

**College of Engineering**  
**Electrical Department**  
**Master in Electrical Engineering**

Level	Subject Code	Subject	Pre-Required	Credit Hours				Contact Hours	Required Univ/College	Mandatory/ Elective	
				Theoretical	Tutorial	Exercises	Total				
First Level (Common Semester)	Common courses	EE 701	Simulation of Engineering Systems.	None	3	0	0	3	3	C	Mandatory
		EE 702	Advanced Mathematics	None	3	0	0	3	3	C	Mandatory
		EE 703	Modeling of Stochastic Engineering Systems.	None	3	0	0	3	3	C	Mandatory
Second Level	Electronic and communication Engineering Branch	EE 711	Advanced Digital Circuit Design	None	3	0	0	3	3	C	Mandatory
		EE 721	Advanced Communication System	None	3	0	0	3	3	C	Mandatory
		EE ---	Elective 1 from A) or B)*	None	3	0	0	3	3	C	Elective
EE ---		Elective 2 from A) or B)*	None	3	0	0	3	3	C	Elective	
EE ---		Elective 3 from A) or B)*	None	3	0	0	3	3	C	Elective	
EE750		Thesis	None	0	0	3	3	3	C	Mandatory	
Fourth Level		EE750	Thesis	None	0	0	3	3	3	C	Mandatory
Elective A	ELECTRONICS	EE 712	Electronic Devices								
		EE 713	Microwave Electronics								

		EE 714	VLSI Fabrication Technology								
		EE 715	Nanoelectronics								
		EE 716	Electronics Systems Manufacturing								
		EE 717	Hardware Accelerated Computing								
<b>Elective B</b>	<b>COMMUNICATIONS</b>	EE 722	Adaptive & Statistical Signal Processing								
		EE 723	Mobile & Wireless Communication System								
		EE 724	Architectures and Algorithms for DSP Systems								
		EE 725	Information and Coding Theory								
		EE 726	Telecommunicati on Networks								
		EE 727	Advanced Digital Signal Processing								
<b>Second Level</b>	<b>Electrical machine and power system Engineering Branch</b>	EE 731	Generalized theory of electrical machines	None	3	0	0	3	3	C	Mandatory
		EE 741	Power System Operation and Control	None	3	0	0	3	3	C	Mandatory
		EE ---	Elective 1 from A) or B)*	None	3	0	0	3	3	C	Elective
<b>Third Level</b>		EE ---	Elective 2 from A) or B)*	None	3	0	0	3	3	C	Elective
		EE ---	Elective 3 from A) or B)*	None	3	0	0	3	3	C	Elective
		EE 750	Thesis	None	0	0	3	3	3	C	Mandatory
<b>Fourth Level</b>	EE 750	Thesis	None	0	0	3	3	3	C	Mandatory	

<b>Elective A</b>	<b>ELECTRICAL MACHINES</b>	EE 732	Power Electronics Application										
		EE 733	Renewable Energy Systems										
		EE 734	Electrical Machines Dynamics										
		EE 735	Electrical Machines for Special purpose										
		EE 736	Design of Electrical Machines										
		EE 737	Advanced Theory of Electrical Machines										
<b>Elective B</b>	<b>POWER SYSTEMS</b>	EE 742	Power Semiconductor & Converters										
		EE 743	Power Systems Stability and Control										
		EE 744	Reliability Evaluation & Power System Plan										
		EE 745	Advanced Power Systems Analysis										
		EE 746	Power System Protection										
		EE 747	High Voltage Transmission Systems										

\* Minimum one elective needs to be selected from each groups A and B in their respective specialization.