DEPARTMENT OF ELECTRICAL & ELECTRONICS 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 (ELECTRICAL & ELECTRONICS ENGINEERING)

THIRD SEMESTER

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted						Contact Hours			Credits
				Theory			Practical						
				End Sem.	Mid Sem.	Quiz/ Assignment	End Sem.	Term work Lab Work & Sessional		L	T	P	
1.	BCET 301	ES	Energy & Environmental Engineering	100	30	20	-	-	150	3	-	-	3
2.	BEST 301	BSC	Mathematics-III	100	30	20			150	3	1	-	4
3.	BEET 301 BEEP 301	DC	Electrical Measurements & Instrumentation	100	30	20	30	20	200	3	1	2	5
4.	BECT 304 BECP 304	DC	Electronic Devices	100	30	20	30	20	200	3	0	2	4
5	BEET 305 BEEP 305	DC	Networks Analysis andSynthesis	100	30	20	30	20	200	3	1	2	5
6.	BEEP 306	DC	Programming Practices	-	-	-	30	20	50	-	-	2	1
7	BASP 307		Evaluation of Internship-I Completed at I year level/Seminar Presentation for Lateral Entry					50	50			2	1
8.	BASP 307	DLC	90 hrs. Internship	To be completed anytime during fourth semester. Itsevaluation/credit to be added in fifth semester.									
Total				500	150	100	90	160	1000	15	3	8	23
9.	BC	MC	Cyber Security	Non-credit course									
			NSS/NCC										

*The Mini Project or internship (3-4 weeks) conducted during summer break after II semester and will be assessed during III

BACHELOR OF TECHNOLOGY (ELECTRICAL & ELECTRONICS ENGINEERING)

FOURTH SEMESTER

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted						Contact Hours			Credits
				Theory			Practical						
				End Sem.	Mid Sem	Quiz/ Assignment	End Sem.	Term work Lab Work & Sessional		L	T	P	
1.	BECT 402	DC	Signals and Systems	100	30	20	-	-	150	3	1	-	4
2.	BEET 402 BEEP 402	DC	Electrical Machine-I	100	30	20	30	20	200	3	1	2	5
3.	BECT 401 BECP 401	DC	Digital Electronics	50	30	20	30	20	200	3	0	2	4
4.	BEET 404 BEEP 404	DC	Power System-I	100	30	20	30	20	200	3	1	2	5
5.	BEET 405 BEEP 405	DC	Control System	100	30	20	-	-	150	3	1	0	4
6.	BHUT 401	DLC	Universal Human	50	30	20			100	2	0	0	2
7.	BENP 407	DLC	90 hrs. Internship based on using various software's – Internship –II	To be completed anytime during fourth semester. Itsevaluation/credit to be added in fifth semester.									
			Total	500	180	120	90	110	1000	17	4	6	24
8.	BCSP 408	MC	Cyber Security	Non-credit course									
			NSS/NCC										

BACHELOR OF TECHNOLOGY (ELECTRICAL & ELECTRONICS ENGINEERING)

FIFTH SEMESTER

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per Week			
				Theory			Practical						
				End Sem	Mid Sem	Quiz / Assignment	End Sem	Term Work /Lab Work & Sessional		L	T	P	
1.	BEET- 501 BEEP-501	DC	Electrical Machine-II	100	30	20	30	20	200	3	1	2	5
2.	BEET -502 &BEEP 501	DC	Power System-II	100	30	20	30	20	200	3	1	2	5
3.	BEET-503 (A or B or C)	DE	Departmental Elective-I	100	30	20	-	-	150	3	0	0	3
4.	BOET-504 (A / B / C / D)	OE	Open Elective-I	100	30	20	-	-	150	3	0	0	3
5.	BEET-505	DC	Electromagnetic Field theory	100	30	20	-	-	150	3	1	0	4
6	BENP-506	IN	Evaluation of Internship-II completed at II-year level	-	-	-	-	100	100	0	0	4	2
7	BENP-507		Open-Source Lab					50	50				
8	BASP-507/607	IN	Internship -III	To be completed any time during Fifth/ Sixth semester. Its evaluation/credit to be added in Seventh semester.									
Total				500	150	100	60	190	1000	11	5	19	22
NSS/NCC													

Departmental Electives			Open Electives	
BEET 503(A)	CAD of Power Apparatus		BOET-504(A)	Digital Control System
BEET 503(B)	Applied Instrumentation		BOET-504(B)	Communication Engineering
BEET 503(C)	Electrical Engineering Material		BOET-504(C)	Industrial electronics
			BOET- 504(D)	Innovation and Entrepreneurship

BACHELOR OF TECHNOLOGY (ELECTRICAL & ELECTRONICS ENGINEERING)

SIXTH SEMESTER

S. No.	Subject Code	Category	Subject Name	Maximum Marks Allotted					Total Marks	Contact Hours per Week			
				Theory			Practical						
				End Sem	Mid Sem	Quiz / Assignment	End Sem	Team Work /Lab Work & Sessional		L	T	P	
1.	BEET-601 & BEEP-601	DC	Power Electronics	100	30	20	30	20	200	3	1	2	5
2.	BECT-602 & BECP-602	DC	Microprocessor & Embedded systems	100	30	20	30	20	200	3	1	2	5
3.	BECT-603	DC	Digital Signal Processing	100	30	20	30	20	200	3	1	2	5
4.	BEET-604(A or B or C)	DE	Departmental Elective	100	30	20	-	-	150	3	0	0	3
5.	BOET-605(A or B or C)	OE	Open Elective	100	30	20	-	-	150	3	0	0	3
6.	BEEP-606	O/E Lab	Simulation lab/Virtual Lab	-	-	-	30	20	50	0	0	4	2
7	BEEP-607	P	Minor Project -I				-	50	50	0	0	4	2
8	BASP-507/607	IN	Internship - III	To be completed anytime during Fifth/Sixth semester. Its evaluation/credit to be added in Seventh Semester.									
Total				500	150	100	90	160	1000	14	4	14	25

Departmental Electives			Open Electives	
BEET 604(A)	FACTS		BOET-605(A)	Introduction to Smart Grids
BEET 604(B)	Energy Management and SCADA		BOET-605(B)	Power Plant Engineering
BEET 604(C)	NCER		BOET-605(C)	Special Electromechanical Systems

BACHELOR OF TECHNOLOGY (ELECTRICAL & ELECTRONICS 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