1. Course Scheme for Masters of Engineering in Electrical Engineering

COURSE DISTRIBUTION		
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
	Total	**39 Credit Hours**

CORE COURSES: POWER SYSTEMS		
S. No.	**Course**	**Credit Hours**
1.	Advanced Electrical Machines	3
2.	Advanced Power Conversion	3
3.	Advance Power Systems	3
CORE COURSES: COMMUNICATION AND SIGNAL PROCESSING		
1.	Advanced Digital Signal Processing	3
2.	Information Theory and Coding	3
3.	Advanced Mobile and Wireless Communication	3
CORE COURSES : ELECTRONICS SYSTEMS DESIGN		
1.	Advanced Digital System Design	3
2.	Advanced VLSI Design	3
3.	Advanced Control Systems	3
CORE COURSES : ROBOTICS AND INTELLIGENT SYSTEMS		
1.	Robotics Mechanics & Control	3
2.	Machine Learning & Artificial Intelligence	3
3.	Modeling and Simulation	3

MATHEMATICS COURSE		
1.	Advanced Engineering Mathematics	3
UNIVERSITY CORE COURSES		
1.	Academic Reading & Writing	3
2.	Advanced Computational Mathematics	3

ELECTIVE COURSES

POWER SYSTEMS		
1.	High Voltage DC Transmission	3
2.	Industrial Drives - Power Electronics	3
3.	Electric Vehicle Technology	3
4.	Electric Machine Design	3
5.	Photovoltaic Power System Design	3
6.	Wind Power System	3
1.	Distributed Generation & Microgrids	3
2.	Sustainable Energy System	3
3.	Electricity Market	3
4.	Steam and Gas Power Systems	3
5.	Smart Grids	3
6.	Power Economics & Management	3
7.	Electrical Power Quality	3
8.	Power System Stability	3
CONTROL SYSTEMS		
9.	Advanced Control Systems	3
10.	Industrial Automation and Control	3
11.	Measurement and Process Control Systems	3
12.	Neural Networks and Applications	3
ELECTROMAGNETICS & MICROWAVE		
13.	Radar System Engineering	3
14.	Microwave Circuit Design	3
15.	Advanced Antenna Theory and Design	3
16.	Microwave Networks and Passive Components	3
17.	Selected Topics in Microwave Engineering	3
18.	RF Mems Theory and Application	3
COMMUNICATION		
19.	Wireless Sensor Networks	3
20.	Broadband & Satellite Communication	3
21.	Advanced Digital Communication	3
22.	Advanced Optical Communication	3
23.	Information theory and Coding	3
SIGNAL PROCESSING		
24.	Adaptive Filter Theory	3
25.	Array Signal Processing	3
26.	Statistical Signal Processing	3
27.	Signal Detection and Estimation	3
28.	DSP with FPGAs	3
29.	Digital Image Processing	3
ELECTRONICS		
30.	IC Design and Packaging Technologies	3
31.	Sensor Technology	3
32.	Electronic Materials and devices	3
33.	Biomedical Electronics and systems	3

ROBOTICS		
1.	Bio-Medical Robotics	3
2.	Mobile Robotics & Autonomous Navigation	3
3.	Swarm Robotics & Bio Inspired Robotics	3
4.	IoT Based Systems Design	3
5.	Developmental Robotics	3
6.	Deep Learning and Big Data Analytics	3
7.	Fuzzy Systems	3
8.	Human Computer Interface	3
INTRA-DISCIPLINARY AREAS & REASERCH		
9.	Optimization Techniques	3
10.	Advanced Security and Cryptography	3
11.	Advanced Probability and Stochastic Processes	3
12.	Machine Learning	3
13.	Autonomous Vehicle Design	3
14.	Research Methodology	NA

2. Semester Wise Corse Scheme (Fall 2018) M.E in Electrical Engineering

Power Systems			
Course Code	**Semester-I**	**Pre- req**	**CHR**
	Advanced Power Conversion	--	3
	Advance Electrical Machines	--	3
	Academic Reading and Writing	--	3
	Advanced Computational Mathematics	--	3
Course Code	**Semester-II**	**Pre- req**	**CHR**
	Advanced Power Systems	--	3
	High Voltage DC Transmission	--	3
	Advanced Engineering Mathematics	--	3
	Advanced Control Systems	--	3
Course Code	**Semester-III&IV Thesis**	--	**CHR**
	Elective Course-I	--	3
	Elective Course-II	--	3
	ME- Thesis	--	9

Communications & Signal Processing			
Course Code	**Semester-I**	**Pre- req**	**CHR**
	Advanced Digital Signal Processing	--	3
	Advanced Wireless and Mobile Communications	--	3
	Academic Reading and Writing	--	3
	Advanced Computational Mathematics	--	3
Course Code	**Semester-II**	**Pre- req**	**CHR**
	Advanced Digital Systems Design	--	3
	Advanced Engineering Mathematics	--	3
	Advanced Control Systems		3
	Information Theory and Coding	--	3
Course Code	**Semester-III & IV**	--	**CHR**
	Elective Course-I	--	3
	Elective Course –II	--	3
	ME- Thesis	--	6

	Electronics Systems Design		
Course Code	**Semester-I**	**Pre- req**	**CHR**
	Advanced Wireless and Mobile Communications	--	3
	Advanced Digital Systems Design	--	3
	Academic Reading and Writing	--	3
	Advanced Computational Mathematics	--	3
Course Code	**Semester-II**	**Pre- req**	**CHR**
	Advanced VLSI Design	--	3
	Elective Course –I	--	3
	Advanced Engineering Mathematics	--	3
	Advanced Control Systems		3
Course Code	**Semester-III & IV**	**--**	**CHR**
	Elective Course –II	--	3
	Elective Course -III	--	3
	ME- Thesis	--	6

ROBOTICS AND INTELLIGENT SYSTEMS			
Course Code	**Semester-I**	**Pre- req**	**CHR**
	Modeling and Simulation	--	3
	Advanced Control Systems	--	3
	Academic Reading and Writing	--	3
	Advanced Computational Mathematics	--	3
Course Code	**Semester-II**	**Pre- req**	**CHR**
	Robotic Mechanics and Control	--	3
	Machine Learning & Artificial Intelligence	--	3
	Advanced Engineering Mathematics	--	3
	Advanced Digital System Design	--	3
Course Code	**Semester-III&IV Thesis**	--	**CHR**
	Elective Course-I	--	3
	Elective Course-II	--	3
	ME- Thesis	--	9