

## I YEAR I SEMESTER

Sr.No	Core/Elective	Course Code	Course Name	L	T	P	Credits
1.	Professional Core-I	22PS6111	Advanced Power System Analysis	3	0	0	3
2.	Professional Core-II	22PS6112	Economic Operation of Power Systems	3	0	0	3
3.	Professional Elective-I	22PE6171 22PE6172 22PS6171 22PS6172	1. Advanced Power Electronic Converters 2. Renewable Energy Technologies 3. Smart Grid Technologies 4. Modern Control Theory	3	0	0	3
4.	Professional Elective-II	22PS6173 22PS6174 22PS6175  22PE6173	1. HVDC Transmission 2. Electrical Power Distribution System 3. Reactive Power Compensation and Management 4. Electric Vehicles and Design	3	0	0	3
5.	MC	22MC6111	Research Methodology & IPR	2	0	0	2
6.	Lab-I	22PS6151	Power Systems Computation Lab-I	0	0	4	2
7.	Lab-II	22PS6152	Advanced Power Systems Lab	2	0	4	2
8.	Audit-I	22AU6101	Audit Course-I	2	0	0	0
<b>Total Credits</b>				<b>16</b>	<b>0</b>	<b>8</b>	<b>18</b>

## I YEAR II SEMESTER

Sr.No	Core/Elective	Course Code	Course Name	L	T	P	Credits
1.	Professional Core-III	22PS6211	Digital Protection of Power System	3	0	0	3
2.	Professional Core-IV	22PS6212	Power System Dynamics	3	0	0	3
3.	Professional Elective-III	22PS6271 22PS6272 22PS6273 22PS6274	1. Restructured Power Systems 2. Power Quality Improvement Techniques 3. EHV AC Transmission 4. Swarm Intelligence Techniques in Power Systems	3	0	0	3
4.	Professional Elective-IV	22PS6275 22PE6271 22PS6276 22PS6277	1. AI Techniques in Power Systems 2. Electric Vehicle Charging Techniques 3. Power System Reliability and Planning 4. Industrial Load Modelling and Control	3	0	0	3
5.	MPWS	22PS6291	Mini Project with Seminar	0	0	4	2
6.	Lab-III	22PS6251	Power Systems Computation Lab-II	0	0	4	2
7.	Lab-IV	22PS6252	Power System Protection Lab	0	0	4	2
8.	Audit-II	22AU6201	Audit Course-II	2	0	0	0
<b>Total Credits</b>				<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>

## II YEAR I SEMESTER

		III Semester		L	T	P	Credits
Sr.No	Core/Elective	Course Code	Course Name				
1.	Professional Elective-V	22PS7171 22PS7172  22PS7173 22PS7174	1. Power System Transients 2. FACTS and custom Power Devices 3. Gas Insulated Systems 4. SCADA System and Applications	3	0	0	3
2.	Open Elective	22CS7161 22ME7161 22ME7162 22CE7161  22ME7163 22PS7161	1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Photovoltaic Systems	3	0	0	3
3.	Dissertation	22PS7181	Dissertation Stage-I	0	0	12	6
<b>Total Credits</b>				<b>6</b>	<b>0</b>	<b>12</b>	<b>12</b>

## II YEAR II SEMESTER

		IV Semester		L	T	P	Credits
Sr.No	Core/Elective	Course Code	Course Name				
1.	Dissertation	22PS7281	Dissertation Stage-II	0	0	12	6
2.	Dissertation	22PS7282	Dissertation Viva-Voce	0	0	28	14
<b>Total Credits</b>				<b>0</b>	<b>0</b>	<b>40</b>	<b>20</b>

### Open Elective

1. Business Analytics (Offered by CSE Department)
2. Industrial Safety (Offered by **Chemical Engineering** Department)
3. Operations Research (Offered by **Mechanical Engineering** Department)
4. Cost Management of Engineering Projects (Offered by **Civil Engineering** Department)
5. Composite Materials (Offered by **Metallurgical Engineering** Department)
6. Photovoltaic Systems (Offered by **EEE** Department)

### Audit Course I & II

1. English for Research Paper Writing.
2. Disaster Management.
3. Sanskrit for Technical Knowledge.
4. Value Education.
5. Constitution of India.
6. Pedagogy Studies.
7. Stress Management by Yoga.
8. Personality Development through Life Enlightenment Skills.