

Faculty of Engineering, School of Electrical, Electronics & Communication Engineering
Department of Electrical Engineering
Degree: B. Tech. (Hons) Electrical & Electronics Engineering

Total Credit: 178 (160 + 18*)

	Third Semester						Fourth Semester				
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
MAS21XX	Statistics & Probability	3	0	0	3	MEE22XX	Engineering Economics	3	0	0	3
MBB21XX	Management of Technology	3	0	0	3	EEE2201	Sensors & Sensor Circuits	3	1	0	4
EEE2101	Analog & Digital Systems	3	1	0	4	EEE2202	Generation, Transmission & Distribution	3	1	0	4
EEE2102	Electrical Machines	3	1	0	4	EEE2220/ EEE2221	Object Oriented Programming/ Microcontroller based Systems Design	3	1	0	4
EEE2103	Network & Systems	3	1	0	4	EEE22XX	Program Elective 1	3	0	0	3
EEE2120/ EEE2121	Electrical Vehicle Technology/ Electromagnetic Field Theory	3	1	0	4	EEE00XX	Open Elective 1	3	0	0	3
EEE2130	Electrical Machinery Lab	0	0	2	1	EEE2230	Virtual Instrumentation Lab	0	0	2	1
EEE2131	Analog & Digital Systems Lab	0	0	2	1	EEE2231	Microcontroller Lab	0	0	2	1
EEE2170	Project-based Learning 1	0	0	2	1	EEE2270	Project-based Learning 2	0	0	2	1
		18	4	6	25			18	3	6	24
	Total Contact Hours (L+T+P)	28					Total Contact Hours (L+T+P)	27			
	Fifth Semester						Sixth Semester				
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
EEE3101	Power Electronics	3	1	0	4	EEE3201	Control Systems	3	1	0	4
EEE3102	Modern Power Systems	3	1	0	4	EEE32XX	Program Elective 4	3	0	0	3
EEE3120/ EEE3121	Renewable Energy Systems/ Soft Computing Techniques	3	1	0	4	EEE32XX	Program Elective 5	3	0	0	3
EEE31XX	Program Elective 2	3	0	0	3	EEE32XX	Program Elective 6	3	0	0	3
EEE31XX	Program Elective 3	3	0	0	3	EEE00XX	Open Elective 3	3	0	0	3
EEE00XX	Open Elective 2	3	0	0	3	EEE3230	Professional Practice	0	0	2	1
EEE3130	Power Electronics Lab	0	0	2	1	EEE3231	Control & Automation Lab	0	0	2	1
EEE3131	Power Systems Lab	0	0	2	1	EEE3232	Advance Systems Simulation Lab	0	0	2	1

Faculty of Engineering, School of Electrical, Electronics & Communication Engineering
Department of Electrical Engineering
Degree: B. Tech. (Hons) Electrical & Electronics Engineering

Total Credit: 178 (160 + 18*)

EEE3170	Project-based Learning 3	0	0	2	1	EEE3270	Project-based Learning 4	0	0	6	3
EEE3180	Research Methodology	1	0	0	1	EEE3280	Electric vehicles: Technology & Economics	3	0	0	3
		19	3	6	25			18	1	12	25
	Total Contact Hours (L+T+P)	28					Total Contact Hours (L+T+P)	31			
	Seventh Semester						Eighth Semester				
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
EEE41XX	Program Elective 7	3	0	0	3	EEE4270	Major Project	0	0	24	12
EEE41XX	Program Elective 8	3	0	0	3	EEE4280	Honors Project	0	0	16	8
EEE00XX	Open Elective 4	3	0	0	3						
EEE00XX	Open Elective 5	3	0	0	3						
EEE4170	Internship (Industry or Research)	0	0	2	1						
EEE4180	Charging Technologies for Electric Vehicle	3	0	0	3						
EEE4181	Electric Vehicle Motors	3	0	0	3						
		18	0	2	19			0	0	40	20
	Total Contact Hours (L+T+P)	20					Total Contact Hours (L+T+P)	40			

Flexi Core		
Flexi Core 1 (III Sem)	Flexi Core 2 (IV Sem)	Flexi Core 3 (V Sem)
EEE2120: Electrical Vehicle Technology EEE2121: Electromagnetic Field Theory	EEE2220: Object Oriented Programming EEE2221: Microcontroller based Systems Design	EEE3120: Renewable Energy Systems EEE3121: Soft Computing Techniques

Program Electives			
IV Sem	V Sem	VI Sem	VII Sem
Example - PE1 <ul style="list-style-type: none"> EEE2240: Solar Photovoltaic systems EEE2241: Engineering Systems Modelling 	Example - PE2 <ul style="list-style-type: none"> EEE3140: Industrial Automation EEE3141: Graph Theory & Applications 	Example - PE 4 <ul style="list-style-type: none"> EEE3240: Data Analytics EEE3241: Sensor & Actuator 	Example - PE 7 <ul style="list-style-type: none"> EEE4140: Switch Gear & Protection EEE4141: Power System Optimization

Faculty of Engineering, School of Electrical, Electronics & Communication Engineering
 Department of Electrical Engineering
 Degree: B. Tech. (Hons) Electrical & Electronics Engineering

Total Credit: 178 (160 + 18*)

<ul style="list-style-type: none"> • EEE2242: Internet of Things 	<ul style="list-style-type: none"> • EEE3142: Energy and Power Optimization Example - PE3 • EEE3143: Digital Signal Processing • EEE3144: Intelligent Systems • EEE3145: Distributed Energy Resources 	<ul style="list-style-type: none"> • EEE3242: Industrial Robot operating Systems Example - PE5 • EEE3243: AI and Machine Learning • EEE3244: Power System Operation & Control • EEE3245: Solid State Drives Example - PE6 • EEE3246: Communications Systems • EEE3247: Industrial Control Systems • EEE3248: Energy Storage Devices 	<ul style="list-style-type: none"> • EEE4142: Decision Techniques and Optimization Example - PE8 • EEE4143: Microgrid • EEE4144: Demand Side Management • EEE4145: Energy Audit and Management
--	--	---	---

Open Electives	
Graded OE	Non-Graded OE
OE1 EEE0001: Fundamentals of Electric Vehicle OE2 EEE0002: Fundamentals of Solar PV Systems OE3 EEE0003: Battery Management Systems OE4 EEE0004: Renewable Energy Systems OE5 EEE0005: Energy Auditing & Management	OE1 EEE0051: Course Name OE2 EEE0052: Course Name OE3 EEE0052: Course Name OE4 EEE0052: Course Name OE5 EEE0052: Course Name

Courses for Hons. with specialization Electric Vehicle
V Sem
EEE 3180: Research Methodology
VI / VII Sem
EEE3280: Electric vehicles: Technology & Economics EEE4180: Charging Technologies for Electric Vehicle EEE4181: Electric Vehicle Motors
VIII Sem
EEE 4280: Honors Project