

# Dr.V.R.K WOMEN'S COLLEGE OF ENGINEERING AND TECHNOLOGY

## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### CO Attainment

<b>Accademic Year:</b> 2021-2022 <b>Year &amp; Branch :</b> III Year EEE <b>Semester:</b> I <b>Batch:</b> 2019-2023 <b>Subject Code:</b> EC303PC <b>Subject:</b> HVE <b>Faculty:</b> Mr. Syed Riyaz Ahmed		<div style="background-color: #4CAF50; color: white; padding: 10px; margin-bottom: 5px;">Enter-1 for Absentees</div> <div style="background-color: #FFEB3B; padding: 10px; margin-bottom: 5px;">Total no. of students registered for the course= 03</div>
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S.NO	HALL TICKET NUMBER	NAME OF THE STUDENT	MSD I Examination				MSD II Examination				% of Attainment					Univ. Exam Mark	Univ. Exam Mark	CRITERIA FOR CO ATTAINMENT		CRITERIA FOR CO ATTAINMENT	
			ASS	SUB	OBJ	Total	ASS	SUB	OBJ	Total	CO1	CO2	CO3	CO4	CO5	Criteria	Level	Criteria	Level		
			5	10	10	25	5	10	10	25	100	100	100	100	100						
1	20H85A0201	DASTAPURE SHRUTHI	5	6	5	16	5	10	9	24	64	64	80	96	96	42	56	60 Percentage and above of appeared students Scoring >=50% of Total	3	60 Percentage and above of appeared students Scoring >=35% of Total	3
2	20H85A0202	MOHAMMAD MUSKAN FALAK	5	7	5	17	5	10	10	25	68	68	84	100	100	38	51				
3	20H85A0203	UTTUNUR BHAVANI	5	10	8	23	5	9	10	24	92	92	94	96	96	35	47				
No of students crossed the threshold level in Internal Examination (>=50%)										3	3	3	3	3		3	No of students crossed the				
No of Students Appered for the Examination										3	3	3	3	3		3	No of Students Appered for				
% of Students crossed the threshold level										100	100	100	100	100		100	% of Students crossed the				
COs attainment Level										3	3	3	3	3		3	COs attainment Level				
Average of COs attainment										3						3	Average of COs attainment				
Course Outcome attainment of the class										3											



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Contact No. 7893044962 / 08413235962

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CO-PO-PSO ATTAINMENT		
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING		
SUBJECT CODE	COURSE NAME	Attainment
<b>YEAR 2 - SEMESTER 1</b>		
EE301ES	Engineering Mechanics	2.25
EE302PC	Electrical Circuit Analysis	2.5
EE303PC	Analog Electronics	2.5
EE304PC	Electrical Machines - I	2.3
EE305PC	Electro Magnetic Fields	2.3
EE306PC	Electrical Machines Lab - I	3
EE307PC	Analog Electronics Lab	3
EE308PC	Electrical Circuit Lab	3
*MC309	Gender Sensitization Lab	3
<b>YEAR 2 - SEMESTER 2</b>		
MA401BS	Laplace transforms, Numerical methods & Complex variables	2
EE402PC	Electrical Machines -II	2.2
EE403PC	Digital Electronics	2.5
EE404PC	Control Systems	2.5
EE405PC	Power Systems -I	2.6
EE406PC	Digital Electronics Lab	3
EE407PC	Electrical Machines Lab -II	3
EE408PC	Control Systems Lab	3
*MC409	Constitution of India	3
<b>YEAR 3 - SEMESTER 1</b>		
EE501PE	Power Electronics	2.8
EE502PE	Power Systems -II	2.6
EE503PE	Measurements and Instrumentation	2.3
EE512PE	High Voltage Engineering	2.5
SM504MS	Business Economics and Financial Analysis	2.5
EE505PC	Power System Simulation Lab	3
EE506PC	Power Electronics Lab	3
EE507PC	Measurements and Instrumentation Lab	3
EN508HS	Advanced English Communication Skills Lab	3
*MC510	Intellectual Property Rights	3
<b>YEAR 3 - SEMESTER 2</b>		
ME800OE	Non- Conventional Sources of Energy	3
EE613PE	Wind And Solar Energy Systems	2.8
EE601PC	Signals and Systems	2.5



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EE602PC	Microprocessors and Microcontrollers	2.2
EE603PC	Power System Protection	2.8
EE604PC	Power System Operation and Control	2.4
EE605PC	Power System Lab	3
EE606PC	Microprocessors and Microcontrollers Lab	3
EE607PC	Signals and Systems Lab	3
*MC609	Cyber Security	3
<b>YEAR 4 - SEMESTER I</b>		
SM701MS	Fundamentals of Management for Engineers	3
EE711PE	Electrical and Hybrid Vehicles	2.6
EE721PE	HVDC Transmission	2.6
MN700OE	Health and Safety in Mines	2.8
EE701PC	Electrical and Electronics Design Lab	3
EE702PC	Industrial Oriented Mini Project/Summer Internship	3
EE703PC	Seminar	3
EE704PC	Project Stage - I	3
<b>YEAR 4 - SEMESTER II</b>		
EE811PE	Power Quality and FACTS	2.5
EE822PE	Electrical Distribution Systems	2.4
MT802OE	Total Quality Management	2.8
EE801PC	Project Stage - ii	3

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HEAD OF THE DEPARTMENT  
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DR. VRK WOMEN'S COLLEGE  
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## DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

### CO-PO-PSO ATTAINMENT FOR 2019-2023 BATCH(R18)

#### II YEAR – I SEMESTER

Subject Code & Course Name	COs	Outcomes	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO1 0	PO1 1	PO1 2	PSO 1	PSO 2	PSO 3	
EE301ES Engineering Mechanics	CO 1	Students are able to determine resultant of forces acting on a body and analyse equilibrium of a body subjected to a system of forces.	3	2	3	2	2	2			1	2	1	2	1	3	2	
	CO 2	Students can solve the problem of bodies subjected to friction.	3	2	3	2	1	2	1	1	2	2	2	2	3	3	2	
	CO 3	Students are able to find the location of centroid and calculate moment of inertia of a given section	2	2	3	2	2	1			1	2	3	2	3	2	3	1
	CO 4	Students are able to Understand the kinetics and kinematics of a body undergoing rectilinear, curvilinear, rotatory motion and rigid body motion.	3	3	2	2	1	1				1	1	1	1	1	1	1
	CO 5	To solve problems using work energy equations for translation, fixed axis rotation and plane motion and solve problems of vibration.	3	2	2	1	1	1	1	1	1	1	1	1	1	1	2	1
	<b>AVERAGE</b>			3	2	3	2	1	1	1	1	1	2	1	2	2	2	1
<b>Average with Marks</b>			2.1	1.65	1.95	1.35	1.05	1.05	0.75	0.75	1.05	1.35	1.05	1.35	1.2	1.8	1.05	



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
EE302PC	CO1	Apply network theorems for the analysis of electrical circuits.	2	3	2	3	2	3	1		2	1	1	2	3	2	1
	CO2	Obtain the transient and steady-state response of electrical circuits	3	3	2	3	2	2		1	2	1	1	2	2	2	1
	CO3	Analyze circuits in the sinusoidal steady-state (single-phase and three phase)	3	3	2	3	2	3	1		1	1	2	2	3	1	1
	CO4	Analyze the Laplace transform to circuits	3	3	3	3	2	2		1	1	1	1	2	2	2	2
	CO5	Analyze two port circuit behaviour.	3	3	1	3	2	1		1	1	1	1	2	1	1	2
		<b>AVERAGE</b>	3	3	2	3	2	2	1	1	1	1	1	2	2	2	1
		<b>Average with Marks</b>	<b>2.3333</b>	<b>2.5</b>	<b>1.667</b>	<b>2.5</b>	<b>1.667</b>	<b>1.833</b>	<b>0.8333</b>	<b>0.833</b>	<b>1.167</b>	<b>0.8333</b>	<b>1</b>	<b>1.6667</b>	<b>1.83333</b>	<b>1.33333</b>	<b>1.1667</b>



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Code		<b>Outcomes</b>															
Course Name																	
	CO1	Know the characteristics, utilization of various components.	3	2	3	3	2	1	1	2	2	2	2	2	3	3	2
	CO2	Understand the biasing techniques	3	2	3	2	1	2		1	2	2	2	2	3	2	2
EE303PC	CO3	Design and analyze various rectifiers, small signal amplifier circuits	3	3	3	3	1	2	1		2	3	3	2	2	2	2
	CO4	Design sinusoidal and non-sinusoidal oscillators.	3	3	3	3	2	3	1		2	3	3	2	2	3	2
Analog Electronics	CO5	A thorough understanding, functioning of OP-AMP, design OP-AMP based circuits with linear	3	3	3	2	2	2		1	2	2	3	2	3	3	2
	<b>AVERAGE</b>		3	3	3	3	2	2	1	1	2	2	3	2	3	3	2
	<b>Average with marks</b>		2.5	2.167	2.5	2.167	1.3333	1.667	0.833	1.1111	1.667	2	2.1667	1.6667	2.16667	2.1667	1.66667



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			EE304PC	Electrical machines - I	CO1	Students are able to identify different parts of a DC machine & understand its operation	3	2	3	2	2	3	1	1	3	2	2	3
		CO2	Students can carry out different testing methods to predetermine the efficiency of DC machines	2	3	2	3	3	3		1	1	1	2	3	2	2	2
		CO3	Students understand different excitation and starting methods of DC machines.	3	2	3	2	2	3	1		2	2	2	2	3	2	2
		CO4	Students are able to understand and control the voltage and speed of a DC machines	3	2	3	3	3	1		1	2	1	2	2	2	3	2
		CO5	Analyze single phase and three phase transformers circuits	3	2	3	3	2	2	1		2	2	2	2	2	3	
		AVERAGE		3	2	3	3	2	2	1	1	2	2	2	2	2	2	2
		Average with Marks		2.146 7	1.686 7	2.146 7	1.993 3	1.8 4	1.8 4	0.766 7	0.766 7	1.533 3	1.226 7	1.533 3	1.84	1.84	1.84	1.533 3



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Course Name <b>EE305PC</b> Electromagnetic Fields	CO1	Understand the basic mathematical concepts related to electromagnetic vector fields. .	3	3	2	3	3	1		1	2	2	2	2	3	2	3
	CO2	Apply the principles of electrostatics to the solutions of problems relating to electric field and electric potential, boundary conditions and electric energy density	3	2	3	2	2	2	1		1	2	1	1	2	3	2
	CO3	Apply the principles of magnetostatics to the solutions of problems relating to magnetic field and magnetic potential, boundary conditions and magnetic energy density.	2	3	3	2	3	3	3	1	1	2	2	2	2	2	2
	CO4	Understand the concepts related to Faraday's law, induced emf and Maxwell's equations.	2	2	3	3	2	2		1	1	2	2	1	3	3	2
	CO5	Apply Maxwell's equations to solutions of problems relating to transmission lines and uniform plane wave propagation.	2	3	3	2	3	2	1		2	1	2	2	3	2	2
	AVERAGE		2	3	3	2	3	2	2	1	1	2	2	2	3	2	2
	Average With Marks		1.84	1.9933	2.147	1.84	1.993	1.5333	1.278	0.767	1.0733	1.38	1.38	1.22667	1.99333	1.84	1.68667





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<b>EE306PC</b> <b>Electrical</b> <b>Machines Lab</b> <b>- I</b>	CO1	Acquire knowledge about the working of DC machines as generators and motors and start and control the Different DC Machines.	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	Assess the performance of different machines using different testing methods	3	3	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO3	Identify different conditions required to be satisfied for self – excitation of DC Generators	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO4	Separate iron losses of DC machines into different components	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	Analyze single phase and three phase transformer circuits	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
		<b>Average with Marks</b>	<b>2.8</b>	<b>2.4</b>	<b>3</b>	<b>2.8</b>	<b>2.8</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2.8</b>	<b>3</b>	<b>2.8</b>





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EE308PC Electrical Circuits Lab	CO1	Student should be able to analyze complex DC and AC linear circuits	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	Student should be able to Evaluate response in a given network by using theorems	3	2	3	3	3	3	3	3	3	3	3	3	3	3	2
	CO3	Apply concepts of electrical circuits across engineering	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO4	Student should be able to measure active and reactive powers for star and delta connected balanced loads	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	Student should be able to express given Electrical Circuit in terms of A, B, C, D and Z, Y Parameter Model and Calculate circuits	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>Average with Marks</b>	2.8	2.2	3	2.8	3	3	3	3	3	3	3	3	2.8	3	2.8



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MC309 Gender Sensitization Lab	CO1	Students will have developed a better understanding of important issues related to gender in contemporary India.	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	Students will be sensitized to basic dimensions of the biological, sociological, psychological and legal aspects of gender. This will be achieved through discussion of materials derived from research, facts, everyday life, literature	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO3	Students will attain a finer grasp of how gender discrimination works in our society and how to counter it.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO4	Students will acquire insight into the gendered division of labour and its relation to politics and economics.	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	Men and women students and professionals will be better equipped to work and live together as Year 2 equals.	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
		<b>Average with marks</b>	<b>2.8</b>	<b>2.2</b>	<b>3</b>	<b>2.8</b>	<b>2.8</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2.8</b>	<b>3</b>	<b>2.8</b>



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## II YEAR – II SEMESTER

Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS1	PS2	PS3
<b>MA401BS Laplace Transforms, Numerical Methods and Complex Variables</b>	CO1	Analyze the Laplace transforms techniques for solving ODE's	3	3	2	2	3	3	1	1	1	1	2	1	3	2	2
	CO2	Evaluate the root of a given equation. Estimate the value for the given data using interpolation.	2	3	3	2	2	2		1	1	2	2	1	3	3	2
	CO3	Students are able to find the numerical solutions for a given ODE'	2	3	2	2	3	2	1		1	1	1	1	3	2	3
	CO4	Analyze the complex function with reference to their analyticity, integration using Cauchy's Integral and residue	3	3	2	3	2	3	1	1	1	1	2	1	3	2	2
	CO5	Students are able to understand Taylor's and Laurent's series expansions of complex Function	2	3	2	2	3	2	1		2	2	1	1	3	2	2
		<b>AVERAGE</b>	2	3	2	2	3	2	1	1	1	1	2	1	3	2	2
		Average with marks	2	2	1	1	2	2	1	1	1	1	1	1	2	1	1





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EE403PC DIGITAL ELECTRONICS	CO1	Understand working of logic families and logic gates.	3	2	3	3	2	2	1	1	3	2	2	2	3	2	2
	CO2	Design and implement Combinational and Sequential logic circuits	3	2	3	2	2	2	1	1	3	3	2	2	3	2	3
	CO3	Understand the process of Analog to Digital conversion and Digital to Analog conversion	2	2	3	3	3	2		1	2	2	2	2	2	3	2
	CO4	Students will be able to use PLDs to implement the given logical problem	2	3	2	2	3	3	1		2	2	3	3	2	2	2
	CO5	To implement synchronous state machines using flip-flops	3	2	2	2	2	2	1	1	2	2	2	2	3	2	2
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.167</b>	<b>1.833</b>	<b>2.167</b>	<b>2</b>	<b>2</b>	<b>1.833</b>	<b>0.833</b>	<b>0.833</b>	<b>2</b>	<b>1.8333</b>	<b>1.8333</b>	<b>1.8333</b>	<b>2.167</b>	<b>1.833</b>	<b>1.833</b>



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS1	PS2	PS3	
Course Name EE404PC Control Systems	CO1	Categorize different types of system and identify a set of algebraic equations to represent and model a complicated system into a more simplified form.	3	3	3	3	3	2	1		2	2	2	2	2	2	2	
	CO2	Characterize any system in Laplace domain to illustrate different specification of the system using transfer function concept.	2	3	3	2	3	3	3	1	1	3	2	3	3	2	2	
	CO3	Interpret different physical and mechanical systems in terms of electrical system to construct equivalent electrical models for analysis.	3	2	3	2	3	2	1			2	3	3	3	3	2	3
	CO4	Employ time domain analysis to predict and diagnose transient performance parameters of the system for standard input functions.	3	3	2	2	3	2	1	1			2	3	3	3	2	2
	CO5	Formulate different types of analysis in frequency domain to explain the nature of stability of the system	3	3	3	2	3	2			1	3	3	3	2	2	3	2
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	
		<b>AVERAGE WITH MARKS</b>	<b>2.333</b>	<b>2.333</b>	<b>2.333</b>	<b>1.833</b>	<b>2.5</b>	<b>1.833</b>	<b>1.25</b>	<b>0.833</b>	<b>1.667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2.167</b>	<b>1.833</b>	<b>1.833</b>	





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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS1	PS2	PS3
EE404PC  Power Systems - I	CO1	Understand the concepts of power systems.	3	3	2	3	2	3	1	1	1	1	3	2	3	2	2
	CO2	Understand the operation of conventional generating stations and renewable sources of electrical power	3	2	2	3	2	3		1	1	1	2	3	3	2	
	CO3	Evaluate the power tariff methods.	3	2	2	2	3	3	1	1	1	1	2	2	2	2	2
	CO4	Determine the electrical circuit parameters of transmission lines	3	3	3	2	2	2	1		1	1	2	3	2	3	2
	CO5	Understand the layout of substation and underground cables and corona.	3	2	3	3	3	2	1	1	1	1	2	2	2	2	3
		<b>AVERAGE</b>		3	2	2	3	2	3	1	1	1	1	2	2	2	2
	<b>Average with marks</b>		3	2	2	2	2	2	1	1	1	1	2	2	2	2	2



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PS1	PS2	PS3
EE406PC Digital Electronics Lab	CO1	Understand working of logic families and logic gates.	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO2	Design and implement Combinational and Sequential logic circuits.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO3	Understand the process of Analog to Digital conversion and Digital to Analog conversion	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO4	Be able to use PLDs to implement the given logical problem	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO5	To implement synchronous state machines using flip flops.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
		<b>AVERAGE</b>	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
		<b>AVERAGE WITH MARKS</b>	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4





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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
EE408PC	CO1	To improve the system performance by selecting a suitable controller and/or a compensator for a specific application	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3	
Control Systems Lab	CO2	Apply various time domain and frequency domain techniques to assess the system performance	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2	
	CO3	Apply various control strategies to different applications(example: Power systems, electrical drives etc)	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3	
	CO4	Test system controllability and observability using state space representation and applications of state space representation to various systems	3	2	3	3	2	3	3	3	3	3	3	3	3	3	3	2
	CO5	To design various controllers and compensators to improve system performance.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3	
		<b>AVERAGE</b>		3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	<b>AVERAGE WITH MARKS</b>		3	2	3	2.6	2.6	3	3	3	3	3	3	3	2.6	3	2.6	



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Subject Code Course Name MC409	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Constitution of India	CO1	To realize the significance of constitution of India to students from all walks of life and help them to understand the basic concepts of <del>Indian constitution</del>	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO2	To identify the importance of fundamental rights as well as fundamental duties	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO3	To understand the functioning of Union, State and Local Governments in Indian federal system	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO4	To learn procedure and effects of emergency, composition and activities of election commission and amendment procedure	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO5	To learn procedure and effects of emergency, composition and activities of election commission and amendment procedure.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
		<b>AVERAGE</b>	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
		<b>AVERAGE WITH MARKS</b>	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4



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## III YEAR – I SEMESTER

Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Course Name <b>EE501PE</b> Power Electronics	CO1	Students ability to Understand the differences between signal level and power level devices and types of components & its characteristics.	3	2	3	2	1		1	2	1	2	2	2	3	2	2
	CO2	Analyze the controlled rectifier circuits of single phase and three phase for different loads.	3	2	3	2	1	1	1		1	2	2	2	3	2	2
	CO3	Analyze the operation of DC-DC choppers and its types	2	2	3	2	2	1	1	1	2	2	1	1	2	2	2
	CO4	Analyze the operation of voltage source inverters of single phase and three phase for different loads	2	3	2	3	2	1		1	3	3	2	2	3	2	2
	CO5	Analyze the AC-AC controlled circuits of single phase and three phase for different loads and principle of cyclo converter.	3	2	2	2	3	1	1		2	2	2	3	3	2	2
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.4267</b>	<b>2.0533</b>	<b>2.4267</b>	<b>2.0533</b>	<b>1.68</b>	<b>0.9333</b>	<b>0.9333</b>	<b>1.2444</b>	<b>1.68</b>	<b>2.0533</b>	<b>1.68</b>	<b>1.8667</b>	<b>2.6133</b>	<b>1.8667</b>	<b>1.8667</b>



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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
EE502PE Power System - II	CO1	Analyze transmission line performance.	3	2	3	3	2	1	1	1	2	2	2	3	3	3	2
	CO2	Apply load compensation techniques to control reactive power	3	2	3	2	1	2	1	1	2	2	2	2	3	2	2
	CO3	Understand the application of per unit quantities.	2	3	3	3	1	2	1	1	2	2	3	3	2	2	2
	CO4	Design over voltage protection and insulation coordination	2	3	3	3	2	1	1		2	2	3	3	2	3	2
	CO5	Determine the fault currents for symmetrical and unbalanced faults	3	3	3	2	2	1		1	2	2	3	2	3	3	2
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.2533</b>	<b>2.2533</b>	<b>2.6</b>	<b>2.2533</b>	<b>1.3867</b>	<b>1.2133</b>	<b>0.8667</b>	<b>0.8667</b>	<b>1.7333</b>	<b>1.7333</b>	<b>2.2533</b>	<b>2.2533</b>	<b>2.2533</b>	<b>2.2533</b>	<b>1.7333</b>



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EES03PE  Measurement and Instrumentation	CO1	Identify various types of electronic instrument suitable for specific measurement and Classify various errors present	3	3	3	2	3	2		1	2	2	2	2	3	2	2
	CO2	Understand construction, working principle and types of oscilloscopes.	3	3	3	3	2	2	1		2	2	1	1	3	3	2
	CO3	Comprehend different types of signal generators and analyzers, their construction and operation	3	2	3	3	2	3	1	1	2	2	2	3	3	3	2
	CO4	Describe the working principle, selection criteria and applications of various transducers used in measurement	3	2	3	2	2	2	1	1	3	2	2	2	3	2	2
	CO5	Identify various types of electronic instrument suitable for specific measurement. And Classify various errors present in	2	3	3	3	3	2	1		2	3	3	3	2	2	2
		<b>AVERAGE</b>		3	3	3	3	2	2	1	1	2	2	2	2	3	2
	<b>AVERAGE WITH MARKS</b>		2.147	1.993	2.3	1.993	1.84	1.687	0.767	0.767	1.687	1.6867	1.5333	1.6867	2.1467	1.84	1.5333





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High Voltage Engineering	CO1	Understand the basic physics related to various breakdown processes in solid, liquid and gaseous insulating materials	3	2	3	3	2	1	1		2	2	2	3	3	3	2
	CO2	Knowledge of generation and measurement of DC.	3	2	3	2	1	2	1	1	1	2	2	2	3	2	3
	CO3	Knowledge of tests on HV equipment and on insulating materials	2	3	3	3	1	2	1	1	2	2	3	3	2	2	2
	CO4	Knowledge of how over-voltages arise in a power system	2	3	3	3	2	1	1	1	2	2	3	3	2	3	2
	CO5	Understanding high voltage testing methods	3	3	3	2	2	1			2	2	3	2	3	3	2
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.167</b>	<b>2.167</b>	<b>2.5</b>	<b>2.167</b>	<b>1.333</b>	<b>1.167</b>	<b>0.833</b>	<b>0.833</b>	<b>1.5</b>	<b>1.6667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>1.8333</b>



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Course Name SMS04MS  Business Economics and Financial Analysis	CO1	The students will understand the various Forms of Business and the impact of economic variables on the Business.	3	2	3	3	2	2	3	2	2	2	2	3	3	3	3
	CO2	The Demand, Supply, Production, Cost, Market Structure, Pricing aspects are learnt	3	2	3	2	2	2	2	3	2	2	2	2	3	2	3
	CO3	To Acquire knowledge on pricing strategies for the products	2	3	3	3	2	2	3	2	2	2	3	3	2	1	2
	CO4	The Students can study the firm's financial position by analysing the Financial Statements of a Company	2	3	3	3	2	2	2	3	2	2	3	3	2	3	2
	CO5	Familiarize with Financial Analysis through ratios.	3	3	3	2	2	2	2	2	2	2	3	2	3	3	2
		<b>AVERAGE</b>		<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
	<b>AVERAGE WITH MARKS</b>		<b>2.1667</b>	<b>2.1667</b>	<b>2.5</b>	<b>2.1667</b>	<b>1.6667</b>	<b>1.6667</b>	<b>2</b>	<b>2</b>	<b>1.6667</b>	<b>1.6667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2</b>	<b>2</b>



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Code																	
Course Name																	
	CO1	Perform various transmission line calculations	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	Understand Different circuits time constants	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO3	Analyze the experimental data and draw the conclusions.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
EE505PC	CO4	To analyze the data using software tools	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Power System Simulation Lab	CO5	To understand the high frequency transitions.	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>







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Course Code & Course Name EN508HS Advanced Communication Skills Lab	CO1	Acquire vocabulary and use it contextually	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	Listen and speak effectively, confidently in formal and informal contexts	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO3	Develop proficiency in academic reading and writing	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO4	Increase possibilities of job prospects	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	Communicate confidently in formal and informal contexts.	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	
		<b>AVERAGE WITH MARKS</b>	<b>2.8</b>	<b>2.2</b>	<b>3</b>	<b>2.8</b>	<b>2.8</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	<b>2.8</b>	



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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
	CO1	Distinguish and Explain various forms of IPRs	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO2	Identify criteria's to fit one's own intellectual work in particular form of IPRs	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
MC510	CO3	Apply statutory provisions to protect particular form of IPRs.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
Intellectual Property Rights	CO4	Identify procedure to protect different forms of IPRs national and international level	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	CO5	Develop skill of making search using modern tools and techniques.	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE WITH MARKS</b>	2.8	2.2	3	2.8	2.8	3	3	3	3	3	3	3	2.8	3	2.8



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## III YEAR – II SEMESTER

Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
ME8000E Non Conventional sources of energy	CO1	Identify renewable energy sources and their utilization.	3	2	3	2	3	3		1	2	2	2	2	3	3	2
	CO2	Understand the basic concepts of solar radiation and analyze the	3	2	2	2	2	2		1	2	2	2	2	3	2	2
	CO3	Understand principles of energy conversion from alternate sources including wind, geothermal, ocean, biomass, biogas and	2	3	3	3	2	2	1		2	2	3	3	2	2	2
	CO4	Understand the concepts and applications of fuel cells.	3	2	2	2	2	2		1	3	2	2	2	3	2	2
	CO5	Identify methods of energy storage for specific applications	3	2	3	2	2	2	1		2	2	2	2	3	2	2
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>
		<b>average with marks</b>	<b>2.8</b>	<b>2.2</b>	<b>2.6</b>	<b>2.2</b>	<b>2.2</b>	<b>2.2</b>	<b>1</b>	<b>1</b>	<b>2.2</b>	<b>2</b>	<b>2.2</b>	<b>2.2</b>	<b>2.8</b>	<b>2.2</b>	<b>2</b>







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Course Name <b>EE601PC</b> Signals and Systems	CO1	Differentiate various signal functions.	2	3	3	3	2	2	1	1	2	2	3	3	2	2	2
	CO2	Represent any arbitrary signal in time and frequency domain.	3	2	3	2	2	2		1	2	2	2	2	3	2	2
	CO3	Understand the characteristics of linear time invariant systems.	2	2	3	3	3	2	1	1	2	3	3	3	2	2	3
	CO4	Analyze the signals with different transform technique	3	2	3	2	2	2	2	2		2	2	2	2	2	2
	CO5	Analyze discrete time signals and systems by using appropriate mathematical tools	3	3	2	2	2	2		1	2	2	2	2	2	2	2
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.1667</b>	<b>2</b>	<b>2.3333</b>	<b>2</b>	<b>1.833</b>	<b>1.667</b>	<b>1.1111</b>	<b>1</b>	<b>1.667</b>	<b>1.8333</b>	<b>2</b>	<b>2</b>	<b>1.8333</b>	<b>1.6667</b>	<b>1.8333</b>



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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
	CO1	Understands the internal architecture, organization and assembly language programming of 8086	3	2	3	3	2	3	1		2	2	2	3	3	3	2
EE602PC	CO2	Understands the internal architecture, organization and assembly language programming of 8051 microcontrollers	3	2	3	2	2	2	1	1	2	2	2	2	3	2	2
Microprocessors and Microcontrollers	CO3	Understands the interfacing techniques to 8086 and 8051 based systems	2	3	3	3	3	2	1	1	2	2	3	3	2	2	2
	CO4	Understands the internal architecture of ARM processors and basic concepts of advanced ARM Processors.	2	2	3	2	2	2	1		2	2	2	2	2	2	2
	CO5	Design electrical circuitry to the Microprocessor I/O ports in order to interface the processor to external devices	2	3	2	2	2	2		2	2	2	2	2	2	2	2
		<b>AVERAGE</b>	2	2	3	2	2	2	1	1	2	2	2	2	2	2	2
		<b>AVERAGE WITH MARKS</b>	1.76	1.76	2.053	1.76	1.613	1.613	0.733	0.978	1.467	1.4667	1.6133	1.76	1.76	1.6133	1.4667





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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Code Course Name	CO1	Perform various load flow techniques	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO2	Understand Different protection method	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO3	Analyze the experimental data and draw the conclusions.	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO4	Perform various load flow techniques	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO5	Students will be able to find sequence impedance of three phase synchronous machine and transformer.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
EE605PC																	
Power System Lab																	
		<b>AVERAGE</b>	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
		<b>AVERAGE WITH MARKS</b>	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4
Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Course Name	CO1	To know the importance of frequency control	2	3	3	3	1	2	1	1	2	1	3	3	2	2	2
	CO2	Understand operation and control of power systems.	3	2	3	2	1	2		1	1	2	2	2	3	2	1
	CO3	Analyze various functions of Energy Management System (EMS) functions.	2	3	3	3	1	2	1	1	2	1	3	3	2	2	1
	CO4	Analyze whether the machine is in stable or unstable position.	2	2	3	2	2	2	1		2	2	2	2	2	2	2
	CO5	Understand power system deregulation and restructuring	2	3	2	2	2	2		1	2	2	2	2	2	2	2
EE604PC																	
Power System																	
Operation and Control																	
		<b>AVERAGE</b>	2	3	3	2	1	2	1	1	2	2	2	2	2	2	2
		<b>AVERAGE WITH MARKS</b>	1.76	2.08	2.24	1.92	1.12	1.6	0.8	0.8	1.44	1.28	1.92	1.92	1.76	1.6	1.28



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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
<b>EE606PC</b> <b>Microprocessors</b> <b>and</b> <b>Microcontrollers</b> <b>Lab</b>	<b>CO1</b>	Identify relevant information to supplement to the Microprocessor and Microcontroller course. Arithmetic, Logical, String Operations on 16 Bit and 32-Bit Data Bit level Logical Operations, Rotate, Shift, Swap and Branch Operations	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2	
	<b>CO2</b>	Set up programming strategies and select proper mnemonics and run their program on the training boards.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3	
	<b>CO3</b>	Practice different types of programming Assembly Language Programs to Perform Arithmetic (Both Signed and Unsigned) 16 Bit Data Operations, Logical Operations (Byte and Bit Level Operations), Rotate, Shift, Swap and Branch Instructions Time delay Generation using Timers of 8051. Serial Communication from/to 8051 to/from I/O	3	2	3	3	2	3	3	3	3	3	3	3	3	3	3	2
	<b>CO4</b>	Develop testing and experimental procedures on Program Using Interrupts to Generate Square Wave 10 KHZ Frequency on P2.1 Using Timer 0 8051 in 8 bit Auto reload Mode and Connect a 1 HZ Pulse to INT1 pin and Display on Port 0. Assume	3	2	3	3	2	3	3	3	3	3	3	3	3	3	3	2
	<b>CO5</b>	Prepare Interfacing I/O Devices to 8051, 7 Segment Display to 8051. Matrix Keypad to 8051, Sequence Generator Using Serial Interface in 8051. 8 bit ADC Interface to 8051. Triangular Wave Generator through DAC interfaces to 8051.	3	2	3	2	3	3	3	3	3	3	3	3	3	2	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2.6</b>	<b>2.4</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2.6</b>	<b>3</b>	<b>2.4</b>	



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EE607PC Signals and Systems lab	CO1	Understand the concepts of continuous time and discrete time systems	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO2	Analyze systems in complex frequency domain	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
	CO3	Understand sampling theorem and its implications	3	2	3	3		2	3	3	3	3	3	3	3	3	2
	CO4	Understand the concepts of continuous time and discrete time systems	3	2	3	3	2	3	3	3	3	3	3	3	3	3	2
	CO5	To analyze sampling principles and various transform techniques.	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2.6</b>	<b>2.5</b>	<b>2.8</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2.6</b>	<b>3</b>	<b>2.4</b>



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<b>CYBER SECURITY</b>	CO1	To familiarize various types of cyber-attacks and cyber-crimes	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3
	CO2	To give an overview of the cyber laws	3	2	3	3	3	3	3	3	1	3	3	3	2	2	3
	CO3	To study the defensive techniques against these attacks	3	3	3	3	3	3	2	3	3	3	3	2	3	3	3
	CO4	To study cybersecurity challenges and implications.	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3
	CO5	To know about Cyber Security.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>2.8</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2.8</b>	<b>2.8</b>	<b>2.6</b>	<b>3</b>	<b>3</b>	<b>2.6</b>	<b>2.8</b>	<b>2.8</b>	<b>3</b>





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## IV YEAR – I SEMESTER

Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
SM701MS Fundamentals of Management for Engineers	CO1	The students understand the significance of Management in their Profession. The various Management Functions like Planning, Organizing, Staffing, Leading, Motivation and Control aspects are learnt in this course. The students can explore the Management Practices in their domain area.	3	2	3	3	2	1	2	2	1	2	2	3	3	3	2
	CO2	Understand the management concepts	3	2	3	2	3	2	2	1	1	2	2	2	3	2	2
	CO3	Analyze the concepts of management	2	3	3	3	2	2	1	2	2	1	3	3	2	2	1
	CO4	Development of managerial skills for engineers	2	3	3	3	2	1	2	1	2	1	3	3	2	3	2
	CO5	Applications of concepts in practical aspects	3	3	3	2	2	1	1	1	2	1	3	2	3	3	2
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>





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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
EE721PC HVDC TRANSMISSION	C01	Compare EHV AC and HVDC system and to describe various types of DC links	3	2	3	2	1	2	2	1	1	2	2	2	3	2	1
	C02	Analyze Graetz circuit for rectifier and inverter mode of operation	2	3	3	3	1	2	1	1	2	1	3	3	2	2	1
	C03	Describe various methods for the control of HVDC systems and to perform power flow analysis	3	2	3	3	2	1	1	2	1	2	2	3	3	3	2
	C04	To study AC/DC systems	3	2	3	2	1	2	2	1	1	2	2	1	2	2	2
	C05	Describe various protection methods for HVDC systems and classify Harmonics and design	2	3	3	3	1	2	1	1	1	2	1	3	2	2	2
		AVERAGE		3	2	3	3	1	2	1	1	1	2	2	2	2	2
	AVERAGE WIT MARKS		2.253	2.08	2.6	2.253	1.04	1.56	1.213	1.04	1.04	1.56	1.7333	2.08	2.08	1.9067	1.3867



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	P11	PO12	PSO1	PSO2	PSO3
Course Name MN700OE HEALTH AND SAFETY IN MINES	CO1	Students are able to understand the basics of health and safety in mines	3	2	2	3	2	3	1		3	2	2	3	3	3	2
	CO2	Evaluate the concept of health and safety in underground and opencast mines	3	2	2	2	2	2			2	2	2	2	3	2	2
	CO3	Understand the techniques, system engineering approach and the generic approach to safety in mining operations.	2	3	3	3	2	2	1	1	2	2	3	3	2	2	2
	CO4	Understand the concept of safety	3	2	2	2	3	2	1		3	2	2	2	3	2	3
	CO5	Gain the knowledge and be able to understand the importance of health and safety including the role of safety risk assessment in the	2	3	3	3	2	2		1	2	3	3	3	2	2	2
		<b>AVERAGE</b>	3	2	3	3	2	2	1	1	2	2	2	3	3	2	2
		<b>AVERAGE WITH MARKS</b>	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2





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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO2	
EE702PC Industrial Oriented Mini Project / Summer Internship	CO1	Students will be able to practice acquired knowledge within the chosen area of technology for project development.	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	
	CO2	Identify, discuss and justify the technical aspects of the chosen project with a comprehensive and systematic approach.	3	2	3	3	3	3	3	3	3	3	3	3	2	2	3	
	CO3	Reproduce, improve and refine technical aspects for engineering projects.	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	
	CO4	Work as an individual or in a team in development of technical projects.	3	3	3	2	2	2	2	2	2	2	2	2	3	3	3	3
	CO5	Communicate and report effectively project related activities and findings	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>2.8</b>	<b>2.8</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	





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## IV YEAR – II SEMESTER

Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
EE811PE Power Quality and FACTS	CO1	The student will be able to Know the severity of power quality problems in distribution system and Understand the concept of voltage sag transformation from up-stream (higher voltages) to down-stream	3	2	3	3	2	1	1	2	2	2	3	3	3	3	2
	CO2	knowledge of FACTS Concept and general system considerations and Series/shunt reactive compensation at mid point & its comparison.	3	2	3	2	3	2	1	1	2	2	2	2	3	2	2
	CO3	Understand the control circuits of Shunt Controllers SVC & STATCOM for various functions viz. Transient stability Enhancement, voltage instability prevention and power	3	3	3	3	3	2	1	1	2	2	3	3	2	2	2
	CO4	Understand the Power and control circuits of Series Controllers GCSC, TSSC and TCSC	3	2	3	2	2	2			2	2	2	2	3	2	3
	CO5	Knowledge of the Unified Power Flow Controller including its circuit arrangement, Operation and control	3	3	3	3	2	2		1	2	3	3	3	2	2	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.5</b>	<b>2</b>	<b>2.5</b>	<b>2.167</b>	<b>2</b>	<b>1.5</b>	<b>0.833</b>	<b>1.042</b>	<b>1.667</b>	<b>1.8333</b>	<b>2.1667</b>	<b>2.1667</b>	<b>2.1667</b>	<b>1.8333</b>	<b>2</b>





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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
<b>EE822PE Electrical Distribution Systems</b>	CO1	To distinguish between transmission and distribution systems and feeder analysis.	3	2	3	2	3	2			2	2	2	2	3	2	3
	CO2	To understand Substation installation and to analyze the power loss in Substation and Voltage drop	3	2	3	3	2	2	1	1	2	2	2	3	3	3	2
	CO3	Design protection of distribution systems. Coordination of Protective devices.	3	2	3	2	3	2			2	2	2	2	3	2	2
	CO4	To understand the importance of compensation and pf improvement	3	3	3	2	3	2	1	1	3	2	2	2	3	2	2
	CO5	To understand the importance of protection of voltage control and pf improvement	3	3	3	3	2	2	3			2	3	1	3	3	2
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>2.4</b>	<b>1.92</b>	<b>2.4</b>	<b>1.92</b>	<b>2.08</b>	<b>1.6</b>	<b>1.333</b>	<b>0.8</b>	<b>1.8</b>	<b>1.6</b>	<b>1.76</b>	<b>1.6</b>	<b>2.4</b>	<b>1.92</b>	<b>1.76</b>



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Subject Code Course Name	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
	CO1	Identify renewable energy sources and their utilization.	3	2	3	3	2	2	1	1	2	2	2	3	3	3	2
	CO2	Understand the basic concepts of solar radiation and analyze the working of solar and thermal systems.	3	2	3	2	3	2	1	1	3	2	2	2	3	2	2
MT802OE	CO3	Understand principles of energy conversion from alternate sources including wind, geothermal, ocean, biomass, biogas and hydrogen	3	2	3	2	2	2	2	1	2	2	2	2	3	2	3
TOTAL QUALITY MANAGEMENT	CO4	Understand the concepts and applications of fuel cells, thermoelectric convertor and MHD generator	2	3	3	3	2	2	1	1	2	2	3	3	2	2	3
	CO5	Identify methods of energy storage for specific applications	3	2	3	2	2	2	1	2	2	2	3	2	3	3	3
		<b>AVERAGE</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>



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Subject Code	COs	Outcomes	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Course Name EE704PC  Project Stage - II	CO1	Demonstrate a sound technical knowledge of their selected project topic.	3	3	3	3	2	1	1	2	3	2	3	3	3	2	1
	CO2	Undertake problem identification, formulation and solution.	3	3	3	3	2	2	1	2	3	2	3	3	3	2	2
	CO3	Design engineering solutions to complex problems utilizing a systems approach.	3	3	3	3	2	1	1	2	3	2	3	3	3	2	2
	CO4	Communicate with engineers and the community at large in written and oral forms	3	3	3	3	2	2	1	2	3	2	3	3	3	2	3
	CO5	Conduct an engineering project	3	3	3	3	2	3	1	2	3	2	3	3	3	2	3
		<b>AVERAGE</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2</b>
		<b>AVERAGE WITH MARKS</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>1.8</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>2</b>	<b>2.2</b>



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## R18 CO-PO-PSO MAPPING CONSOLIDATION

### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

Course Code	Course Name	PROGRAM OUTCOMES (Pos)												PSOs		
		1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
<b>YEAR 2 - SEMESTER 1</b>																
EE301 ES	Engineering Mechanics	2.1	1.65	1.95	1.35	1.05	1.05	0.75	0.75	1.05	1.35	1.05	1.35	1.2	1.8	1.05
EE302P C	Electrical Circuit Analysis	2.33 333 3	2.5	1.66 666 7	2.5	1.66 666 7	1.83 333 3	0.83 333 3	0.83 333 3	1.16 6667 3	0.83 333 3	1	1.66 666 7	1.83 333 3	1.33 333 3	1.16 666 7
EE303P C	Analog Electronics	2.5	2.16 666 7	2.5	2.16 666 7	1.33 333 3	1.66 666 7	0.83 333 3	1.11 1111 3	1.66 6667 3	2	2.16 666 7	1.66 666 7	2.16 666 7	2.16 666 7	1.66 666 7
EE304P C	Electrical Machines - I	2.14 666 7	1.68 666 7	2.14 666 7	1.99 333 3	1.84	1.84	0.76 666 7	0.76 666 7	1.53 3333 3	1.22 666 7	1.53 333 3	1.84	1.84	1.84	1.53 333 3
EE305P C	Electro Magnetic Fields	1.84	1.99 333 3	2.14 666 7	1.84	1.99 333 3	1.53 333 3	1.27 777 8	0.76 666 7	1.07 3333 3	1.38	1.38	1.22 666 7	1.99 333 3	1.84	1.68 666 7
EE306P C	Electrical Machines Lab - I	2.8	2.4	3	2.8	2.8	3	3	3	3	3	3	3	2.8	3	2.8



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EE307P C	Analog Electronics Lab	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
EE308P C	Electrical Circuit Lab	2.8	2.2	3	2.8	3	3	3	3	3	3	3	3	2.8	3	2.8
*MC30 9	Gender Sensitization Lab	2.8	2.2	3	2.8	2.8	3	3	3	3	3	3	3	2.8	3	2.8
<b>YEAR 2 - SEMESTER 2</b>																
MA401 BS	Laplace transforms, Numerical methods & Complex variables	2	2	1	1	2	2	1	1	1	1	1	1	2	1	1
EE402P C	Electrical Machines -II	3	2	3	3	3	3	3	2	1	1	2	2	2	2	2
EE403P C	Digital Electronics	2.16	1.83	2.1	2	2	1.83	0.83	0.83	2	1.83	1.83	1.83	2.16 7	1.83	1.83
EE404P C	Control Systems	2.33 333 3	2.33 333 3	2.33 333 3	1.83 333 3	2.5	1.83 333 3	1.25	0.83 333 3	1.66 6667	2.16 666 7	2.16 666 7	2.16 666 7	2.16 666 7	1.83 333 3	1.83 333 3
EE405P C	Power Systems -I	3	2	2	2	2	2	1	1	1	1	2	2	2	2	2
EE406P C	Digital Electronics Lab	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4
EE407P C	Electrical Machines Lab -II	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
EE408P C	Control Systems Lab	3	2	3	2.6	2.6	3	3	3	3	3	3	3	2.6	3	2.6
*MC40 9	Constitution of India	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4
<b>YEAR 3 - SEMESTER 1</b>																



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EE501P E	Power Electronics	2.42 666 7	2.05 333 3	2.42 666 7	2.05 333 3	1.68	0.93 333 3	0.93 333 3	1.24 444 4	1.68	2.05 333 3	1.68	1.86 666 7	2.61 333 3	1.86 666 7	1.86 666 7
EE502P E	Power Systems -II	2.25 333 3	2.25 333 3	2.6	2.25 333 3	1.38 666 7	1.21 333 3	0.86 666 7	0.86 666 7	1.73 3333 7	1.73 333 3	2.25 333 3	2.25 333 3	2.25 333 3	2.25 333 3	1.73 333 3
EE503P E	Measurements and Instrumentation	2.14 666 7	1.99 333 3	2.3	1.99 333 3	1.84	1.68 666 7	0.76 666 7	0.76 666 7	1.68 6667 7	1.68 666 7	1.53 333 3	1.68 666 7	2.14 666 7	1.84	1.53 333 3
EE512P E	High Voltage Engineering	2.16 666 7	2.16 666 7	2.5	2.16 666 7	1.33 333 3	1.16 666 7	0.83 333 3	0.83 333 3	1.5	1.66 666 7	2.16 666 7	2.16 666 7	2.16 666 7	2.16 666 7	1.83 333 3
SM504 MS	Business Economics and Financial Analysis	2.16 666 7	2.16 666 7	2.5	2.16 666 7	1.66 666 7	1.66 666 7	2	2	1.66 6667 7	1.66 666 7	2.16 666 7	2.16 666 7	2.16 666 7	2	2
EE505P C	Power System Simulation Lab	3	2	3	2	3	3	3	3	3	3	3	3	2	3	3
EE506P C	Power Electronics Lab	3	2	3	3	3	3	3	3	33	3	3	3	3	3	3
EE507P C	Measurements and Instrumentation Lab	3	2	3	3	3	3	3	3	3	3	3	3	3	3	3
EN508 HS	Advanced English Communication Skills Lab	2.8	2.2	3	2.8	2.8	3	3	3	3	3	3	2.9	2.9	2.9	2.8



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*MC510	Intellectual Property Rights	2.8	2.2	3	2.8	2.8	3	3	3	3	3	3	3	2.8	3	2.8
<b>YEAR 3 - SEMESTER 2</b>																
ME800OE	Non- Conventional Sources of Energy	2.8	2.2	2.6	2.2	2.2	2.2	1	1	2.2	2	2.2	2.2	2.2	2.8	2.2
EE613PE	Wind And Solar Energy Systems	2.16	2	2.3	2	1.83	1.667	1.11	1	1.667	1.83	2	2	1.83	1.6	1.83
EE601PC	Signals and Systems	1.76	1.76	2.053	1.76	1.61333	1.61333	0.73333	0.978	1.46667	1.467	1.61333	1.76	1.76	1.61333	1.46666
EE602PC	Microprocessors and Microcontrollers	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2
EE603PC	Power System Protection	1.76	2.08	2.24	1.92	1.12	1.6	0.8	0.8	1.44	1.28	1.92	1.92	1.76	1.6	1.28
EE604PC	Power System Operation and Control	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4
EE605PC	Power System Lab	3	2	3	2.6	2.4	3	3	3	3	3	3	3	2.6	3	2.4
EE606PC	Microprocessors and Microcontrollers Lab	3	2	3	2.6	2.5	2.8	3	3	3	3	3	3	2.6	3	2.4
EE607PC	Signals and Systems Lab	3	2	3	2.6	2.5	2.8	3	3	3	3	3	3	2.6	3	2.4
*MC609	Cyber Security	3	2.8	3	3	3	3	2.8	2.8	2.6	3	3	2.6	2.8	2.8	3
<b>YEAR 4 - SEMESTER I</b>																



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SM701 MS	Fundamentals of Management for Engineers	3	3	3	3	3	2	1	2	1	3	3	3	3	3	2
EE711P E	Electrical and Hybrid Vehicles	2	2	3	2	2	2	1	1	1	2	2	2	2	2	2
EE721P E	HVDC Transmission	2.25 333 3	2.08	2.6	2.25 333 3	1.04	1.56	1.21 333 3	1.04	1.04	1.56	1.73 333 3	2.08	2.08	1.90 666 7	1.38 666 7
MN700 OE	Health and Safety in Mines	2	2	2	2	2	2	1	1	2	2	2	2	2	2	2
EE701P C	Electrical and Electronics Design Lab	3	2	3	3	2	3	3	3	3	3	3	3	3	3	3
EE702P C	Industrial Oriented Mini Project/Summer Internship	3	2.8	2.8	3	3	3	3	3	3	3	3	3	3	3	3
EE703P C	Seminar	3	2	3	3	2	3	3	3	3	3	3	3	3	3	3
EE704P C	Project Stage - I	3	2	3	3	2	3	3	3	3	3	3	3	3	3	3
<b>YEAR 4 - SEMESTER 2</b>																
EE811P E	Power Quality and FACTS	2.5	2	2.5	2.16 666 7	2	1.5	0.83 333 3	1.04 166 7	1.66 6667	1.83 333 3	2.16 666 7	2.16 666 7	2.16 666 7	1.83 333 3	2
EE822P E	Electrical Distribution Systems	2.4	1.92	2.4	1.92	2.08	1.6	1.33 333 3	0.8	1.8	1.6	1.76	1.6	2.4	1.92	1.76
MT802 OE	Total Quality Management	3	2	3	2	2	2	1	1	2	2	2	2	3	2	3





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EE801P C	Project Stage - ii	3	3	3	3	2	1.8	1	2	3	2	3	3	3	2	2.2
	<b>OVERALL ATTAINMENT</b>	2.60 413 3	2.11 266 7	2.63 326	2.39 473 3	2.21 146 7	2.28 787 3	1.91 528 9	1.92 123 3	2.80 8912	2.26 326 7	2.38 64	2.40 226 7	2.42 020 7	2.39 486 7	2.21 713 3
	<b>80% OF ATTAINMENT</b>	2.08 330 7	1.69 013 3	2.10 660 8	1.91 578 7	1.76 917 3	1.83 029 9	1.53 223 1	1.53 698 7	2.24 7129	1.81 061 3	1.90 912	1.92 181 3	1.93 616 5	1.91 589 3	1.77 370 7



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## INDIRECT ASSESSMENT

### CO-PO-PSO MAPPING(R18)

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### A) STUDENT SURVEY

RESPONDENT NAME	PROGRAM OUTCOMES												PROGRAM SPECIFIC OUTCOMES		
	PO 1	PO2	PO 3	PO 4	PO 5	PO6	PO7	PO8	PO9	PO1 0	PO11	PO1 2	PSO1	PSO2	PSO 3
DASTAPURE SHRUTHI	3	3	3	3	3	3	3	2	3	3	3	3	3	3	3
MOHAMMAD MUSKAN FALAK	3	2	3	3	3	3	3	3	2	3	2	3	3	3	3
UTTUNUR BHAVANI	3	3	3	3	3	2	2	3	3	3	3	3	3	3	3
AVERAGE	3	2.6666 7	3	3	3	2.6666 7	2.6666 7	2.6666 7	2.6666 7	3	2.6666 7	3	3	3	3



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## INDIRECT ASSESSMENT

### CO-PO-PSO MAPPING(R18)

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### B) PARENT SURVEY

RESPONDENT NAME	PROGRAM OUTCOMES												PROGRAM SPECIFIC OUTCOMES		
	PO1	PO2	PO3	PO4	P O5	PO6	PO7	PO8	PO9	PO10	PO 11	PO 12	PSO 1	PSO2	PSO 3
DASTAPURE SHRUTHI	2	2	3	2	3	3	2	2	3	1	2	1	3	2	3
MOHAMMAD MUSKAN FALAK	3	2	2	3	1	3	3	2	2	1	2	3	3	3	3
UTTUNUR BHAVANI	3	3	2	3	2	2	2	3	3	2	2	3	3	2	3
AVERAGE	2.666 667	2.333 333	2.333 333	2.666 667	2	2.666 667	2.333 333	2.333 333	2.666 667	1.333 333	2	2.3 33	3	2.333333	3



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## INDIRECT ASSESSMENT

### CO-PO-PSO MAPPING(R18)

#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

#### C) ALUMNI SURVEY

RESPONDENT NAME	PROGRAM OUTCOMES												PROGRAM SPECIFIC OUTCOMES		
	P O1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO2	PSO 3
DASTAPURE SHRUTHI	3	3	3	2	3	3	2	3	3	2	3	2	3	2	3
MOHAMMAD MUSKAN FALAK	3	3	2	3	2	3	3	1	2	2	3	3	3	2	3
UTTUNUR BHAVANI	3	2	2	3	2	2	3	3	3	2	3	3	3	1	3
AVERAGE	3	2.6666 67	2.3333 33	2.6666 67	2.3333 33	2.6666 67	2.6666 67	2.3333 33	2.6666 67	2	3	2.6 67	3	1.666667	3



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## INDIRECT ASSESSMENT

### CO-PO-PSO MAPPING(R18)

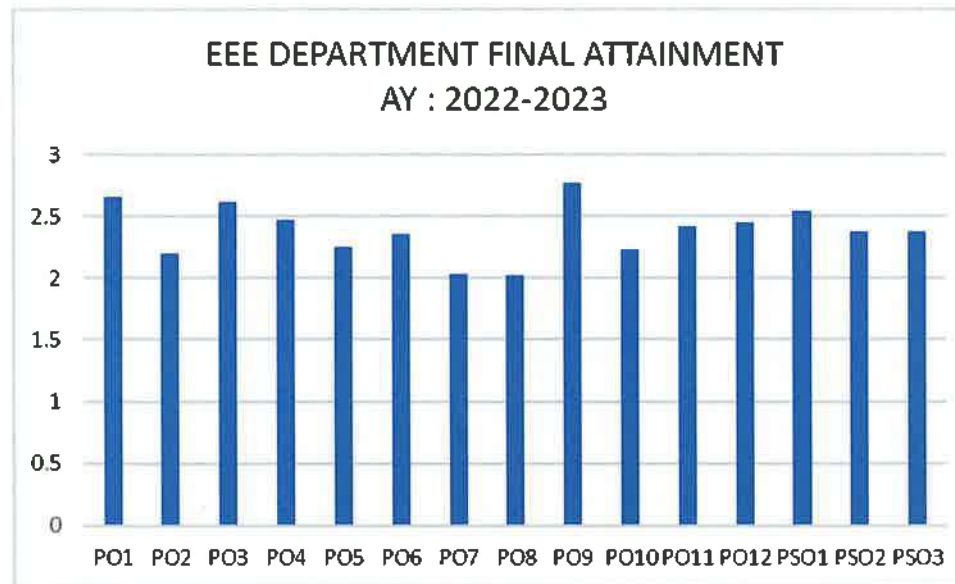
#### DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

SURVEY	PROGRAM OUTCOMES												PROGRAM SPECIFIC OUTCOMES		
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO2	PSO 3
STUDENT SURVEY	3	2.6666 67	3	3	3	2.6666 67	2.6666 67	2.6666 67	2.6666 67	3	2.6666 67	3	3	3	3
PARENT SURVEY	2.6666 67	2.3333 33	2.3333 33	2.6666 67	2	2.6666 67	2.3333 33	2.3333 33	2.6666 67	1.3333 33	2	2.3333 33	3	2.3333 33	3
ALUMNI SURVEY	3	2.6666 67	2.3333 33	2.6666 67	2.3333 33	2.6666 67	2.6666 67	2.3333 33	2.6666 67	2	3	2.6666 67	3	1.6666 67	3
<b>AVERAGE</b>	<b>2.8888 89</b>	<b>2.5555 56</b>	<b>2.5555 56</b>	<b>2.7777 78</b>	<b>2.4444 44</b>	<b>2.6666 67</b>	<b>2.5555 56</b>	<b>2.4444 44</b>	<b>2.6666 67</b>	<b>2.1111 1</b>	<b>2.5555 56</b>	<b>2.6666 67</b>	<b>3</b>	<b>2.3333 33</b>	<b>3</b>
<b>20% OF INDIRECT ASSESSMENT</b>	<b>0.5777 78</b>	<b>0.51111 1</b>	<b>0.51111 1</b>	<b>0.5555 56</b>	<b>0.4888 89</b>	<b>0.5333 33</b>	<b>0.51111 1</b>	<b>0.4888 89</b>	<b>0.5333 33</b>	<b>0.4222 22</b>	<b>0.51111 1</b>	<b>0.5333 33</b>	<b>0.6</b>	<b>0.4666 67</b>	<b>0.6</b>



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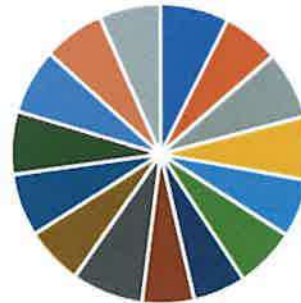


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## EEE DEPARTMENT FINAL ATTAINMENT AY: 2022-2023



■ PO1 ■ PO2 ■ PO3 ■ PO4 ■ PO5 ■ PO6 ■ PO7 ■ PO8  
■ PO9 ■ PO10 ■ PO11 ■ PO12 ■ PSO1 ■ PSO2 ■ PSO3