

Department of ELECTRONICS & COMMUNICATION ENGINEERING

COMMON FIRST YEAR PROGRAM STRUCTURE FOR ALL B.TECH BRANCHES

FIRST SEMESTER

SI No.	Course Code	Course Title	Contact Hours						Evaluation Scheme		Subject Total	Credits
									Seasonal Exam	ESE		

THEORY COURSES

			L	T	P	CT	TA	Total	ESE		
1	BSCT10	Mathematics –I	3	1	0	30	20	50	100	150	4
2	BSCT102/ BSCT103	*Physics/Chemistry	3	1	0	30	20	50	100	150	4
3	BHST101	English	2	0	0	30	20	50	50	100	2
4	BCST101 / BEET101	Programming for Problem Solving / Basic Electrical Engineering	3	1	0	30	20	50	100	150	4
5	Induction Program		3 Weeks Duration								

PRACTICAL / TRAINING / PROJECT

1	BSCP102/ BSCP103	Physics/ Chemistry Lab	0	0	3	-	25	25	25	50	1.5
2	BHSP101	Language Lab	0	0	2	-	25	25	25	50	1
3	BCSP101 / BEEP101	Programming for Problem Solving Lab / Basic Electrical Engineering			3	-	25	25	25	50	2
		Total	11	2	8					700	17.5

SECOND SEMESTER

1	BSCT201	Mathematics –II	3	1	0	30	20	50	100	150	4
2	BSCT202/ BSCT20	*Physics/ Chemistry	3	1	0	30	20	50	100	150	4
3	BCST201 / BEET201	Programming for Problem Solving / Basic Electrical Engineering	3	1	0	30	20	50	100	150	4
4	BEST201	Environmental Sciences	2	0	0	-	-	-	50	50	-

PRACTICAL / TRAINING / PROJECT

1	BSCP202/ BSCP203	Physics/ Chemistry Lab	0	0	3	-	25	25	25	50	1.5
2	BMEP201	Workshop/ Manufacturing Practices	1	0	3	-	50	50	50	100	3
3	BMEP202	Engineering Graphics & Design	1	0	3	-	50	50	50	100	3
4	BCSP201 / BEEP201	Programming for Problem Solving Lab / Basic Electrical Engineering	0	0	2	-	25	25	25	50	1.5
		Total	11	3	11	-	-	-	-	950	21

BACHELOR OF TECHNOLOGY (ELECTRONICS & COMMUNICATION ENGINEERING)

THIRD SEMESTER

SI No.	Course Code	Course Title	Contact Hours						Evaluation Scheme		Subject Total	Credits
									Seasonal Exam	ESE		

THEORY COURSES

			L	T	P	CT	TA	Total	ESE		
1	TCS-301	Computer Based Numerical Technique	2	1	0	15	10	25	50	75	3
2	TEC-301	Electronic Devices and Circuits	3	1	0	30	20	50	100	150	4
3	TEE-302	Electromechanical Energy Conversion-I	3	1	0	30	20	50	100	150	4
4	TEC-303	Electronic Measurement and Instrumentation	3	1	0	30	20	50	100	150	4
5	TEE-301	Network Analysis and Synthesis	3	1	0	30	20	50	100	150	4
6	THM-301	Engineering Economics	2	0	0	15	10	25	50	75	2

PRACTICAL / TRAINING / PROJECT

1	PEC-351	Electronics Devices and Circuits Lab	0	0	2	-	25	25	25	50	3
2	PEC-352	EMEC Lab-I	0	0	2	-	25	25	25	50	2
3	PEE-353	Network and Measurement Lab	0	0	2	-	25	25	25	50	2
4		Personality development/GP	0	0	2	-	-	-	-	50	-
		Total	16	4	10					1000	28

FOURTH SEMESTER

THEORY COURSES

1	TEE-401	Electrical & Electronics Engg. Materials	3	1	0	30	20	50	100	150	4
2	TEE-402	EMEC-II	3	1	0	30	20	50	100	150	4
3	TCS-403	Microprocessor & Application	2	1	0	15	10	25	75	100	3
4	TEC-404	Signal and Systems	3	1	0	30	20	50	100	150	4
5	TEC-405	Elements of Power Systems	3	1	0	30	20	50	100	150	4
6	TEE-406	Communication Engineering	2	1	0	15	10	25	75	100	2

PRACTICAL / TRAINING / PROJECT

1	PEE – 451	EMEC-II lab	0	0	2	-	25	25	25	50	2
2	PCS-452	Microprocessors Lab	0	0	2	-	25	25	25	50	3
3	PEC-453	Analog Communication Lab	0	0	2	-	25	25	25	50	2
4	PD IV /GP IV	Communication Engineering Lab	0	0	2	-	-	-	-	50	-
		Total	16	6	4	-	-	-	-	1000	28

BACHELOR OF TECHNOLOGY (ELECTRONICS & COMMUNICATION ENGINEERING)

FIFTH SEMESTER

SI No.	Course Code	Course Title	Contact Hours						Evaluation Scheme		Subject Total	Credits
									Seasonal Exam	ESE		
THEORY COURSES												
			L	T	P	CT	TA	Total	ESE			
1	TEE 501	EMFT	3	1	0	30	20	50	100	150	4	
2	TEE 502	System Engineering	3	1	0	30	20	50	100	150	4	
3	TEE 503	Applied & Electronic Instrumentation	3	1	0	30	20	50	100	150	4	
4	TEC 502	Digital Signal Processing	3	1	0	30	20	50	100	150	4	
5.	TEC-503	VLSI Technology	3	1	0	30	20	50	100	150	4	
6.	TCS – 507	Concepts of Programming and OOPs	2	1	0	15	10	25	50	75	3	

PRACTICAL / TRAINING / PROJECT

1	PEE -553	Applied Instrumentation Lab	0	0	2	-	25	25	25	50	2
2	PEC-552	Digital Signal Processing Lab	0	0	2	-	-	-	25	25	2
3	PCS-557	Concepts of Programming & OOPS Lab	0	0	2	-	25	25	25	50	2
4	DIS550	Discipline	-	-	2	-	-	-	-	50	-
		Total	16	6	10					1000	28

SIXTH SEMESTER

THEORY COURSES

1	TEE – 601	Power System Analysis	3	1	0	30	20	50	100	150	4
2	TEE – 602	Control System	3	1	0	30	20	50	100	150	4
3	TEE – 603	Power Electronics	3	1	0	30	20	50	100	150	4
4	TEC – 602	VLSI Circuit Design	3	1	0	30	20	50	100	150	4
5	TCS – 607	Data Structures Using C++	3	1	0	30	20	50	100	150	4
6	THU – 608	Principles of Management	2	0	0	15	10	25	50	75	2

PRACTICAL / TRAINING / PROJECT

1	PEE-652	Control System	0	0	2	-	25	25	25	50	2
2	PEE-653	Power Electronics	0	0	2	-	0	0	25	25	2
3	PCS-657	Data Structures Using C++Lab	0	0	2	-	25	25	25	50	2
5	DIS650	Discipline	-	-	2	-	-	-	-	50	-
		Total	16	6	10					1000	28

BACHELOR OF TECHNOLOGY (ELECTRONICS & COMMUNICATION ENGINEERING)

SEVENTH SEMESTER

SI No.	Course Code	Course Title	Contact Hours						Evaluation Scheme		Subject Total	Credits
									Seasonal Exam	ESE		

THEORY COURSES

			L	T	P	CT	TA	Total	ESE		
1	TEE-701	Switch Gear and Protection	3	1	0	30	20	50	100	150	4
2	TEE-702	ANN & Fuzzy Logic	3	1	0	30	20	50	100	150	4
3	TEC701	Optical Fiber Communication System	3	1	0	30	20	50	100	150	4
4		ELECTIVE-I	3	1	0	30	20	50	100	150	4
5		Open Elective	3	1	0	30	20	50	100	150	4

PRACTICAL / TRAINING / PROJECT

1	PEE 751	Power System Lab	0	0	2	-	25	25	25	50	2
2	PEC-751	OFC Lab	0	0	2	-	25	25	25	50	2
3	PEE-753	Industrial Training seminar	0	0	2	-	50	50	-	50	2
4	PEE-754	Project	0	0	2	-	50	50	-	50	2
		Total	15	5	8					1000	28

EIGHT SEMESTER

THEORY COURSES

1	TEE-801	Electric Drives	3	1	0	30	20	50	100	150	4
2	TEE – 802	SCADA & Energy Management	3	1	0	30	20	50	100	150	4
3		ELECTIVE-II	3	1	0	30	20	50	100	150	4
4		ELECTIVE-III	3	1	0	30	20	50	100	150	4

PRACTICAL / TRAINING / PROJECT

1	PEE-851	Electronic Drive Lab	0	0	2	-	25	25	25	50	2
2	PEC-852	Project	0	0	12	-	0	100	200	300	6
3	DIS850	Discipline	-	-	2	-	-	-	-	50	-
		Total	12	4	16	-	-	-	-	1000	28

ELECTIVE-I

TEE 011	Utilization of Electrical Energy and Traction
TEE 011	Digital Control System
TIC 011	Fiber Optics and Laser Instrumentation
TIC 012	Analytical Instrumentation

ELECTIVE-II

TEE 021	Modern Control System
TEE 022	Bio-Medical Instrumentation
TEE 023	Power Plant Engineering
TIC 023	System Design Using Microcontroller

ELECTIVE-III

TEE 031	Power Quality Improvement Techniques
TEE 032	Power Converter Application
TEE 033	EHV AC & DC TRANSMISSION
TEC 033	Adaptive Signal Processing
TEC 034	Embedded Systems