

PROGRAM STRUCTURE

I SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
1	172PD1T01	Electrical Machine Modeling & Analysis	✓			Students are able to acquire skills related to machines particularly in traction, electrical vehicles, etc. or as generators enabling them to be employed for controlling, designing and manufacturing in power station, wind turbines, etc
2	172PD1T02	Analysis of Power Electronic Converters	✓			Students are able to acquire skills related to the various power electronic devices which enables them to get employed in semiconductor-based industries such as in communications, computing, health care, military systems, transportation, clean energy, etc.
3	172PD1T03	Power Electronic Control of DC Drives	✓			Students are able to acquire skills related to the various power electronic devices which enables them to get employed in semiconductor-based industries such as in communications, computing, health care, military systems, transportation, clean energy, etc.
4	172PD1T04	Flexible AC Transmission Systems	✓			Students are able to acquire skills related to mitigating some of the potential transmission of electrical power challenges that enables them to get employed in power transmission company.
5	172PD1E01	Modern Control Theory		✓		This subject ensures that the students develop strategic skills to improving productivity and enhancing the best practices of the company.
6	172PD1E02	Power Quality	✓			Students are able to acquire skills related to high-quality power efficiency that enables them to be employed in industries focusing in saving money on electricity bill and carbon footprint.
7	172PD1E03	Optimization Techniques		✓		Students are able to demonstrate technical skill of optimization that helps to gain problem-solving skills optimally i.e. to solve a problem in a logical as well as creative way in an optimized manner.
8	172PD1E04	Energy Auditing, Conservation & Management			✓	the course focuses on the loss and profit studies and other company maintenance activities, creates the entrust among the students to have own company.

9	172PD1E05	Artificial Intelligence Techniques	✓			Students are able to acquire skills related to design, synthesize and evaluate the performance of ANN enabling them to be employed for designing artificial intelligence systems
10	172PD1E06	HVDC Transmission	✓			Students are able to acquire skills related to mitigating some of the potential transmission of electrical power challenges imposed by the growth in non-dispatchable renewable generation on electric grids consideration that enables them to get employed in power transmission company.
11	172PD1L01	Simulation Lab	✓			Students are able to acquire skills related to fundamental knowledge on various analytical tools for engineering simulation and enabling them to be employed in areas of computer aided design

II SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
12	172PD2T05	Switched Mode Power Conversion	✓			Students are able to acquire skills related to fundamental knowledge on SMPS working and operations and enabling them to be employed in areas of inverters, charging, etc.
13	172PD2T06	Power Electronics Control of AC Drives	✓			Students are able to acquire skills related to the various power electronic drives which enables them to get employed in semiconductor-based industries such as in communications, computing, health care, military systems, transportation, clean energy, etc.
14	172PD2T07	Digital Controllers		✓		This subject ensures that the students develop strategic methods to improving productivity and enhancing the best practices of the company.
15	172PD2T08	Custom Power Devices				
16	172PD2E07	Renewable Energy Systems	✓			Students are able to acquire skills related to various types of pivotal role in the development of a sustainable energy supply enabling the students to get employed in renewable energy generation sector.
17	172PD2E08	Reactive Power Compensation & Management	✓			Students are able to acquire skills related to high-quality power efficiency that enables them to get employed in industries focusing in saving money on electricity bill and carbon footprint.
18	172PD2E09	Electrical Distribution System	✓			Students are able to acquire skills related to mitigating some of the potential distribution of electrical power challenges imposed by the growth in non-dispatchable renewable generation on electric grids that enables them to get employed in power distribution company.
19	172PD2E10	Smart Grid Technologies	✓			Students are able to acquire skills related to smart grid technologies and its challenges imposed by the growth in non-dispatchable renewable generation on electric grids that enables them to get employed in power company.
20	172PD2E11	Special Machines	✓			Students are able to acquire skills related to special machines particularly in traction, electrical vehicles, etc. or as generators enabling them to be employed for controlling, designing and manufacturing in power station, wind turbines, etc

21	172PD2E12	Programmable Logic Controllers & Applications		✓		Students are able to demonstrate technical solving skills by providing knowledge on PLCs with growing penetration of smart electronics in strategic areas including Space, Defence and Nuclear energy.
22	172PD2L02	Power Converters & Drives Lab	✓			Students are able to acquire skills related to the various power electronic drives which enables them to get employed in semiconductor based industries such as in communications, computing, health care, military systems, transportation, clean energy, etc.

III SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
23	K4301	Comprehensive Viva-Voce				
24	K4302	Seminar – I	✓			students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
25	K4303	Project Work Part – I				

IV SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
26	L4301	Seminar – II				
27	L4302	Project Work Part- - II	✓			students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum engineering domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
Total		27	18	4	1	


Program Coordinator


Head of the Department
Head of The Department
Dept. Of Electrical & Electronics Engineering
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