माधव प्रौद्योगिकी एवं विज्ञान संस्थान, ग्वालियर
MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE, GWALIOR
Deemed to be University
(Declared under Distinct Category by Ministry of Education, Goverment of India)
NAAC ACCREDITED WITH A++ GRADE
Gola Ka Mandir, Gwalior (M.P.) - 474005, INDIA
Ph.: +91-751-2409300, E-mail: director@mitsgwalior.in, Website: www.mitsgwalior.in

ANNEXURE - I

Semester-Wise General Scheme Structure &Important Guidelines for Flexible Curriculum

(Batch admitted in Academic Session 2024-25 onwards)

Abbreviations Used

L	Lecture
T	Tutorial
P	Practical
HSMC	Humanities and Social Sciences including Management Courses
BSC	Basic Science Courses
ESC	Engineering Science Courses
DC	Departmental Core
DE	Departmental Elective
SPC	Specialization Courses
OC	Open Category
DLC	Departmental Laboratory Courses
MOOC	Massive Open Online Course
MWS	Mandatory Workshop
SP	Semester Proficiency
SIP	Summer Internship Project
SLP	Self-learning Presentation
PDC	Professional Development Component
PBL	Project Based Learning
PC	Professional Certification
MAC	Mandatory Audit Course
NEC	Novel Engaging Course

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Department of Electrical Engineering
Scheme of Evaluation
B. Tech. I Semester *(Electrical Engineering)* *(for batch admitted in academic session 2024-25)*

S. No.	Course Code	Category Code	Course Name	Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Major Evaluation	Lab Work & Sessional	Major Evaluation	Total Marks	L	T	P	Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
				Maximum Marks Allotted							**Contact Hours per week**						
				Theory Block				**Practical Block**									
				Continuous Evaluation			Major Evaluation	**Continuous Evaluation**	Major Evaluation								
1.	13241101	DC	Electrical Engineering Materials	20	20	30	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
2.	13241102	ESC	Computer Programming	20	20	30	30	-	-	100	2	-	-	2	Face to Face	MCQ	2 Hrs
3.	13241103	ESC	Basic Civil Engineering& Mechanics	20	20	30	30	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
4.	13241104	ESC	Basic Mechanical Engineering	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	13241105	ESC	Basic Electrical & Electronics Engineering	20	20	30	30	-	-	100	2	-	-	2	Face to Face	MCQ	2Hrs
6.	13241106	DLC	Computer Programming Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	13241107	DLC	Electrical & Electronics Engineering Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	13241108	SP	Semester Proficiency$	-	-	-	-	50	-	50	-	-	-	1	Face to Face	SO	-
9.	13241109	PBL	Micro Project-I#	-	-	-	-	70	30	100	-	-	-	1	Experiential	SO	-
10.	13241110	ESC	Engineering Physics Lab	-	-	-	-	70	30	100	-	-	-	1	Experimental	AO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
			Total	100	100	150	150	380	120	1000	11	3	10	19	-	-	-
12.	13241111	MAC	Universal Human Values & Professional Ethics (UHVPE)	20	20	30	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
13.	13241112	MWS	Mandatory Workshop on Indian Constitution and Traditional Knowledge at Department Level (Duration: Two Days)											GRADE	Interactive	MCQ	-

Induction programme of three weeks (MC): Physical activity, Creative Arts, Universal Human Values, Literary, Proficiency Modules, Lectures by Eminent People, Visits to local Areas, Familiarization to Dept./Branch & Innovations.

Skill Internship Program (Soft Skill): Minimum 45 hours duration: To be credited in II Semester.

$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses.

MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **PP:** Pen Paper   **SO:** Submission + Oral **OB:** Open Book

$$This coursewill be distributed in the I Year Group wise among the programmes where ever required.

Micro Project-I will be presented and evaluated through an interdisciplinary project evaluation committee.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	5	1	0	0	0	2	1	1	0	0	0	1	1	1

Mode of Learning						Mode of Examination					Total Credits
Theory		Lab				Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	PP	MCQ	OB	SO	AO	
13	-	1	1	3	1	6	7	-	3	3	19
68.4%	-	5.3%	5.3%	15.8%	5.3%	31.6%	36.8%	-	15.8%	15.8%	Credits %

Recommended in the BoS meeting of Deptt of EE held on.6th December 2024

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Department of Electrical Engineering
Scheme of Evaluation
B. Tech. II Semester *(Electrical Engineering)*

(for batch admitted in academic session 2024-25)

S. No.	Course Code	Category Code	Course Name	Theory Block — Continuous Evaluation — Minor Evaluation I	Theory Block — Continuous Evaluation — Minor Evaluation II	Theory Block — Continuous Evaluation — Quiz/ssignmen	Theory Block — Major Evaluation	Practical Block — Continuous Evaluation — Lab Work & Sessional	Practical Block — Major Evaluation	Total Marks	L	T	P	Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
1.	13241201	DC	**Network Analysis**	20	20	30	30	-	-	100	3	-	-	**3**	Face to Face	MCQ	2 Hrs
2.	13241202	DC	**Measurement & Instrumentation**	20	20	30	30	-	-	100	2	1	-	**3**	Face to Face	MCQ	2 Hrs
3.	13241203	DC	**Switching Theory and Logic Design**	20	20	30	30	-	-	100	2	1	-	**3**	Face to Face	MCQ	2 Hrs
4.	13241204	ESC	**Engineering Drawing**	20	20	30	30	-	-	100	1	2	-	**3**	Face to Face	PP	2 Hrs
5.	13241205	BSC	**Calculus and Laplace Transforms**	20	20	30	30	-	-	100	3	-	-	**3**	Face to Face	PP	2 Hrs
6.	13241206	DLC	**Measurement & Instrumentation Lab**	-	-	-	-	70	30	100	-	-	2	**1**	Experimental	AO	-
7.	13241207	DLC	**Problem Solving through Python Programming**	-	-	-	-	70	30	100	-	-	2	**1**	Experimental	AO	-
8.	13241208	SP	**Semester Proficiency$**	-	-	-	-	50	-	50	-	-	2	**1**	Face to Face	SO	-
9.	13241209	PBL	**Micro Project-II# (based on Analog & Digital Electronics/ Network Analysis)**	-	-	-	-	70	30	100	-	-	2	**1**	Experiential	SO	-
10.	13241210	DLC	**Engineering Chemistry Lab**	-	-	-	-	70	30	100	-	-	2	**1**	Experimental	AO	-
11.	13241211	HSMC	**Language Lab**	-	-	-	-	70	30	100	-	-	2	**1**	Blended	AO	-
12.	NECxxxxx	NEC	**Novel Engaging Course (Activity Based Learning)**	-	-	-	-	50	-	50	-	1	-	**1**	Interactive	SO	-
13.	SIP1xxxx	SIP	**Skill Internship Program (Soft Skill)**	-	-	-	-	60	-	60	-	-	-	**2****	Experiential	SO	-
			Total	100	100	150	150	510	150	1160	11	05	12	**24**	-	-	-
14.	13241212	MAC	**Sustainability & Environmental Science**	20	20	30	30	-	-	100	2	-	-	**GRADE**	Blended	MCQ	1.5 Hrs
15.	13241213	MWS	**Mandatory Workshop on Indian Knowledge System at Department Level(Duration: Two Days)**											**GRADE**	Interactive	MCQ	-
			Summer Semester of six-eight week duration will be conducted for makeup of I & II semester examination.														

$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **PP:** Pen Paper   **SO:** Submission + Oral   **OB:** Open Book

** These credits will be transferred from Skill Internship Program (Soft Skill).

#Micro Project-II will be presented and evaluated through an interdisciplinary project evaluation committee.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
1	1	1	3	0	0	0	3	1	1	0	1	0	1	1	1

Mode of Learning							Mode of Examination					Total Credits
Theory		Lab					Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
15	-	1	1	5	1	1	6	9	-	5	4	24
62.5%	0.0%	4.2%	4.2%	20.8%	4.2%	4.2%	25.0%	37.5%	0.0%	20.8%	16.7%	**Credits %**

Recommended in the BoS meeting of Deptt of EE held on.6th December 2024

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Department of Electrical Engineering
Scheme of Evaluation

B. Tech. III Semester *(Electrical Engineering)* **(for batch admitted in academic session 2024-25)**

S. No.	Course Code	Category Code	Course Name	Theory Block — Continuous Evaluation — Minor Evaluation I	Theory Block — Continuous Evaluation — Minor Evaluation II	Theory Block — Continuous Evaluation — Quiz/Assignment	Theory Block — Major Evaluation	Practical Block — Continuous Evaluation — Lab Work & Sessional	Practical Block — Major Evaluation	Total Marks	L	T	P	Total Credits	Mode of Learning	Mode of Major Evaluation	Duration of Major Evaluation
1.	13242101	BSC	Differential Equations, Matrices &Fourier Series	20	20	30	30	-	-	100	3	-	-	3	Face to Face	PP	2 Hrs
2.	13242102	DC	Data Structures	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	13242103	DC	Electromagnetic Field Theory	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	13242104	DC	Electrical Machines-I	20	20	30	30	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
5.	13242105	DC	Generation, Transmission & Distribution of Electric Power	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
6.	13242106	DLC	Electrical Machines-I Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	13242107	DLC	Generation, Transmission & Distribution of Electric Power Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	13242108	SP	Semester Proficiency$	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
9.	13242109	PBL	Macro Project-I#	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
10.	13242110	SLP	Self-learning/Presentation$$$ (SWAYAM/NPTEL/MOOC)	-	-	-	-	40	-	40	-	-	2	1	Mentoring Blended	SO	-
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
			Total	100	100	150	150	350	90	940	11	05	10	21	-	-	-
12.	13242111	MAC	Cyber Security	20	20	30	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
13.	13242112	MWS	Mandatory Workshop on Internet of Things(IoT) at Department Level(Duration: Two Days)											GRADE	Interactive	MCQ	-
			Skill Internship Project : Minimum 30 hours duration: To be credited in IV Semester														

$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

MCQ: Multiple Choice Question **AO:** Assignment + Oral **PP:** Pen Paper **SO:** Submission + Oral **OB:** Open Book

#Macro Project-I will be presented and evaluated through an interdisciplinary project evaluation committee. **These credits will be transferred from Skill Internship Program.

$$$Compulsory registration for one online course using SWAYAM/NPTEL/ MOOC, evaluation through attendance and presentation.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	1	0	4	0	0	0	2	1	1	0	1	0	1	1	1

Mode of Learning							Mode of Examination					Total Credits
Theory		Lab					Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
15	-	1	1	2	1	1	6	9	-	4	2	21
71.4%	0.0%	4.8%	4.8%	9.5%	4.8%	4.8%	28.6%	42.9%	0.0%	19.0%	9.5%	Credits %

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Department of Electrical Engineering
Scheme of Evaluation
B. Tech. IV Semester *(Electrical Engineering)*   *(for batch admitted in academic session 2024-25)*

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted						Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation.	Duration of Major Evaluation
				Theory Block				Practical Block									
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation		L	T	P				
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assign-ment		Lab Work & Sessional									
1.	13242201	DC	Electrical Machines-II	20	20	30	30	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
2.	13242202	DC	Power System Analysis	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	13242203	DC	Power Electronics	20	20	30	30	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
4.	13242204	DC	Signals & Systems	20	20	30	30	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
5.	13242205	DC	Microprocessor & Microcontroller	20	20	30	30	-	-	100	3	-	-	3	Face to Face	MCQ	2 Hrs
6.	13242206	DLC	Electrical Machines-II Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
7.	13242207	DLC	Power System Analysis Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
8.	13242208	DLC	Power Electronics & Drives Lab	-	-	-	-	70	30	100	-	-	2	1	Experimental	AO	-
9.	13242209	SP	Semester Proficiency$	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	-
10.	13242210	PBL	Macro Project-II#	-	-	-	-	70	30	100	-	-	2	1	Experiential	SO	-
11.	13242210	PC	Professional Certification	-	-	-	-	50	-	50	-	-	2	1	Blended	SO	-
12.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	50	-	50	-	1	-	1	Interactive	SO	-
13.	SIP2XXXX	SIP	Skill Internship Project	-	-	-	-	60	-	60	-	-	-	2**	Experiential	SO	
	Total			**100**	**100**	**150**	**150**	**490**	**120**	**1110**	**11**	**05**	**12**	**24**	**-**	**-**	**-**
14.	13242211	MAC	Project Management, Economics & Financing	20	20	30	30	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
15.	13242212	MWS	Mandatory Workshop on Computer Vision at Department Level(Duration: Two Days)											GRADE	Interactive	MCQ	-
16.	13242213	MWS	Mandatory Workshop on Life Skills at Department Level (Duration: Two Days)											GRADE	Interactive	MCQ	-
	Summer Semester of six-eight week duration will be conducted for makeup of previous semester examination.																
	Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																

$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses

MCQ: Multiple Choice Question   **AO:** Assignment + Oral **PP:** Pen Paper   **SO:** Submission + Oral   **OB:** Open Book

#Macro Project-II will be presented and evaluated through an interdisciplinary project evaluation committee.

**These credits will be transferred from Skill Internship Project.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
1	0	0	5	0	0	0	3	1	1	1	0	0	1	1	2

Mode of Learning							Mode of Examination					Total Credits
Theory		Lab					Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
15	-	1	1	5	1	1	6	9	-	5	4	24
62.5%	0.0%	4.2%	4.2%	20.8%	4.2%	4.2%	25.0%	37.5%	0.0%	20.8%	16.7%	Credits %

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Department of Electrical Engineering
Scheme of Evaluation
B. Tech. V Semester *(Electrical Engineering)*   (for batch admitted in academic session 2024-25)

S. No.	Course Code	Category Code	Course Name	Theory Block — Continuous Evaluation — Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Major Evaluation	Practical Block — Continuous Evaluation — Lab Work & Sessional	Major Evaluation	MOOCs — Assign-ment	Exam	Total Marks	L	T	P	Total Credits	Mode of Learning	Mode of Major Evaluation.	Duration of Major Evaluation
1.	13243101	DC	Switchgear & Protection	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
2.	13243102	DC	Communication System Theory	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
3.	13243103	DC	Data Science	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
4.	132431xx	DE	Departmental Elective*(DE-1)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
5.	132431yy	SPC	Specialization Course (SPC-1)	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
6.	13243104	DLC	Switchgear & Protection Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
7.	13243105	DLC	Data Science Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
8.	13243106	SP	Semester Proficiency$	-	-	-	-	50	-	-	-	50	-	-	2	1	Face to Face	SO	-
9.	13243107	PBL	Cornerstone Project	-	-	-	-	70	30	-	-	100	-	-	4	2	Experiential	SO	-
		Total		80	80	120	120	260	90	25	75	850	11	04	10	20	-	-	-
10.	13243108	MAC	Supply Chain Management	20	20	30	30	-	-	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
11.	13243109	MWS	Mandatory Workshop on Blockchain at Department Level(Duration: Two Days)													GRADE	Interactive	MCQ	-
			Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																

$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses
MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **PP:** Pen Paper   **SO:** Submission + Oral   **OB:** Open Book
* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	3	1	1	0	2	0	1	0	0	0	1	1	1

Mode of Learning							Mode of Examination					Total Credits
Theory		Lab					Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
12	3	0	2	2	1	0	6	9	-	3	2	20
60.0%	15.0%	0.0%	10.0%	10.0%	5.0%	0.0%	30.0%	45.0%	0.0%	15.0%	10.0%	Credits %

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Department of Electrical Engineering
Scheme of Evaluation
B. Tech. VI Semester *(Electrical Engineering)*(for batch admitted in academic session 2024-25)

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted								Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode of Major Evaluation.	Duration of Major Evaluation.
				Theory Block				Practical Block		MOOCs			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assign-ment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional											
1.	13243201	DC	Control Systems	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2 Hrs
2.	13243202	DC	Artificial Intelligence & Machine Learning	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	MCQ	2Hrs
3.	132432xx	DE	Departmental Elective*(DE-2)	-	-	-	-	25	75	-	-	100	3	-	-	3	Online	MCQ	3 Hrs
4.	132432yy	OC	Open Category Course (OC-1)	20	20	30	30	-	-	-	-	100	2	1	-	3	Face to Face	PP	2 Hrs
5.	132432zz	SPC	Specialization Course (SPC-2)	20	20	30	30	-	-	-	-	100	3	-	-	3	Face to Face	PP	2 Hrs
6.	13243203	DLC	Control System Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
7.	13243204	DLC	Artificial Intelligence & Machine Learning Lab	-	-	-	-	70	30	-	-	100	-	-	2	1	Experimental	AO	-
8.	13243205	SP	Semester Proficiency$	-	-	-	-	50	-	-	-	50	-	-	2	1	Face to Face	SO	-
9.	13243206	PBL	Capstone Project	-	-	-	-	70	30	-	-	100	-	-	4	2	Experiential	SO	-
			Total	80	80	120	120	260	90	25	75	**850**	12	03	10	**20**	-	-	-
10.	13243207	MAC	Disaster Management	20	20	30	30	-	-	-	-	100	2	-	-	GRADE	Blended	MCQ	1.5 Hrs
11.	13243208	MWS	Mandatory Workshop on Intellectual Property Rights at Department Level(Duration: Two Days)													GRADE	Interactive	MCQ	-
			Skill Enhancement Program/Research Internship/On Job Training for Four weeks duration																
			Summer Semester of six-eight week duration will be conducted for makeup of previous semester examination.																
			Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																

$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses
MCQ: Multiple Choice Question **AO:** Assignment + Oral   **PP:** Pen Paper   **SO:** Submission + Oral   **OB:** Open Book
* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform.

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	2	1	1	1	2	0	1	0	0	0	1	1	1

Mode of Learning							Mode of Examination					Total Credits
Theory		Lab					Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
12	3	0	2	2	1	0	6	9	-	3	2	20
60.0%	15.0%	0.0%	10.0%	10.0%	5.0%	0.0%	30.0%	45.0%	0.0%	15.0%	10.0%	**Credits %**

Recommended in the BoS meeting of Deptt of EE held on.6th December 2024

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Department of Electrical Engineering
Scheme of Evaluation
B. Tech. VII Semester *(Electrical Engineering)* (for batch admitted in academic session 2024-25)

S. No.	Course Code	Category Code	Course Name	Maximum Marks Allotted								Total Marks	Contact Hours per week			Total Credits	Mode of Learning	Mode Of Exam.	Duration of Major Evaluation.
				Theory Block				Practical Block		MOOCs			L	T	P				
				Continuous Evaluation			Major Evaluation	Continuous Evaluation	Major Evaluation	Assignment	Exam								
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment		Lab Work & Sessional											
1.	132441xx	DE	Departmental Elective# (DE-3)	20	20	30	30	-	-	-	-	100	3	-	-	3	Blended	MCQ	2 Hrs
2.	132441mm	DE	Departmental Elective* (DE-4)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
3.	132441yy	OC	Open Category Course* (OC-2)	-	-	-	-	-	-	25	75	100	3	-	-	3	Online	MCQ	3 Hrs
4.	132441zz	SPC	Specialization Course # (SPC-3)	20	20	30	30	-	-	-	-	100	2	1	-	3	Blended	PP	2 Hrs
5.	13244101	SEP	Skill Enhancement Program/Research Internship/ On Job Training	-	-	-	-	-	50	-	-	50	-	-	2	1**	Experiential	SO	-
6.	13244102	DLC	Creative Problem Solving	-	-	-	-	-	50	-	-	50	-	-	2	1	Experiential	AO	-
	Total			40	40	60	60	-	100	50	150	500	10	02	04	14	-	-	-
	Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																		

$^\$$Semester Proficiency– includes the weightage towards ability/ skill/ competency /knowledge level /expertise attained etc. in the semester courses.
MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **PP:** Pen Paper   **SO:** Submission + Oral   **OB:** Open Book
* Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform.
** These credits will be transferred from Skill Enhancement Program/Research Internship/On Job Training
#Course run through MITS-DU MOOCs

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	0	2	1	1	1	0	1	0	0	0	0	0	1

Mode of Learning							Mode of Examination					Total Credits
Theory			Lab				Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
6	6	0	1	0	1	0	3	9	0	1	1	14
42.9%	42.9%	0.0%	7.1%	0.0%	7.1%	0.0%	21.4%	64.4%	0.0%	7.1%	7.1%	**Credits %**

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Department of Electrical Engineering
Scheme of Evaluation

B. Tech. VIII Semester *(Electrical Engineering)* (for batch admitted in academic session 2024-25)

S. No.	Course Code	Category Code	Course Name	Theory Block Continuous Evaluation Minor Evaluation I	Theory Block Continuous Evaluation Minor Evaluation II	Theory Block Continuous Evaluation Quiz/ Assign ment	Major Evaluation	Practical Block Continuous Evaluation	Practical Block Major Evaluation	MOOCs Assign-ment	MOOCs Exam	Total Marks	L	T	P	Total Credits	Mode of Learning	Mode of Exam.	Duration of Major Evaluation.
1.	132442xx	DE	**Departmental Elective* (DE-5)**	-	-	-	-	-	-	25	75	100	3	-	-	**3**	Online	MCQ	3 Hrs
2.	132442yy	OC	**Open Category Course*(OC-3)**	-	-	-	-	-	-	25	75	100	3	-	-	**3**	Online	MCQ	3 Hrs
3.	13244201	PBL	**Industry Internship/Research Internship/ Innovation & Start-up**	-	-	-	-	280	120	-	-	400	-	-	20	**10**	Experiential	SO	-
4.	13244202	PDC	**Professional Development##**	-	-	-	-	-	50	-	-	50	-	-	4	**2**	Interactive	SO	-
			Total	-	-	-	-	280	170	50	150	650	06	-	24	18	-	-	-
			Summer Semester of six-eight week duration will be conducted to complete any backlog courses.																
			Additional Course for Honours or Minor Degree: Permitted to opt for maximum two additional courses for the award of Honours or Minor Degree																

MCQ: Multiple Choice Question   **AO:** Assignment + Oral   **PP:** Pen Paper   **SO:** Submission + Oral   **OB:** Open Book

*Course run through SWAYAM/NPTEL/ MOOC Learning Based Platform

Evaluation will be based on participation/laurels brought by the students to the institution in national/state level technical and other events during the complete tenure of the UG programme (participation in professional chapter activities, club activities, cultural events, sports, personality development activities, collaborative events, MOOCs, technical events, institute/department committees, etc.)

HSMC	BSC	ESC	DC	DE	SPC	OC	DLC	NEC	SP	SIP	SLP	PDC	PBL	MAC	MWS
0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0

Mode of Learning							Mode of Examination					Total Credits
Theory		Lab					Theory			Lab		
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	
0	6	2	10	0	0	0	0	6	0	12	0	18
0%	**33.3%**	**11.1%**	**55.6%**	**0%**	**0%**	**0%**	**0%**	**33.3%**	**0%**	**66.7%**	**0%**	**Credits %**

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Department of Electrical Engineering

List of Department Elective Courses: (Traditional Mode)

1. Power System Economics
2. Electrical Safety
3. Energy Storage Technologies
4. Electric Power Quality
5. Renewable Power Generation Systems
6. Integrated Energy Systems
7. Switched Mode Power supplies
8. Design of Electrical Apparatus
9. Utilization of Electrical Energy
10. Industrial Instrumentation and Automation
11. Electric Drives
12. HVDC & FACTS
13. Hybrid Vehicles
14. Restructured Power Systems
15. Semiconductor Based Sensors
16. Digital Circuit Design
17. Energy Auditing
18. High Voltage Engineering
19. Energy Auditing
20. Advanced Control System

List of Open Category Courses: (Traditional Mode)
1. Electrical Technology
2. Hybrid Vehicles
3. Biomedical Instrumentation
4. Energy Storage Systems and Applications
5. Industrial Instrumentation and Automation
6. Energy Conservation & Management
7. Applications of Electrical Equipment& Motors
8. Bio-Inspired Algorithms and Applications

Recommended in the BoS meeting of Deptt of EE held on.6th December 2024

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Department of Electrical Engineering

Specialization Courses:

Smart Grid Technologies:
1. Elements of Smart Grid System
2. Wide Area Monitoring and Control
3. Smart Grid Protection
4. Smart Grid Communications and Protocols

Power System & Energy
5. Sustainable and Renewable Energy Technology
6. Distributed Generation & Micro Grids
7. Power System Planning, Operation & Control
8. Energy Storage Technologies