B. Tech. (Electrical & Electronics Engineering)
Department of Electrical & Electronics Engineering
(Applicable to Students Admitted during 2019-20 & onwards)

Year	THIRD SEMESTER						FOURTH SEMESTER					
	Sub. Code	**Subject Name**	**L**	**T**	**P**	**C**	**Sub. Code**	**Subject Name**	**L**	**T**	**P**	**C**
II	BB0025	Value Ethics & Governance	2	0	0	2	EO2001	Economics	3	0	0	3
	MA2103	Engineering Mathematics – III	2	1	0	3	MA2206	Engineering Mathematics – IV	2	1	0	3
	EE2101	Analog & Digital System Design	3	1	0	4	EE2201	Electrical Machinery – II	3	1	0	4
	EE2102	Electromagnetic Field Theory	2	1	0	3	EE2202	Generation Transmission & Distribution	3	1	0	4
	EE2103	Electrical Circuit Analysis	3	1	0	4	EE2203	Microcontrollers	2	1	0	3
	EE2104	Electrical Machines-I	3	1	0	4	EE22**	Open Elective – I	3	0	0	3
	EE2130	Analog System Design Lab	0	0	2	1	EE2230	Electrical Machinery Lab –II	0	0	2	1
	EE2131	Digital System Design Lab	0	0	2	1	EE2231	Microcontroller Lab	0	0	2	1
	EE2132	Electrical Machinery Lab – I	0	0	2	1	EE2232	MATLAB & System Simulation Lab	0	0	2	1
							EE2233	Project Based Learning Lab	0	0	2	1
			15	**5**	**6**	**23**			**16**	**4**	**8**	**24**
	Total Contact Hours (L + T + P)		**26**				**Total Contact Hours (L + T + P) + OE**		**25 + 3 = 28**			
III	**FIFTH SEMESTER**						**SIXTH SEMESTER**					
	BB0026	Organisation & Management	3	0	0	3	EE3201	Linear Control Theory	2	1	0	3
	EE3101	Communication Systems	2	1	0	3	EE3202	Power Electronics	3	1	0	4
	EE3102	Digital Signal Processing	3	1	0	4	EE3203	Switch Gear & Protection	3	1	0	4
	EE3103	Measurements & Instrumentation	3	1	0	4	EE32XX	Program Elective I	3	0	0	3
	EE3104	Power System Analysis	3	1	0	4	EE32XX	Program Elective II	3	0	0	3
	EE30**	Open Elective – II	3	0	0	3	EE30**	Open Elective – III	3	0	0	3
	EE3130	DSP Lab	0	0	2	1	EE3230	Power Electronics Lab	0	0	2	1
	EE3131	Measurements & Instrumentation Lab	0	0	2	1	EE3231	Power Systems Lab	0	0	2	1
	EE3132	Project Based Learning Lab	0	0	2	1	EE3232	Control & Automation Lab	0	0	2	1
							EE3270	Minor Project – I	0	0	2	1
			17	**4**	**6**	**24**			**17**	**3**	**8**	**24**
	Total Contact Hours (L + T + P) + OE		**24 + 3 = 27**				**Total Contact Hours (L + T + P) + OE**		**25 + 3 = 28**			
IV	**SEVENTH SEMESTER**						**EIGHTH SEMESTER**					
	EE41XX	Program Elective – III	3	0	0	3	EE4270	Project Work/Practice School				12
	EE41XX	Program Elective – IV	3	0	0	3						
	EE41XX	Program Elective – V	3	0	0	3						
	EE41XX	Program Elective – VI	3	0	0	3						
	EE41XX	Program Elective – VII	3	0	0	3						
	EE4170	Minor Project – II	0	0	4	2						
	EE4171	Seminar / Industrial Training	0	0	2	1						
			15	**0**	**6**	**18**						**12**
	Total Contact Hours (L + T + P)		**21**									

Minor Specializations	Other Programme Electives	Open Electives
I. Electric Vehicle Technologies EE3254: Dynamics of Electric Vehicle EE4159: Design and Modelling of Special Electrical Machines EE4160: Electric vehicle Power Converters & Drives EE4161: Charging Technologies for Electric Vehicle **II. Renewable Energy Systems** EE3255: Renewable Energy Sources EE4162: Solar Photovoltaic Systems EE4163: Wind Energy Conversion Systems EE4164: Distributed Generation Systems **III. Control Systems** EE3256: System Identification EE4165: Robust Control EE4166: Non-Linear Control Systems EE4167: Optimal Control **IV. Power & Energy Systems** EE3257: Computational Techniques in Power System EE3258: Power System Operation & Control EE4168: Power System Restructuring & Deregulation EE4169: Smart Grid Technologies **V. Computer Engineering** EE3240: Data Structures & Algorithms EE3245: Computer Networks EE4142: Machine Learning EE4143: Data Analytics	EE3241: Database Management Systems EE3242: Object Oriented Programming EE3243: Artificial Intelligence EE3244: Soft Computing Techniques EE3246: Utilization of Electrical Power EE3247: Introduction to Electric Vehicles EE3248: Semiconductor Device Theory EE3249: Digital System Design using HDL EE3250: Digital Image Processing EE3251: Special Electrical Machines EE3252: High Voltage Engineering EE3253: Power System Engineering EE4140: Internet of Things EE4141: Block Chain Technology EE4144: Modern Optimization Techniques EE4145: Control System Design EE4146: Robotics & Automation EE4147: Industrial Automation & Control EE4148: Modern DC – DC Power Converters EE4149: Advanced Power Converter Design EE4150: Microcontroller in Power Electronics EE4151: Solid State Drives EE4152: Solid State Transformers EE4153: Energy Auditing & Management EE4154: HVDC & FACTS EE4155: Microgrid EE4156: Power System Optimization EE4157: Energy Storage Devices EE4158: Power Quality Issues	EE2080: Solar Photovoltaic EE2081: MATLAB for Engineers EE2082: Fundamentals of Renewable Energy Sources EE3080: Electric Vehicle Technology EE3081: Introduction to Lighting Design EE3082: Energy Auditing EE3083: Electrical Energy Systems