

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON.

**Department of Electrical Engineering.
Scheme for B. Tech. (Electrical Engineering)**

SEM III

Course Code	Name of the Course	Group	Teaching Scheme Hrs/ week				Evaluation Scheme							Credits
							Theory				Practical		Total	
			TH	TUT	PR	Total	ISA	ISE1	ISE2	ESE	ICA	ESE		
SH 201	Engineering Mathematics III	A	3	1	-	4	10	15	15	60	-	-	100	4
EE 201	Electronic Devices and Linear Integrated Circuits	B	3	-	-	3	10	15	15	60	-	-	100	3
EE 202	Electrical Circuit Analysis	D	3	-	-	3	10	15	15	60	-	-	100	3
EE 203	Electrical and Electronic Measurements	D	3	-	-	3	10	15	15	60	-	-	100	3
EE 204	Power Plant Engineering	B	3	-	-	3	10	15	15	60	-	-	100	3
EE 205	Electronic Devices and Linear Integrated Circuits Lab	B	-	-	2	2	-	-	-	-	25	25	50	1
EE206	Mini Project-I	B	-	-	2	2	-	-	-	-	50	-	50	1
EE207	Electrical Circuit Analysis Lab	D	-	-	2	2	-	-	-	-	25	25	50	1
EE208	Electrical and Electronic Measurements Lab	D	-	-	2	2	-	-	-	-	50	25	75	1
EE209	Electrical and Electronic Material Lab	D	-	1	-	1	-	-	-	-	25	-	25	1
EE 261	Circuit Simulation Lab	B	-	-	2	2	-	-	-	-	50	-	50	2
Total			15	2	10	27	50	75	75	300	225	75	800	23
ISA :Internal Sessional Assessment		ISE : In Semester Examination				ESE: End Semester Examination								
ICA : Internal Continuous Assessment		TH: Theory Lecture,				TUT: Tutorial,			PR: Practical					
<ul style="list-style-type: none"> • ISA: Internal Sessional Assessment should support the principle of continuous assessment and may be based on three / four different tools like surprise test, quiz, group discussion, home assignments, presentation skills, attendance etc • ICA : Internal Continuous Assessment should support for regular performance of practical and its regular assessment with proper understanding the principles of experimental set-up/experiment carried out. 														

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON.

Department of Electrical Engineering.

Proposed Scheme for B. Tech. (Electrical Engineering)

SEM V

Course Code	Name of the Course	Group	Teaching Scheme Hrs /week				Evaluation Scheme						Credits	
			TH hrs/ week	TUT hrs/ week	PR hrs/ week	Total hrs/ week	Theory				Practical			Total
							ISA	ISE1	ISE2	ESE	ICA	ESE		
EE301	AC Machines	D	3	-	-	3	10	15	15	60	-	-	100	3
EE302	Power System Analysis	D	3	1	-	4	10	15	15	60	-	-	100	4
EE303	Microcontrollers and its Applications	D	3	-	-	3	10	15	15	60	-	-	100	3
EE304	Electrical Testing and Maintenance	D	3	-	-	3	10	15	15	60	-	-	100	3
EE305	Industrial Organization and Management	C	3	-	-	3	10	15	15	60	-	-	100	3
EE306	AC Machines Lab	D	-	-	2	2	-	-	-	-	25	25	50	1
EE307	Power System Analysis Lab	D	-	-	2	2	-	-	-	-	25	25	50	1
EE308	Microcontrollers and its Applications Lab	D	-	-	2	2	-	-	-	-	25	25	50	1
EE309	Electrical Testing and Maintenance Lab	D	-	-	2	2	-	-	-	-	50	-	50	1
EE310	Numerical Methods and Computer Programming Lab	B	-	-	2	2	-	-	-	-	50	-	50	1
EE311	Self Study I	D	-	-	-	-	-	-	-	-	-	-	**50	2
Total			15	1	10	26	50	75	75	300	175	75	800	23

ISA :Internal Sessional Assessment

ISE : In Semester Examination

ESE: End Semester Examination

ICA : Internal Continuous Assessment

TH: Theory Lecture,

TUT: Tutorial,

PR: Practical

**Marks of course Self Study shall be based on one test each conducted on 20% syllabus of four subjects - EE301, EE302, EE303, EE304, The 20% syllabus for self - study shall be declared by subject teacher at the beginning of semester and he/she shall conduct the test examination for that course, assess answer papers of test examination and submit the marks to course coordinator

- **ISA:** Internal Sessional Assessment should support the principle of continuous assessment and may be based on three / four different tools like surprise test, quiz, group discussion, home assignments, presentation skills, attendance etc

- **ICA :** Internal Continuous Assessment should support for regular performance of practical and its regular assessment with proper understanding the principles of experimental set-up/experiment carried out.

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**Department of Electrical Engineering.
Scheme for B. Tech. (Electrical Engineering)**

SEM VI

Course Code	Name of the Course	Group	Teaching Scheme Hrs/week				Evaluation Scheme							Credits
			TH Hrs/week	TUT Hrs/week	PR Hrs/week	Total Hrs/week	Theory				Practical		Total	
							ISA	ISE1	ISE2	ESE	ICA	ESE		
EE351	Electrical Traction and Utilization	D	3	--	--	3	10	15	15	60	-	-	100	3
EE352	Switchgear and Protection	D	3	--	--	3	10	15	15	60	-	-	100	3
EE353	Feedback Control System	B	3	-	--	3	10	15	15	60	-	-	100	3
EE354	Power Electronics	B	3	-	--	3	10	15	15	60	-	-	100	3
EE355	Digital Signal Processing	B	3	-	--	3	10	15	15	60	-	-	100	3
EE356	Electrical Traction and Utilization Lab	D	-	-	2	2	-	-	-	-	50	-	50	1
EE357	Switchgear and Protection Lab	D	-	-	2	2	-	-	-	-	25	25	50	1
EE358	Feedback Control System Lab	B	-	-	2	2	-	-	-	-	25	25	50	1
EE359	Power Electronics Laboratory	B	-	-	2	2	-	-	-	-	25	25	50	1
EE360	Digital Signal Processing Lab	B	-	-	2	2	-	-	-	-	25	-	25	1
EE361	Mini Project	D	-	-	2	2	-	-	-	-	25	-	25	1
EE 362	Self study - II	D	-	-	-	-	-	-	-	-	-	-	**50	2
EE 363	Industrial Lecture	D	1	-	-	1	-	-	-	-	-	-	-	-
Total			16	-	12	28	50	75	75	300	175	75	800	23

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ISE : In Semester Examination

ESE: End Semester Examination

ICA : Internal Continuous Assessment

TH: Theory Lecture,

TUT: Tutorial,

PR: Practical

**Marks of course Self Study shall be based on one test each conducted on 20% syllabus of four subjects - EE351, EE353, EE354, EE355. The 20% syllabus for self - study shall be declared by subject teacher at the beginning of semester.

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GOVERNMENT COLLEGE OF ENGINEERING, JALGAON.

Department of *Electrical Engineering*.

Scheme for B. Tech. (*Electrical Engineering*)

SEM VII

Course Code	Name of the Course	Group	Teaching Scheme Hrs/week				Evaluation Scheme						Credits	
			TH Hrs/ week	TUT Hrs/ week	PR Hrs/ week	Total Hrs/ week	Theory				Practical			Total
							ISA	ISE1	ISE2	ESE	ICA	ESE		
EE401	Electrical Drives	D	3	1	--	4	10	15	15	60	--	--	100	4
CO 430	Data Structures and Algorithms	B	3	-	--	3	10	15	15	60	--	--	100	3
EE403	Elective -I	E	3	--	--	3	10	15	15	60	--	--	100	3
EE404	Elective -II	E	3	--	--	3	10	15	15	60	--	--	100	3
EE405	Inter-disciplinary Elective	E	3	--	--	3	10	15	15	60	--	--	100	3
EE406	Project -I	D	--	--	2	2	--	--	--	--	50	50	100	2
EE407	Electrical Drives Laboratory	D	--	--	2	2	--	--	--	--	25	25	50	1
CO 431	Data Structures and Algorithms Laboratory	B	--	--	2	2	--	--	--	--	25	25	50	1
EE409	Seminar	D	--	--	2	2	--	--	--	--	50	--	50	1
EE410	Self Study-III	D	--	--	--	--	--	--	--	--	-	--	**50	2
Total			15	1	08	24	50	75	75	300	150	100	800	23

Interdisciplinary Elective		Elective I				I Elective II			
A	Renewable Energy Systems	A	Smart Grid			A	Wind and Solar Power Technologies		
B	Electrical Machines and Drives	B	Energy Audit and Conservation			B	Optimization Techniques		
C	Industrial Automation and Control	C	Electric Vehicles and Hybrid Vehicles			C	Computer Aided Power System Analysis		
		D	Control System Design			D	Intelligent Control		
		E	Power System Stability			E	Robotics and Automation		

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ISE : In Semester Examination

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TUT: Tutorial,

PR: Practical

**Marks of course Self Study shall be based on one test each conducted on 20% syllabus of EE401,EE402,EE403,EE404. The 20% syllabus for self - study shall be declared by subject teacher at the beginning of semester. One faculty should be appointed as course co-ordinator for 'self study' to compile marks and enter in MIS

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Department of Electrical Engineering
Scheme for B. Tech. (Electrical Engineering)

SEM VIII

Course Code	Name of the Course	Group	Teaching Scheme Hrs/week				Evaluation Scheme							Credits
							Theory				Practical			
			TH Hrs/week	TUT Hrs/week	PR Hrs/week	Total Hrs/week	ISA	ISE1	ISE2	ESE	ICA	ESE	Total	
EE 451	Electrical Machine Design	D	3	-	-	3	10	15	15	60	-	-	100	3
EE 452	Power System Operation & Control	D	3	-	-	3	10	15	15	60	-	-	100	3
EE 453	Elective -III	E	3	-	-	3	10	15	15	60	-	-	100	3
EE 454	Elective -IV	E	3	-	-	3	10	15	15	60	-	-	100	3
EE 455	Project and Finance Management	B	1	-	-	1	50	-	-	-	-	-	50	1
EE456	Entrepreneurship Development	E	-	-	2	2	-	-	-	-	50	-	50	1
EE 457	Electrical Machine Design Lab	D	-	-	2	2	-	-	-	-	25	25	50	1
EE 458	Project-II	D	-	-	4	4	-	-	-	-	50	100	150	4
EE 459	Industrial Lectures	D	1	-	-	-	-	-	-	-	25	-	25	1
EE 460	Industrial Visit	D	-	-	-	-	-	-	-	-	25	-	25	1
EE 461	Self Study IV	D	-	-	-	-	-	-	-	-			**50	2
Total			14	-	08	21	90	60	60	240	175	125	800	23

Departmental Elective -III		Departmental Elective -IV	
A	Generation, Planning and Load Dispatch	A	Advanced Electric Drives
B	HVDC & FACTs	B	Restructured Power Systems
C	Power System Design	C	High Voltage Engineering
D	EHVAC Transmission	D	Illumination Engineering
E	Power Quality and Mitigation Issues	E	Electrical Machine Analysis

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**Marks of course Self Study shall be based on one test each conducted on 20% syllabus of EE451,EE452,EE453, EE454. The 20% syllabus for self - study shall be declared by subject teacher at the beginning of semester. One faculty should be appointed as course co-ordinator for 'self study' to compile marks and enter in MIS

- At least 12 Industrial Lectures could be arranged for EE 459 in semester based on it test may be conducted (6 lectures in VI and VIII th semester each)

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