

M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR  
(Autonomous)

M.E., DEGREE IN POWER SYSTEMS ENGINEERING

SEMESTER: I II III IV

CURRICULUM - Regulation-2015

(For the students admitted from the academic year 2015-2016 onwards)

SEMESTER – I

Course Code	Course Title	Hours / Week			Credit	Maximum Marks		
		L	T	P		CIA	ESE	Total
	<b>THEORY</b>							
PMA15103	Applied Mathematics for Electrical Engineers	3	1	0	4	50	50	100
PPS15101	Advanced Power System Analysis	3	1	0	4	50	50	100
PPS15102	Advanced Power System Operation and Control	3	0	0	3	50	50	100
PPS15103	Power Quality	3	0	0	3	50	50	100
PPS15104	System Theory	3	0	0	3	50	50	100
E1	Elective I	3	0	0	3	50	50	100
	<b>PRACTICAL</b>							
PPS15105P	Power System Simulation Laboratory I	0	0	3	2	50	50	100
<b>Total</b>					<b>22</b>			<b>700</b>

SEMESTER – II

Course Code	Course Title	Hours / Week			Credit	Maximum Marks		
		L	T	P		CIA	ESE	Total
	<b>THEORY</b>							
PPS15201	Power System Protection	3	0	0	3	50	50	100
PPS15202	Power System Dynamics	3	0	0	3	50	50	100
PPS15203	Flexible AC Transmission systems	3	0	0	3	50	50	100
PPS15204	Restructured power Systems	3	0	0	3	50	50	100
E2	Elective II	3	0	0	3	50	50	100
E3	Elective III	3	0	0	3	50	50	100
	<b>PRACTICAL</b>							
PPS15205P	Power System Simulation Laboratory II	0	0	3	2	50	50	100
<b>Total</b>					<b>20</b>			<b>700</b>

SEMESTER - III

Course Code	Course Title	Hours / Week			Credit	Maximum Marks		
		L	T	P		CIA	ESE	Total
	THEORY							
E4	Elective IV	3	0	0	3	50	50	100
E5	Elective V	3	0	0	3	50	50	100
E6	Elective V	3	0	0	3	50	50	100
	PRACTICAL							
PPS15301P	Project Work (Phase –I)	0	0	12	6	50	50	100
Total					15			400

SEMESTER - IV

Course Code	Course Title	Hours / Week			Credit	Maximum Marks		
		L	T	P		CIA	ESE	Total
	PRACTICAL							
PPS15401P	Project work (Phase –II)	0	0	24	12	50	50	100
Total					12			100

Total Credits = 69

LIST OF ELECTIVES					
SEMESTER -I		L	T	P	C
PPS15151	Modeling and Analysis of Electrical Machines	3	0	0	3
PPS15152	Power Electronics for Renewable Energy Resources	3	0	0	3
PPS15153	Power System Planning and Reliability	3	1	0	4
SEMESTER -II					
PPS15251	Power System Economics	3	0	0	3
PPS15252	Control System Design	3	0	0	3
PPS15253	EHVAC Transmission	3	0	0	3
PPS15254	Electric transients in power system	3	0	0	3
PPS15255	Energy management and auditing	3	0	0	3
PPS15256	Power Distribution Systems	3	0	0	3
SEMESTER -III					
PPS15351	Advanced Power System Dynamics	3	0	0	3
PPS15352	Smart Grid	3	0	0	3
PPS15353	High Voltage Direct Current Transmission	3	0	0	3
PPS15354	Industrial Power System Analysis and Design	3	0	0	3
PPS15355	Optimal Control and Filtering	3	0	0	3
PPS15356	Solar energy and energy storage systems	3	0	0	3
PPS15357	Optimization Techniques	3	0	0	3
PPS15358	Power system stability	3	0	0	3
PPS15359	Wind Energy Conversion Systems	3	0	0	3