods/Week				Credits
			L	T	P	Total	
1	HU 801	Values & Ethics in profession	3	0	0	3	3
2	HU 802	Industrial Management	3	0	0	3	3
3	CS 801	Elective II	3	0	0	3	3
4	CS 802	Elective III	3	0	0	3	3
Total Theory						12	12
B. Practical							
5	CS 893	Assigned Project	0	0	12	12	8
Total Practical						12	8
C. Sessional							
6	CS 881	Comprehensive Viva-Voce	0	0	0	0	4
7	CS 882	Personality Development	0	0	3	3	2
Total of Sessionals						3	6
Total of Semester						27	26
Elective-I							
Sl. No.	Course Code	Topic					
1	CS-704A	Distributed Database					
2	CS-704B	Bio Informatics					
3	CS-704C	Parallel Programming					
4	CS-704D	Advanced Operating System					
5	CS-704E	Computational Geometry					

6	CS-704F	Modeling & Simulation
7	CS-704G	Image Processing
8	CS-704H	Network Applications (For Ceramic Technology College only)

Elective-I

Sl. No.	Course Code	Topic
1	CS-704A	Distributed Database
2	CS-704B	Bio Informatics
3	CS-704C	Parallel Programming
4	CS-704D	Advanced Operating System
5	CS-704E	Computational Geometry
6	CS-704F	Modeling & Simulation
7	CS-704G	Image Processing
8	CS-704H	Network Applications (For Ceramic Technology College only)

Elective-III

Sl. No.	Course Code	Topic
1	CS 802A	Mobile Computing
2	CS 802B	Real Time & Embedded System
3	CS 802C	GIS & Remote Sensing
4	CS 802D	Network Security
5	CS 802E	Advanced Java Programming
6	CS 802F	Natural Language Processing