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**MASTER OF ENGINEERING IN ELECTRICAL ENGINEERING**

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<b>COURSE DISTRIBUTION</b>		
Core Courses	03	09 Credit Hours
Area of Specialization Elective Courses	04	12 Credit Hours
University Core Courses	02	06 Credit Hours
Mathematics Course	01	03 Credit Hours
Thesis	--	09 Credit Hours
<b>Total</b>		<b>39 Credit Hours</b>

<b>CORE COURSES: POWER SYSTEMS</b>			
<b>S. No.</b>	<b>Code</b>	<b>Course</b>	<b>Credit Hours</b>
1.	EPS-511	Advanced Electrical Machines	3
2.	EPS-512	Advanced Power Conversion	3
3.	EPS-513	Advance Power Systems	3
<b>CORE COURSES: COMMUNICATION AND SIGNAL PROCESSING</b>			
1.	CSP-511	Advanced Digital Signal Processing	3
2.	CSP-512	Information Theory and Coding	3
3.	CSP-513	Advanced Mobile and Wireless Communication	3
<b>CORE COURSES : ELECTRONICS SYSTEMS DESIGN</b>			
1.	ESD-511	Advanced Digital System Design	3
2.	ESD-512	Advanced VLSI Design	3
3.	ESD-513	Advanced Control Systems	3
<b>CORE COURSES : ROBOTICS AND INTELLIGENT SYSTEMS</b>			
1.	RIS-511	Robotics Mechanics & Control	3
2.	RIS-512	Machine Learning & Artificial Intelligence	3
3.	RIS-513	Modeling and Simulation	3
<b>MATHEMATICS COURSE</b>			
1.	MTS-511	Advanced Engineering Mathematics	3

UNIVERSITY CORE COURSES			
1.	UCC-511	Research Methodologies	3
2.	UCC-512	Advanced Computational Mathematics	3

## ELECTIVE COURSES

	Code	POWER SYSTEMS	
1	EPS-621	High Voltage DC Transmission	3
2	EPS-522	Industrial Drives - Power Electronics	3
3	EPS-523	Electric Vehicle Technology	3
4	EPS-624	Electric Machine Design	3
5	EPS-525	Distributed Generation & Microgrids	3
6	EPS-526	Steam and Gas Power Systems	3
7	EPS-527	Smart Grids	3
8	EPS-528	Electrical Power Quality	3
9	EPS-529	Power System Stability	3
10	EPS-531	Photovoltaic Power System Design	3
11	EPS-532	Wind Power System	3
12	EPS-534	Sustainable Energy System	3
13	EPS-535	Electricity Market	3
14	EPS-536	Power Economics & Management	3
CONTROL SYSTEMS			
1	ESD-522	Industrial Automation and Control	3
2	ESD-523	Measurement and Process Control Systems	3
3	ESD-524	Neural Networks and Applications	3
COMMUNICATION			
1	CSP -521	Wireless Sensor Networks	3
2	CSP -522	Broadband & Satellite Communication	3
3	CSP -523	Advanced Digital Communication	3
4	CSP -524	Advanced Optical Communication	3
SIGNAL PROCESSING			
1	CSP -531	Adaptive Filter Theory	3
2	CSP -632	Array Signal Processing	3
3	CSP -633	Statistical Signal Processing	3
4	CSP -634	Signal Detection and Estimation	3
5	CSP -535	DSP with FPGAs	3
6	CSP -536	Digital Image Processing	3
ELECTROMAGNETICS & MICROWAVE			
1	CSP -541	Radar System Engineering	3
2	CSP -642	Microwave Circuit Design	3
3	CSP -643	Advanced Antenna Theory and Design	3
4	CSP -644	Microwave Networks & Passive Components	3
5	CSP -545	Selected Topics in Microwave Engineering	3
6	CSP -546	RF Mems Theory and Application	3
ELECTRONICS			
1	ESD-531	Advanced Power Electronics	3
2	ESD-532	Embedded Systems	3
3	ESD-533	Electronic Materials and devices	3
4	ESD-534	Biomedical Electronics and systems	3
5	ESD-535	Sensor Technology	3
6	ESD-536	IC Design and Packaging Technologies	3
ROBOTICS			
1	RIS -521	Bio-Medical Robotics	3
2	RIS -522	Mobile Robotics & Autonomous Navigation	3
3	RIS -523	Swarm Robotics & Bio Inspired Robotics	3
4	RIS -524	IoT Based Systems Design	3
5	RIS -525	Developmental Robotics	3
6	RIS -626	Deep Learning and Big Data Analytics	3
7	RIS -527	Fuzzy Systems	3
8	RIS -528	Human Computer Interface	3
INTRA-DISCIPLINARY AREAS & REASERCH			
1	IDE-551	Optimization Techniques	3
2	IDE-552	Advanced Security and Cryptography	3
3	IDE-651	Advanced Probability and Stochastic Processes	3
4	IDE-553	Machine Learning Techniques	3
5	IDE-651	Autonomous Vehicle Design	3