

**M.KUMARASAMY COLLEGE OF ENGINEERING, KARUR**  
(Autonomous)

**M.E., DEGREE IN POWER SYSTEMS ENGINEERING**

**SEMESTER: I II III IV**

**CURRICULUM - Regulation-2013**

(For the students admitted from the academic year 2013-2014 onwards)

**SEMESTER – I**

Course Code	Course Title	Hours / Week			Credit	Maximum Marks		
		L	T	P		CIA	ESE	Total
<b>THEORY</b>								
PMA13103	Applied Mathematics for Electrical Engineers	3	1	0	4	50	50	100
PPS13101	Power System Analysis	3	1	0	4	50	50	100
PPS13102	Power System Operation and Control	3	0	0	3	50	50	100
PPS13103	Electrical Transients in Power Systems	3	0	0	3	50	50	100
PPS13104	System Theory	3	0	0	3	50	50	100
E1	Elective I	3	0	0	3	50	50	100
<b>PRACTICAL</b>								
PPS13105P	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>								
PPS13201	Power System Protection	3	0	0	3	50	50	100
PPS13202	Power System Dynamics	3	0	0	3	50	50	100
PPS13203	Flexible AC Transmission systems	3	0	0	3	50	50	100
PPS13204	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>								
PPS13205P	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	ES E	Total
	<b>THEORY</b>							
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
	<b>PRACTICAL</b>							
PPS13301P	Project Work (Phase –I)	0	0	12	6	50	50	100
<b>Total</b>					<b>15</b>			<b>400</b>

**SEMESTER - IV**

Course Code	Course Title	Hours / Week			Credit	Maximum Marks		
		L	T	P		CIA	ESE	Total
	<b>PRACTICAL</b>							
PPS13401P	Project work (Phase –II)	0	0	24	12	50	50	100
<b>Total</b>					<b>12</b>			<b>100</b>

**Total Credits = 69**

## LIST OF ELECTIVES

<b>SEMESTER -I</b>		<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
PPS13151	Analysis of Electrical Machines	3	0	0	3
PPS13152	Analysis of Inverters	3	0	0	3
PPS13153	Electro Magnetic Field Computation and Modeling	3	1	0	4
<b>SEMESTER -II</b>					
PPS13251	Advanced Digital Signal Processing	3	0	0	3
PPS13252	Control System Design	3	0	0	3
PPS13253	EHV Power Transmission	3	0	0	3
PPS13254	Power Quality	3	0	0	3
PPS13355	Power System Planning and Reliability	3	0	0	3
PPS13256	Special Electrical Machines	3	0	0	3
<b>SEMESTER -III</b>					
PPS13351	Advanced Power System Dynamics	3	0	0	3
PPS13352	Applications of MEMS Technology	3	0	0	3
PPS13353	High Voltage Direct Current Transmission	3	0	0	3
PPS13354	Industrial Power System Analysis and Design	3	0	0	3
PPS13355	Optimal Control and Filtering	3	0	0	3
PPS13356	Power Electronics for Renewable Energy Systems	3	0	0	3
PPS13357	Soft Computing Techniques	3	0	0	3
PPS13358	System Identification and Adaptive Control	3	0	0	3
PPS13359	Wind Energy Conversion Systems	3	0	0	3