

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON													
Department of Electrical Engineering													
Scheme for Semester I B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)													
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme					Credit	
							Theory			Practical			Total
			L	T	P	Total	MSE	ISA	ESE	ICA	ESE		
SH100AN	Induction Program [Includes Universal Human Values (UHV - I module)]	Mandatory Audit Course as per AICTE				...	...	...	50	...	50	AU	
SH101N	Engineering Mathematics I	BSC	3	1	...	4	30	10	60	...	...	100	4
SH102N	Engineering Chemistry	BSC	3	...	...	3	30	10	60	...	...	100	3
ME151N	Engineering Graphics	ESC	3	...	...	3	30	10	60	...	...	100	3
CO101N	Fundamentals of Computer Science and Engineering	ESC	3	...	...	3	30	10	60	...	...	100	3
ME152N	Engineering Exploration Workshop	VSEC (Skill)	...	...	4	4	...	...	...	50	...	50	2
SH103N	Engineering Chemistry Lab	BSC	...	...	2	2	...	...	...	50	...	50	1
ME153N	Engineering Graphics Lab	ESC	...	...	2	2	...	...	...	50	...	50	1
CO102N	Fundamentals of Computer Science and Engineering Lab	ESC	...	...	2	2	...	...	...	50	...	50	1
LL102N	Liberal Learning Course (Yoga and Nutrition)	LLC	...	...	4	4	...	...	..	50	...	50	2
SH100N	Ability Enhancement Course (English)	AEC (HSSM)	1	...	2	3	...	...	..	50	...	50	2
Total			13	1	16	30	120	40	240	300	...	700	22
L : Lecture		T: Tutorial	P: Practical				MSE: Mid Semester Examination						
ISA :Internal Sessional Assessment		ESE: End Semester Examination					ICA : Internal Contineous Accessment						

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON													
Department of Electrical Engineering													
Scheme for Semester II B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)													
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme						Credit
			L	T	P	Total	Theory			Practical		Total	
							MSE	ISA	ESE	ICA	ESE		
SH151N	Engineering Mathematics II	BSC	3	1	...	4	30	10	60	...	...	100	4
SH152N	Engineering Physics	BSC	3	...	...	3	30	10	60	...	...	100	3
EE101N	Basic Electrical Engineering	PCC	3	...	...	3	30	10	60	...	...	100	3
CO151N	Programming for Problem Solving	ESC	3	...	...	3	30	10	60	...	...	100	3
ME101N	Mechanical Workshop Practices	VSEC (Skill)	...	...	4	4	...	...	...	50	...	50	2
CO152N	Programming for Problem Solving Lab	ESC	...	...	2	2	...	...	...	50	...	50	1
IK103N	Essence of Indian Traditional Knowledge	HSSM (IKS)	2	...	...	2	30	10	60	...	...	100	2
SH153N	Engineering Physics Lab	BSC	...	...	2	2	...	...	...	50	...	50	1
EE102N	Basic Electrical Engineering lab	PCC	...	...	2	2	...	...	...	50	...	50	1
LL101N	Liberal Learning Course (NSS and Sports)	LLC	...	...	4	4	...	...	..	50	...	50	2
Total			14	1	14	29	150	50	300	250	...	750	22
L : Lecture			T: Tutorial			P: Practical			MSE: Mid Semester Examination				
ISA :Internal Sessional Assessment			ESE: End Semester Examination						ICA : Internal Contineous Accessment				
Exit Option for UG Certificate: 8 credits in work based Vocational Courses or Internship/apprentiship offered during summer Vacation (As per exit policy approved by Board of Studies (Electrical Engineering) in its meeting held on 06 July, 2023.)													
Note: Students securing CGPA 7.0 and above upto semester-II can opt for Double minor by registering additional courses [Semester-III onwards] and earning these additional 18 credits . Students need to submit written application through respective HoD to Academic and Examination Cell. This double minor track should be different than multidisciplinary minor track opted by students from semester-III as per Multi Discxiplinary Minor (MDM) courses. For example: If Electrical Engineering student opted for Civil Engineering track for MDM, then he/she should register for additional credits other than Mechnaical and Civil Engineering courses for double minor. Students opting for double minor can not opt for either Honors or Honors with research degree.													

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON													
Department of Electrical Engineering													
Scheme for Semester III B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)													
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme						Credit
			L	T	P	Total	Theory			Practical		Total	
							MSE	ISA	ESE	ICA	ESE		
EE201N	Electromagnetic Fields	PCC	3	...	...	3	30	10	60	...	...	100	3
EE202N	Analog Circuits	PCC	3	...	...	3	30	10	60	...	...	100	3
EE203N	Network Analysis	PCC	3	...	...	3	30	10	60	...	...	100	3
EE204N	Open Elective -I	OE (MDC)	4		...	4	30	10	60	...	...	100	4
XXMYYYN	Multi Disciplinary Minor-I	MDM-I (MDC)	2	...	...	2	30	10	60	...	...	100	2
EE206N	Network Analysis Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
EE207N	Analog Circuits Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
SH202N	Entrepreneur Development	EEMC	2	...	...	2	30	10	60	...	...	100	2
SH204N	Universal Human Values - II	VEC (HSSM)	2	...	...	2	30	70	...	...	...	100	2
EE208N	Community Based Engineering Project	CEP (ELC)	...	...	4	4	...	...	...	50	...	50	2
Total			19	0	8	27	210	130	360	110	40	850	23
L : Lecture		T: Tutorial	P: Practical				MSE: Mid Semester Examination						
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List of Open Elective -I													
EE204NX Material Science													
EE204NY Industrial Safety													

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON													
Department of Electrical Engineering													
Scheme for Semester IV B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)													
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme						Credit
			L	T	P	Total	Theory			Practical		Total	
							MSE	ISA	ESE	ICA	ESE		
EE251N	DC Machines & Transformer	PCC	3	...	...	3	30	10	60	...	...	100	3
EE252N	Power Generation, Transmission & Distribution	PCC	3	...	...	3	30	10	60	...	...	100	3
EE253N	Digital Circuits	PCC	3	...	...	3	30	10	60	...	...	100	3
EE254N	Open Elective-II	OE (MDC)	2	...	...	2	30	10	60	...	...	100	2
XXMYYYY	Multi Disciplinary Minor-II	MDM-II (MDC)	2	...	...	2	30	10	60	...	...	100	2
EE256N	DC Machines & Transformer Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
EE257N	Digital Circuits Lab	VSEC	...	...	2	2	...	...	...	30	20	50	1
SH201N	Project and Finance Management	EEMC (Mgmt)	2	...	...	2	30	10	60	...	...	100	2
SH203N	Environmental Science	VEC (HSSM)	2	...	...	2	30	20	...	...	...	50	2
SH205N	मराठी लेखनकौशल्य (Writing Skills)*	AEC (HSSM)	2	...	...	2	30	20	...	...	...	50	2
Total			19	0	4	23	240	100	360	60	40	800	21
* Students are permitted to earn credits of this course for any other Modern Indian Language (other than English) through MOOC courses, as per credit transfer policy of the institute.													
L : Lecture		T: Tutorial		P: Practical				MSE: Mid Semester Examination					
ISA :Internal Sessional Assessment		ESE: End Semester Examination						ICA : Internal Contineous Accessment					
List of Open Elective -II													
EE254NX Electrification of Building													
EE254NY Wind and Solar Power System													
Exit Option for UG Diploma: 8 credits in Skill based Vocational Courses/Internship/apprenticeship/MiniProject offered during summer vacation after Second Year (As per exit policy approved by Board of Studies (Electrical Engineering) in its meeting held on 06 July, 2023).													
Note: Students having CGPA more than 8.0, can register for additional 18 credits departmental honours courses from semester-V to earn the credits which will lead to honours degree in that major program with MDM													

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON														
Department of Electrical Engineering														
Scheme for Semester V B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)														
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme						Credit	
			L	T	P	Total	Theory			Practical		Total		
							MSE	ISA	ESE	ICA	ESE			
EE301N	AC Machines	PCC	3		...	3	30	10	60	...	...	100	3
EE302N	Power System Analysis	PCC	3	...	...	3	30	10	60	...	...	100	3
EE303N	Microcontroller and Applications	PCC	3	...	...	3	30	10	60	...	...	100	3
EE304N	Programme Elective- I	PEC	3	1	...	4	30	10	60	...	...	100	4
EE305N	Open Elective-III	OE (MDC)	2	...	...	2	30	10	60	...	...	100	2
XXMYYYN	Multi Disciplinary Minor-III	MDM-III (MDC)	3	1	...	4	30	10	60	...	...	100	4
EE307N	AC Machines Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
EE308N	Power System Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
EE309N	Microcontroller and Applications Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
Total			17	2	6	25	180	60	360	90	60	750	22	
EE310N	Special Machines	DHC-I	3	...	...	3	30	10	60	...	...	100	3
	List of Open Elective -III		List of Program Elective-I											
	EE305NX Energy Audit & Conservation		EE304NA Electrical Measurement											
	EE305NY Energy Storage Systems		EE304NB Electrical Engineering Materials											
DHC:Departmental Honours Course														
L : Lecture		T: Tutorial		P: Practical				MSE: Mid Semester Examination						
ISA :Internal Sessional Assessment		ESE: End Semester Examination						ICA : Internal Contineous Accessment						

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON													
Department of Electrical Engineering													
Scheme for Semester VI B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)													
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme						Credit
			L	T	P	Total	Theory			Practical		Total	
							MSE	ISA	ESE	ICA	ESE		
EE351N	Control System	PCC	3		...	3	30	10	60	...	...	100	3
EE352N	Power Electronics	PCC	3	...	...	3	30	10	60	...	...	100	3
EE353N	Switchgear & Protection	PCC	2	...	...	2	30	10	60	...	...	100	2
XXMYYYYN	Multi Disciplinary Minor-IV	MDM-IV (MDC)	2	...	...	2	30	10	60	...	...	100	2
EE355N	Programme Elective- II	PEC	4	...	...	4	30	10	60	...	...	100	4
EE356N	Programme Elective- III	PEC	4	...	...	4	30	10	60	...	...	100	4
EE357N	Control System Lab	PCC	...	...	2	2				30	20	50	1
EE358N	Power Electronics Lab	PCC	...	...	2	2	...	...	...	30	20	50	1
EE359N	Relay and Circuit Breaker Lab	VSEC	1		2	3	...	...	...	30	20	50	2
Total			19	0	6	25	180	60	360	90	60	750	22
EE360N	Computer Aided Power System Analysis	DHC-II	3	...	...	3	30	10	60	...	...	100	3
EE361N	Electric Machine Modeling and Analysis	DHC-III	3	...	...	3	30	10	60	...	...	100	3
List of Program Elective-II			List of Program Elective-III										
EE355NA	Energy Conseravtion & Management		EE356NA Electrical Machine Design										
EE355NB	Utilization of Electric Energy		EE356NB Power Quality										
EE355NC	Electrical Maintenance		EE356NC Electric Vehicles										
DHC:Depatmental Honours Course													
L : Lecture		T: Tutorial	P: Practical				MSE: Mid Semester Examination						
ISA :Internal Sessional Assessment		ESE: End Semester Examination						ICA : Internal Contineous Accessment					
Exit Option for B.Voc.: 8 credits in Skill based Vocational Courses/Internship/apprentiship/MiniProject offered during summer vacation after Third Year (As per exit policy approved by Board of Studies (Electrical Engineering) in its meeting held on 06 July, 2023.)													

GOVERNMENT COLLEGE OF ENGINEERING, JALGAON														
Department of Electrical Engineering														
Scheme for Semester VII B. Tech. (Electrical Engineering) with effect from academic year 2023-24 (As per NEP 2020)														
Course Code	Name of the Course	Component as per NEP	Teaching Scheme				Evaluation Scheme						Credit	
			L	T	P	Total	Theory			Practical		Total		
							MSE	ISA	ESE	ICA	ESE			
EE401N	Renewable Energy Technology/ (NPTEL Course)	PCC	4	...	...	4	30	10	60	...	...	100	4
As per NPTEL examination scheme and institute policy for credit transfer														
EE402N	NPTEL Course /(Program Elective-IV)	PEC	2	...	...		30	10	60	...	...	100	2
As per NPTEL examination scheme and institute policy for credit transfer														
XXMYYYYN	Multi Disciplinary Minor-V	MDM-V (MDC)	2	...	...		30	10	60	...	...	100	2
As per NPTEL examination scheme and institute policy for credit transfer														
EE404N	Professional Internship/On Job Training	ELC	...	...	24	24	...	...	...	100	...	100	12
Total			8	0	24	28	90	30	180	100	...	400	20	
EE405N	Modern Power Electronics/(8/12 Weeks NPTEL Course)	DHC-IV	As per NPTEL examination scheme and institute policy for credit transfer										100	3
EE406N	Modern Control System/ (8/12 Weeks NPTEL Course)	DHC-V	As per NPTEL examination scheme and institute policy for credit transfer										100	3
A Program Internship of one semester is to be completed by the students. One semester means 12 weeks minimum (Engagement hours of student for internship should be 18-20 hours per week.)														
List of Program Elective-IV														
EE402NA Illumination Engineering														
EE402NB Power System Operation & Control														
EE402NC Smart Grid Technology														
DHC:Departmental Honours Course														
L : Lecture		T: Tutorial		P: Practical				MSE: Mid Semester Examination						
ISA :Internal Sessional Assessment		ESE: End Semester Examination						ICA : Internal Contineous Accessment						
Note: Mentor faculty/Course Teacher shall be allotted for each online course for smooth evaluation and completion of the course. Mentor faculty/course Teacher need to enrol the course alongwith students														

