Course structure for 3-Year 6-Semester B.Tech. Degree in Electrical Engineering w. e. f. the academic year 2014 - 2015

Semester I Examination

Theoretical

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BET11	Engineering Mathematics	4	-	-	20	10	70	100	4
BET12	Analog Electronics	4	-	-	20	10	70	100	4
BET13	Digital Electronics	4	-	-	20	10	70	100	4
BET14	Electrical and Electronic Measuring Instruments	4	-	-	20	10	70	100	4
BET15	Computer Programming Languages and Numerical Methods	4	-	-	20	10	70	100	4

PRACTICAL

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BEP11	Engineering Drawing	-	1	4	25		50	75	3
BEP12	Material Testing and Workshop Practice	-	1	4	25		50	75	3

Semester II Examination

Theoretical

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BET21	Control Theory I	4	-	-	20	10	70	100	4
BET22	Microprocessors and Peripheral Devices	4	-	-	20	10	70	100	4
BET23	DC Machine and Transformers	4	-	-	20	10	70	100	4
BET24	Network Theory and Transmission lines	4	-	-	20	10	70	100	4
BET25	Transducers and Process Measurements	4	-	-	20	10	70	100	4

PRACTICAL

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BEP21	Electrical Measurements & Measuring Instruments	-	1	4	25		50	75	3
BEP22	Computer Programming Languages	-	1	4	25		50	75	3
BEP23	Analog and Digital Electronics	-	1	4	25		50	75	3

Semester III Examination

Theoretical

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BET31	Analog and Digital Communication	4	-	-	20	10	70	100	4
BET32	Power Electronics and Power Supply	4	-	-	20	10	70	100	4
BET33	Induction and Synchronous Machines	4	-	-	20	10	70	100	4
BET34	Microcontroller and PLC Applications	4	-	-	20	10	70	100	4

BET35	Power Systems	4	-	-	20	10	70	100	4

PRACTICAL

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BEP31	Microprocessor Programming		1	4	25		50	75	3
BEP32	Electrical Machines and Power Systems		1	4	25		50	75	3
BEP33	Control Systems		1	4	25		50	75	3

Semester IV Examination
Theoretical

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BET41	Power System Stability, Load Flow Analysis and Tariff	4	-	-	20	10	70	100	4
BET42	Switchgear and Protection	4	-	-	20	10	70	100	4
BET43	Industrial Drives and Controls	4	-	-	20	10	70	100	4
BET44	Power Station, Substation Engineering and Fault Analysis	4	-	-	20	10	70	100	4
BET45	Advanced Electrical Machines	4	-	-	20	10	70	100	4

PRACTICAL

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BEP41	Advanced Electrical Machines	-	1	4	25		50	75	3
BEP42	Advanced Power Systems	-	1	4	25		50	75	3
BEP43	Power Electronics and Drives	-	1	4	25		50	75	3

Semester V Examination
Theoretical

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BET51	Industrial Economics and Business Management	4	-	-	20	10	70	100	4
BET52	Control theory II	4	-	-	20	10	70	100	4
BET53	Engineering Mechanics, Materials	4	-	-	20	10	70	100	4

	Science and Thermal Engineering								
BET54	Special Electrical Machines and Design of Electrical Machines	4	-	-	20	10	70	100	4
BET55	Elective Paper	4	-	-	20	10	70	100	4

PRACTICAL

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BEP51	PLC, Microcontroller and Communication	-	1	4	25		50	75	3
BEP52	Project Phase – I	-	2	6	50		50	100	4

Semester VI Examination

PRACTICAL

PAPER NO.	SUBJECT	PERIODS per week			EVALUATION SCHEME				CREDITS
		L	T	P	TA	CT	ESE	TOTAL	
BEP61	Design of Electrical Machines and Systems	-	2	6	50		50	100	4
BEP62	Seminar	-	2	6	50		50	100	4
BEP63	Project Phase – II	-	4	12	100		100	200	8
BEP64	General Viva Voce	-	-	-	-	-	-	100	4

Elective Papers:

1. Microprocessor and microcontroller interfacing
2. Digital Signal Processing
3. Process automation , DCS and SCADA
4. Non-Conventional Energy Systems
5. High Voltage Engineering
6. Illumination Engineering
7. Sensor Technology