

**COURSE STRUCTURE FOR B. TECH IN
COMPUTER SCIENCE & COMMUNICATION ENGINEERING
(SECOND YEAR TO FOURTH YEAR)**

SEMESTER-III

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	MA-2003	Discrete Mathematics	3	1	0	4	4
2	CS-2001	Data Structures & Algorithms	3	1	0	4	4
3	IT-2003	Web Technology	3	1	0	4	4
4	MA-2001	Mathematics-III	3	1	0	4	4
5	EC-2011	Digital Electronics	3	0	0	3	3
6	EC-2003	Signals & Systems	3	0	0	3	3
Total of Theory						22	22
Practical							
1	CS-2091	Data Structures Lab	0	0	3	3	2
2	IT-2093	Web Technology Lab	0	0	3	3	2
3	EC-2093	Digital Electronics Lab	0	0	3	3	2
Total of Practical						9	6
Semester Total						31	28

SEMESTER-IV

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	CS-2008	Design & Analysis of Algorithms	3	1	0	4	4
2	CS-2006	Computer Organization and Architecture	3	1	0	4	4
3	MA-2002	Mathematics- IV	3	1	0	4	4
4	CS-2004	Database Management Systems	3	1	0	4	4
5	EC-2016	Communication Engineering	3	1	0	4	4
Total of Theory						20	20
Practical							
1	CS-2096	Design & Analysis of Algorithms Lab	0	0	3	3	2
2	CS-2094	DBMS Lab	0	0	3	3	2
3	EC-2094	Communication Engineering Lab	0	0	3	3	2
Sessional							
1	HS-2081	Business Communications	0	0	3	3	2
Total of Practical & Sessional						12	8
Semester Total						32	28

SEMESTER-V

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	CS-3009	Operating Systems	3	1	0	4	4
2	IT-3003	Software Engineering	3	1	0	4	4
3	CS-3003	Formal Languages and Automata Theory	3	1	0	4	4
4	EC-3007	Digital Signal Processing	3	1	0	4	4
5		Dept Elective-I	3	0	0	3	3
6		Institute Elective – 1	3	0	0	3	3
Total of Theory						22	22
Practical							
1	CS-3091	Operating Systems Lab	0	0	3	3	2
2	EC-3097	Signal Processing Lab	0	0	3	3	2
Sessional							
1	TP-3081	Cognitive Aptitude Test-1	0	0	2	2	1
Total of Practical & Sessional						8	5
Semester Total						30	27

SEMESTER-VI

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	IT-3001	Computer Networks	3	1	0	4	4
2	CS-3002	Compiler Design	3	1	0	4	4
3	IT-3004	Object Oriented System Design	3	1	0	4	4
4	EC-3016	RF-Communication	3	1	0	4	4
5		Open Elective-I	3	0	0	3	3
Total of Theory						19	19
Practical							
1	IT-3091	Computer Networks Lab	0	0	3	3	2
2	CS-3092	Compiler Design Lab	0	0	3	3	2
Sessional							
1	CC-3081	Minor Project	0	0	3	3	2
2	TP-3082	Cognitive Aptitude Test-II	0	0	2	2	1
Total of Practical & Sessional						11	7
Semester Total						30	26

SEMESTER-VII

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1		Dept. Elective-II	3	0	0	3	3
2		Dept. Elective-III	3	0	0	3	3
3		Dept. Elective-IV	3	0	0	3	3
4		Institute Elective-II	3	0	0	3	3
5		Open Elective-II	3	0	0	3	3
Total of Theory						15	15
Sessional							
1	CC-4081	Project (part 1)	0	0	3	3	2
2	CC-4083	Practical Training	-	-	-	-	2
Total of Sessional						3	4
Semester Total						18	19

SEMESTER-VIII

Theory							
Sl No	Subject Code	Course Title	L	T	P	Total	Credit
1		Open Elective - III	3	0	0	3	3
2		Dept. Elective-V	3	0	0	3	3
Total of Theory						6	6
Sessional							
1	CC-4082	Project (part II)	0	0	9	9	6
2	CC-4084	Seminar	0	0	3	3	2
3	CC-4086	General Viva Voce	-	-	-	-	2
Total of Sessional						12	10
Semester Total						18	16

LIST OF INSTITUTE ELECTIVES

Institute Elective - I

Sl. No	Subject Code	Subject Name	Credit
1	HS-2002	Engineering Economics	3
2	HS-2006	International Economics	3
3	HS-2004	Public Finance	3

Institute Elective – II

1	HS-3006	Entrepreneurship	3
2	HS-3008	Management Concepts & Practices	3
3	HS-3002	Organizational Behavior	3
4	HS-3004	Human Resource Management	3

LIST OF DEPARTMENTAL ELECTIVES

Dept. Elective - I

1	CS-3022	Parallel and Distributed Computing	3
2	EC-3027	Optical and Satellite Communication	3
3	CS-3032	Big Data	3
4	CS-3046	Introduction to Computer Graphics	3

Dept. Elective – II

1	CS-4027	Real-time Systems	3
2	IT-4021	Internet of Things	3
3	EC-4031	Mobile Communication Engg.	3
4	EC-6108	Digital Image Processing	3

Dept. Elective – III

1	CS-4031	Software Testing	3
2	CS-3034	Service Oriented Architecture	3
3	CS-4037	Human Computer Interaction	3
4	CS-3030	Computational Intelligence	3

Dept. Elective – IV

1	EC-6128	Wireless Sensor Networks	3
2	EC-3034	Industrial Data Networks	3
3	EC-3030	Adaptive Systems and Signal Processing	3
4	EC-4044	Information Theory & Coding	3

Dept. Elective – V

1	IT-4022	Cyber Law and Intellectual Property Right	3
2	IT-4026	Network Security	3
3	IT-4028	Cyber Security	3
4	EC-4046	Modern Digital Communication	3