

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

SEMESTER-III

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	MA2001	Mathematics-III	3	1	0	4	4
2	EC2017	Electronic Devices & Circuits	3	1	0	4	4
3	EE2007	Network Theory	3	0	0	3	3
4	MA2003	Discrete Mathematics	3	1	0	4	4
5	CS2001	Data Structures and Algorithms	3	1	0	4	4
6	EC2003	Signals and Systems	3	0	0	3	3
Total of Theory						22	22
Practical							
1	EC2091	Electronic Circuits and Networks Lab	0	0	3	3	2
2	CS2091	Data Structures Lab	0	0	3	3	2
Sessional							
1	HS2081	Business Communication	0	0	3	3	2
Total of Practical & Sessional						9	6
Semester Total						31	28

SEMESTER-IV

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	MA2002	Mathematics-IV	3	1	0	4	4
2	EC2011	Digital Electronics	3	0	0	3	3
3	EC2008	Measurements and Instrumentation	3	1	0	4	4
4	CS2008	Design & Analysis of Algorithms	3	1	0	4	4
5	CS2004	Database Management Systems	3	1	0	4	4
6	CS2006	Computer Organization and Architecture	3	1	0	4	4
Total of Theory						23	23
Practical							
1	EC2096	Digital & Linear IC Lab	0	0	3	3	2
2	CS2096	Design & Analysis of Algorithms Lab	0	0	3	3	2
4	CS2094	DBMS Lab	0	0	3	3	2
Total of Practical						9	6
Semester Total						32	29

SEMESTER-V

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	EC3003	Microprocessors and Microcontrollers	3	1	0	4	4
2	EC2016	Communication Engineering	3	1	0	4	4
3	EL3001	Control Systems	3	1	0	4	4
4		Institute Elective-I	3	0	0	3	3
5	CS3009	Operating systems	3	1	0	4	4
6	IT3003	Software Engineering	3	1	0	4	4
Total of Theory						23	23
Practical							
1.	EC3093	Microprocessor and Microcontroller Lab	0	0	3	3	2
2.	EC2098	Simulation Lab	0	0	3	3	2
Sessional							
1	TP3081	Cognitive Aptitude Test-I	0	0	2	2	1
Total of Practical & Sessional						8	5
Semester Total						31	28

SEMESTER-VI

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1	EC3007	Digital Signal Processing	3	1	0	4	4
2	EC3011	VLSI Design	3	0	0	3	3
3	IT3001	Computer Networks	3	1	0	4	4
4		Department Elective-I	3	0	0	3	3
5		Open Elective-I	3	0	0	3	3
6		Institute Elective-II	3	0	0	3	3
Total of Theory						20	20
Practical							
1	EC3096	DSP Lab	0	0	3	3	2
2	EI3093	Control and Instrumentation Lab	0	0	3	3	2
Sessional							
1	TP3082	Cognitive Aptitude Test-II	0	0	2	2	1
2	EM3082	Minor Project	0	0	3	3	2
Total of Practical & Sessional						11	7
Semester Total						31	27

SEMESTER-VII

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1		Department Elective - II	3	0	0	3	3
2		Department Elective - III	3	0	0	3	3
3		Department Elective - IV	3	0	0	3	3
4		Open Elective - II	3	0	0	3	3
Total of Theory						12	12
Practical							
1	EC3095	VLSI Lab	0	0	3	3	2
Sessional							
1	EM4083	Practical Training	-	-	-	-	2
2	EM4082	Project (Part-I)	0	0	3	3	2
Total of Practical & Sessional						6	6
Semester Total						18	18

SEMESTER-VIII

Theory							
Sl. No	Subject Code	Course Title	L	T	P	Total	Credit
1		Department Elective – V	3	0	0	3	3
2		Open Elective – III	3	0	0	3	3
Total of Theory						6	6
Sessional							
1	EM4082	Project (Part-II)	0	0	9	9	6
2	EM4084	Seminar	0	0	3	3	2
3	EM4086	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.	HS2002	Engineering Economics	3
2.	HS2006	International Economics	3
3.	HS2004	Public Finance	3

Institute Elective – II

1.	HS3006	Entrepreneurship	3
2.	HS3008	Management Concepts & Practices	3
3.	HS3002	Organizational Behaviour	3
4.	HS3004	Human Resource Management	3

LIST OF DEPARTMENT ELECTIVES

Dept. Elective – I

1.	IT3042	Introduction to Web Technology	3
2.	CS3033	Principle of Automata Theory	3
3.	EI3025	Principle of Analytical Instrumentation	3
4.	EC3027	Optical and Satellite Communication	3

Dept. Elective - II

1.	EC3022	Advanced Microprocessors	3
2.	EC3024	Embedded Systems	3
3.	CS3030	Computational Intelligence	3
4.	EL3024	Industrial Automation and Control	3

Dept. Elective - III

1.	EC6128	Wireless Sensor Network	3
2.	EC4031	Mobile Communication Engineering	3
3.	EC4044	Information Theory and Coding	3
4.	EC6112	Communication and Network Security	3

Dept. Elective - IV

1.	CS3032	Big Data	3
2.	IT4021	Internet of Things	3
3.	CS3022	Parallel and Distributed Computing	3
4.	IT3022	Cloud Computing	3

Dept. Elective - V

1.	EC6224	Low Power VLSI Design	3
2.	EC6108	Digital Image Processing	3
3.	CS3034	Service Oriented Architecture	3
4.	IT3021	E-Commerce	3