

Faculty of Engineering, School of Electrical Electronics and Communication Engineering  
 Department of Electrical Engineering  
 Degree: B. Tech. Electrical & Electronics Engineering

Total Credit: 160

	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	Networks & 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 2s	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
EEE3170	Project-based Learning 3	0	0	2	1	EEE3270	Project-based Learning 4	0	0	6	3
		18	3	6	24			15	1	12	22
	Total Contact Hours (L+T+P)	27					Total Contact Hours (L+T+P)	28			

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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						
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						
		12	0	2	13			0	0	24	12
	<b>Total Contact Hours (L+T+P)</b>	<b>14</b>					<b>Total Contact Hours (L+T+P)</b>	<b>24</b>			

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

Program Electives			
IV Sem	V Sem	VI Sem	VII Sem
<b>Example - PE1</b> <ul style="list-style-type: none"> <li>• <b>EEE2240:</b> Solar Photovoltaic systems</li> <li>• <b>EEE2241:</b> Engineering Systems Modelling</li> <li>• <b>EEE2242:</b> Internet of Things</li> </ul>	<b>Example - PE2</b> <ul style="list-style-type: none"> <li>• <b>EEE3140:</b> Industrial Automation</li> <li>• <b>EEE3141:</b> Graph Theory &amp; Applications</li> <li>• <b>EEE3142:</b> Energy and Power Optimization</li> </ul> <b>Example - PE3</b> <ul style="list-style-type: none"> <li>• <b>EEE3143:</b> Digital Signal Processing</li> <li>• <b>EEE3144:</b> Intelligent Systems</li> <li>• <b>EEE3145:</b> Distributed Energy Resources</li> </ul>	<b>Example - PE 4</b> <ul style="list-style-type: none"> <li>• <b>EEE3240:</b> Data Analytics</li> <li>• <b>EEE3241:</b> Sensor &amp; Actuator</li> <li>• <b>EEE3242:</b> Industrial Robot operating Systems</li> </ul> <b>Example - PE5</b> <ul style="list-style-type: none"> <li>• <b>EEE3243:</b> AI and Machine Learning</li> <li>• <b>EEE3244:</b> Power System Operation &amp; Control</li> <li>• <b>EEE3245:</b> Solid State Drives</li> </ul> <b>Example - PE6</b> <ul style="list-style-type: none"> <li>• <b>EEE3246:</b> Communications Systems</li> <li>• <b>EEE3247:</b> Industrial Control Systems</li> </ul>	<b>Example - PE 7</b> <ul style="list-style-type: none"> <li>• <b>EEE4140:</b> Switch Gear &amp; Protection</li> <li>• <b>EEE4141:</b> Power System Optimization</li> <li>• <b>EEE4142:</b> Decision Techniques and Optimization</li> </ul> <b>Example - PE8</b> <ul style="list-style-type: none"> <li>• <b>EEE4143:</b> Microgrid</li> <li>• <b>EEE4144:</b> Demand Side Management</li> <li>• <b>EEE4145:</b> Energy Audit and Management</li> </ul>

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