



# <u>Semester-Wise General Scheme Structure & Important Guidelines for</u> <u>Flexible Curriculum</u>

# (Batch admitted in Academic Session 2024-25 onwards)

## **Abbreviations Used**

L	Lecture
· · · · · · · · · · · · · · · · · · ·	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





#### **Department of Electrical Engineering**

## Scheme of Evaluation

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

					Max	imum M	arks Allo	otted				onta	ct				
	a	Categ			Theory	Block		Practical	Block			week	i i		Mode	Mode	Duration
S. No.	Course Code	ory Code	Course Name	Cont	inuous Evalu	ation		Continuous Evaluation	Major	T otal Marks				Credits	of Learning	of Major	of Major
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Evaluation	Lab Work & Sessional	Evaluatio n		L	Т	Р		0	Evaluation	Evaluation
1.	13241101	DC	Electrical Engineering Materials	20	20	30	30	-	-	100	3		121	3	Face to Face	MCQ	2Hrs
2.	13241102	ESC	Computer Programming	20	20	30	30	-	-	100	2		14.1	2	Face to Face	MCQ	2 Hrs
3.	13241103	ESC	Basic Civil Engineering& Mechanics	20	20	30	30	-	-	100	2	1	C	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	<b>Basic Electrical &amp; Electronics Engineering</b>	20	20	30	30	-	-	100	2		$1^{-1}$	2	Face to Face	MCQ	2Hrs
6.	13241106	DLC	Computer Programming Lab	-	-	-	-	70	30	100	-	- <u>-</u> -	2	1	Experimental	AO	
7.	13241107	DLC	Electrical & Electronics Engineering Lab	-	-	-	-	70	30	100	1		2	1	Experimental	AO	
8.	13241108	SP	Semester Proficiency <sup>\$</sup>	-	-	-	-	50	-	50	1	14	2	1	Face to Face	SO	1111- <mark>2</mark> 1111
9.	13241109	PBL	Micro Project-I <sup>#</sup>	-	-	-	-	70	30	100		- <u>-</u>	2	1	Experiential	SO	
10.	13241110	ESC	Engineering Physics Lab	-	-	-	-	70	30	100	-		2	1	Experimental	AO	· · · · · · · · ·
11.	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	-	50	50		1		1	Interactive	SO	
			Total	100	100	150	150	330	170	1000	11	3	10	19	-	-	-
12.	13241111	MAC	Universal Human Values & Professional Ethics (UHVPE)	20	20	30	30	-	-	100	2	÷	12) L	GRADE	Blended	MCQ	1.5 Hrs
13.	13241112	MWS	Mandatory Workshop on Indian Constitution a	nd Traditi	onal Know	ledge at De	epartment I	.evel (Durat	ion: Two	Days)				GRADE	Interactive	MCQ	1.1 <del>.</del>
1.1.1	Induction pr	ogramm	e of three weeks (MC): Physical activity, Creative	Arts, Univ	ersal Hum	an Values,	Literary, P	roficiency N	Iodules, L	ectures h	y Em	inen	t Peop	ole, Visits t	o local Areas,	Familiarizat	ion to
1.1.1	<del>.</del> .	1.1.1.1.1			Dept.	/Branch &	Innovation	ıs.	1.1.1.1.1.		1.1.				· . · . · . · . · . · . ·	1.1.1.1.1.1.	
			Skill Internshin Program	n (Soft S	kill): Mir	11111111111111111111111111111111111111	5 hours d	luration: '	To be cr	edited	in II	Sen	neste	r.			

Skill Internship Program (Soft Skill): Minimum 45 hours duration: To be credited in 11 Sen

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 + OralOB: Open Book

<sup>55</sup>This coursewill be distributed in the I Year Group wise among the programmes where ever required.

<sup>#</sup>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 E	xaminatio	n		Total
The	ory			Lab			Theory		Lab		Total Credite
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	PP	MCQ	OB	SO	AO	Creats
13		1	1	3	1.1.1.1.1.1.1.1	6	7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7. 7		3	3.3	19
68.4%	<del>.</del>	5.3%	5.3%	15.8%	5.3%	31.6%	36.8%		15.8%	15.8%	Credits %





# Department of Electrical Engineering

# Scheme of Evaluation

			B. Tech. II Se	meste	r ( <i>Elec</i>	trica	l Engi	neering	<b>z</b> )	1 - 1 - 1 - 1 <b>(</b>	for ba	tch c	dmit	ted in a	icademic s	ession 20	24-25
					Max Theory	kimum N Block	Aarks Allo	tted Practical	Block		Con	tact H er wee	ours				Durati
S.	Course	Categor		Contin	nuous Evalu	ation		Continuous	DIOCK	Total	<u>.</u> Р			Total	Mode	Mode of	of
No.	Code	y Code	Course Name	Minor Evaluatio n I	Minor Evaluatio n II	Quiz/ ssignmer	Major Evaluatio n	Lab Work & Sessional	Major Evaluatio n	Marks	L	Т	Р	Credits	of Learning	Major Evaluation	Majoi Evaluat n.
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	Analog & Digital Electronics	20	20	30	30	-	-	100	2	1	• <del>•</del> • • •	3	Face to Face	MCQ	2Hrs
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	1-1-	- <del>1</del> - 1 -	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 <sup>\$</sup>	-	-	-	-	50	-	50		- 1	2	1	Face to Face	SO	n n <del>i</del> n.
9.	13241209	PBL	Micro Project-II <sup>#</sup>	-	-	-	-	70	30	100	1.12	1.4	2	1	Experiential	SO	1011 <u>-</u> 01
10.	13241210	DLC	Engineering Chemistry Lab	-	-	-	-	70	30	100		1-1	2	1	Experimental	AO	n i n <del>e</del> n.
11.	13241211	HSMC	Language Lab	-	-	-	-	70	30	100		1.4	2	1	Blended	AO	100 <del>-</del> 11
12.	NECXxxxx	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	-	50	50		1	-	1	Interactive	SO	
13.	SIP1xxxx	SIP	Skill Internship Program (Soft Skill)	-	-	-	-	42	18	60	. 1. <del></del>	1.21	1121	2**	Experiential	SO	1.1.1 <u>-</u> 1.1
			Total	100	100	150	150	442	218	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 Syst	em at Dep	artment Lev	vel(Dura	tion: Two	Days)			• • • •			GRADE	Interactive	MCQ	
			Summer Semester of six-eig	ght week o	duration w	ill be co	onducted	for makeu	p of I &	II semes	ter exa	minat	ion.				

<sup>8</sup>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

<sup>#</sup>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 Learn	ing				Mod	le of Examir	nation		Tetel
Theo	ory	Lab Theory Lab							Credita			
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	Creans
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 %





## **Department of Electrical Engineering**

# **Scheme of Evaluation**

B. Tech. III Semester (*Electrical Engineering*)

(for batch admitted in academic session 2024-25

						Maximum	Marks All	otted		• • • • • • •	Co	ntact	Hours				
					The	ory Block		Practica	l Block		. 1. 1	per w	veek				
S.	Course	Category	Course Nome	С	ontinuous E	valuation		Continuous Evaluation		Total				Total	Mode	Mode of	Duration of Major
No.	Code	Code	Course Name	Mino r Evalu ation I	Minor Evaluatio n II	Quiz/ Assignmen t	Major Evaluation	Lab Work & Sessional	Major Evaluation	Marks	L	Т	Р	Credits	Learning	Major Evaluation	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	• ] • <del>]</del> • ] •	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	<del>.</del>	3	Face to Face	MCQ	2 Hrs
6.	13242106	DLC	Electrical Machines-I Lab	-	-	-	-	70	30	100	) <del>-</del> 11	÷ -	2	1	Experimental	AO	<del>-</del>
7.	13242107	DLC	Generation, Transmission & Distribution of Electric Power Lab	-	-	-	-	70	30	100			2	1	Experimental	AO	
8.	13242108	SP	Semester Proficiency <sup>\$</sup>	-	-	-	-	50	-	50			2	1	Face to Face	SO	· · · - · · ·
9.	13242109	PBL	Macro Project-I <sup>#</sup>	-	-	-	-	70	30	100	1		2	1	Experiential	SO	· · · · · - · · · ·
10	13242110	SLP	Self-learning/Presentation <sup>\$\$\$</sup> (SWAYAM/NPTEL/MOOC)	-	-	-	-	40	-	40		1	2	1	Mentoring Blended	SO	
11	NECXXXXX	NEC	Novel Engaging Course (Activity Based Learning)	-	-	-	-	-	50	50	e e e	1	<del>.</del>	1	Interactive	SO	· · · · · · · · · · · ·
			Total	10 0	100	150	150	300	140	940	1 1	0 5	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 Thi	ngs(Io'	Г) at Departn	ent Level(Dur	ation: Two D	ays)			- 1-1			GRADE	Interactive	MCQ	· · · · - · · · · ·
			Skill Int	ernsh	ip Project : 1	Minimum 30	hours dura	tion: To be c	redited in I	V Seme	ster						

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.

555 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 Learn	ning				Moo	le of Examir	nation		Tetel
The	ory			Lab				Theory			Lab	Credite
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	Creuits
15	<u>.</u>	1	1	2	1	1	6	9	· · · · · <u>-</u> · · · · ·	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 %





### **Department of Electrical Engineering**

# **Scheme of Evaluation**

B. Tech. IV Semester (*Electrical Engineering*)

#### (for batch admitted in academic session 2024-25

1.1.					Ma	aximum M	arks Allot	ted		1.1.1.1	C	onta	ct				
		• • • • • • • • •			Theory	Block		Practical	Block		Ho	weel	per «			Mode	Duration
S. No.	Course Code	Category Code	Course Name	Conti	nuous Evalu	ation	Major	Continuous Evaluation	Major	Total Marks				Total Credits	Mode of Learning	of Major	of Major
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Evaluation	Lab Work & Sessional	Evaluation		L	Т	P		Learning	Evaluation.	Evaluation
1.	13242201	DC	Electrical Machines-II	20	20	30	30	-	-	100	2	1	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	1	3	Face to Face	PP	2 Hrs
4.	13242204	DC	Signal & 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	-	E	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	<del>-</del>
9.	13242209	SP	Semester Proficiency <sup>\$</sup>	-	-	-	-	50	-	50	-	-	2	1	Face to Face	SO	. 1. 1. <del>-</del> . 1. 1.
10.	13242210	PBL	Macro Project-II <sup>#</sup>	-	-	-	-	70	30	100	-	÷.	2	1	Experiential	SO	· . · . · <del>.</del> · . · . ·
11.	13242210	PC	Professional Certification	-	-	-	-	50	-	50	-		2	1	Blended	SO	<u>-</u>
12.	NECXXXXX	NEC	Novel Engaging Course	-	-	-	-	-	50	50		1	-	1	Interactive	SO	· · · · <del>· ·</del> · · · · ·
13.	SIP2XXXX	SIP	Skill Internship Project	-	-	-	-	42	18	60	140	÷ E	r je j	2**	Experiential	SO	
		То	tal	100	100	150	150	422	188	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 Co	omputer Visi	on at Departm	ent Level(Du	ration: Two	Days)				1		GRADE	Interactive	MCQ	<del>-</del>
16.	13242213	MWS	Mandatory Workshop on Li	fe Skills at D	epartment Lev	vel (Duration:	Two Days)				· · · .	·		GRADE	Interactive	MCQ	· · · · · · · · · ·
			Summer	Semester of	six-eight weel	duration wi	ll be conduct	ed for makeup	of previous s	emester	exan	ninat	tion.				
			Additional Course for Hon	ours or Mino	or Degree: Per	mitted to opt	for maximur	n two additiona	al courses for	the awa	rd of	f Hoi	nour	s or Mine	or 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

<sup>#</sup>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 0	1	1	2

				Mode of Learn	ing				M	ode of Examin	ation		
	Theor	ry			Lab				Theory			Lab	<b>Total Credits</b>
	Face to Face	Online	ine Interactive Experiential Experimental Face to Face Blend						MCQ	OB	SO	AO	
	15	· · · · · · · · · ·	· · ·1· · ·	· · · 1· · ·	5	1	• • • 1 • •	6	9		5	• • • • • •	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 %





(for batch admitted in academic session 2024-25)

### Department of Electrical Engineering Scheme of Evaluation

## **B.** Tech. V Semester (*Electrical Engineering*)

									- 0	0			G	-					
1.1.1						Maxi	mum Mar	ks Allotted				1.1.1.	<u>с</u>	onta	ct				
					Theory	Block		Practical	Block	MOO	OCs		но	urs j week	ber			Mode	Duration
S. No.	Course Code	Category Code	Course Name	Conti	nuous Eval	uation	Major	Continuous Evaluation	Major	Assign		Total Marks				Total Credits	Mode of Loorning	of Major	of Major
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Evaluation	Lab Work & Sessional	Evaluation	ment	Exam		L	Т	Р		Learning	Evaluation.	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.	132431уу	SPC	Specialization Course (SPC-1)	20	20	30	30	-	-	-	-	100	2	1		3	Face to Face	РР	2 Hrs
6.	13243104	DLC	Switchgear & Protection Lab	-	-	-	-	70	30	-	-	100	1		2	1	Experimental	AO	: <del>.</del>
7.	13243105	DLC	Data Science Lab	-	-	-	-	70	30	-	-	100	1	E.	2	1	Experimental	AO	
8.	13243106	SP	Semester Proficiency\$	-	-	-	-	50	-	-	-	50	1	8	2	1	Face to Face	SO	
9.	13243107	PBL	Cornerstone Project	-	-	-	-	70	30	-	-	100	1		4	2	Experiential	SO	: <del>.</del>
		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	<b>Mandatory Work</b>	shop on Blo	ckchain at D	epartment Lo	evel(Duratio	n: Two Days)					· . · .	1.1.	· . · .	GRADE	Interactive	MCQ	. 1. 1 <del>.</del> 1. 1. 1
1		Addi	tional Course for	r Honours	or Minor D	egree: Pern	nitted to op	t for maxim	ım two add	itional c	ourses	for the	awa	rd o	f Ho	nours or	<b>Minor Degr</b>	ee	

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 Learn	ing				Moo	de of Exami	nation		Tetel
Theo	ory			Lab			Theory			Lab	Total Credite	
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	Creans
12			2	2	· · · 1 · · ·		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 %





## **Department of Electrical Engineering**

# **Scheme of Evaluation**

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

1.1.						Maxii	num Ma	rks Allotte	d · · · · ·			1.1.1		Cont	act			• • • • • • • • •	• • • • • • • • •
					Theory	Block		Practical	Block	MO	OCs			lours wee	e per ek	Total	Mode	Mode	Duration
S. No.	Course Code	Categor y Code	Course Name	Conti	nuous Eva	luation	Major	Continuous Evaluation	Major	Assign-	_	Total Marks				Credit	of Learning	Major Evaluation	Major Evaluation
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Evaluatio n	Lab Work & Sessional	Evaluatio n	ment	Exam		L	Т	Р	5		· · · · · · · · · · · ·	• • • •
1.	13243201	DC	Control Systems	20	20	30	30	-	-	-	-	100	2	1	. 1. <del>1</del> . 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	<b>Departmental Elective*(DE-2)</b>	-	-	-	-	-	-	25	75	100	3	1	1.4.1	3	Online	MCQ	3 Hrs
4.	132432yy	OC	<b>Open Category Course (OC-1)</b>	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	1		3	Face to Face	PP	2 Hrs
6.	13243203	DLC	Control System Lab	-	-	-	-	70	30	-	-	100	1	1	2	1	Experimental	AO	- [ - <del>]</del> - [ - ] - [ -
7.	13243204	DLC	Artificial Intelligence & Machine Learning Lab	-	-	-	-	70	30	-	-	100		1	2	1	Experimental	AO	· · · · · · · · · ·
8.	13243205	SP	Semester Proficiency <sup>\$</sup>	-	-	-	-	50	-	-	-	50	141	1	2	1	Face to Face	SO	<del>.</del>
9.	13243206	PBL	Capstone Project	-	-	-	-	70	30	-	I.	100	121	2	4	2	Experiential	SO	n in <del>a</del> n in in
			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	MW S	Mandatory Workshop on Intellect	ual Prope	rty Rights a	at Departme	ent Level(D	uration: Two	Days)							GRADE	Interactive	MCQ	
			Skill Enhand	cement P	rogram/R	esearch In	ternship/0	On Job Trai	ning for H	Four we	eks du	iratio	1 <mark>(0</mark> ]	ptior	<mark>nal)</mark>				
			Summer Semes	ter of six	-eight wee	k duration	n will be c	onducted for	· makeup	of prev	ious se	emeste	er ex	amir	nation.				
		Ad	ditional Course for Honours or	Minor D	egree: Pe	rmitted to	opt for m	aximum two	additiona	al cours	es for	the av	vard	of H	Ionour	s or Mi	nor Degree	•	
Seme	ster Proficier	ncv-incl	udes the weightage towards ability/sl	kill/ compe	tency /know	vledge level	/expertise a	ttained etc. in t	he 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 Learn	ing				Mo	de of Examin	nation		Tetel
Theo	ory			Lab				Theory		]	Lab	10tal Credite
Face to Face	Online	Interactive	Experiential	Experimental	Blended	PP	MCQ	OB	SO	AO	Creuits	
12	3	$\begin{array}{c c c c c c c c c c c c c c c c c c c $				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 %





**Department of Electrical Engineering** 

# **Scheme of Evaluation**

B. Tech. VII Semester(*Electrical Engineering*)

(for batch admitted in academic session 2024-25)

						Max	ximum Ma	rks Allottee	1				Co Ho	ontac urs n	ct er				
1-1-1	• • • • • • • • • •	• • • • • • • • •			Theory	Block		Practical	Block	MOOO	Cs		1	veek					Duration
S. No.	Course Code	Category Code	Course Name	Conti	nuous Eval	uation	Major	Continuous Evaluation	Major			Total Marks				Total Credits	Mode of Learning	Mode Of Exam	of Major
				Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Evaluation	Lab Work & Sessional	Evaluation	Assignment	Exam		L	Т	Р		Louining		Evaluation.
1.	132441xx	DE	Departmental Elective (DE-3)	20	20	30	30	-	-	-	-	100	3		÷	3	Face to Face	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)	20	20	30	30	-	-	-	-	100	2	1	÷	3	Face to Face	PP	2 Hrs
4.	132441zz	SPC	Specialization Course (SPC-3)	20	20	30	30	-	-	-	-	100	2	1		3	Face to Face	PP	2 Hrs
5.	13244101	SP	Semester Proficiency <sup>\$</sup>	-	-	-	-	50	-	-	-	50			2	1	Face to Face	SO	
6.	13244102	DLC	Creative Problem Solving	-	-	-	-	70	30	-	-	100			2	1	Experiential	AO	
		Total		60	60	90	90	120	30	25	75	550	10	02	04	14	-	-	-
7.	13244103	MWS	Mandatory Worl	kshop on Ac	dvanced Int	ellectual Pro	operty Righ	its at Departi	nent Level(	Duration: T	wo Day	/s)				GRADE	Interactive	MCQ	

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	0	. 2		1	· · · 1· · ·	0	1	0	0	0	0	0	1.

			Mode of Learn	ning				Moo	le of Examin	nation		Tatal
Theo	ory			Lab				Theory		]	Lab	1 otal Credita
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	Creuits
9	3	0	1	0	1	0	6	6	0	1	1	14
64.3%	21.4%	0.0%	7.1%	0.0%	7.1%	0.0%	42.9%	42.9%	0.0%	7.1%	7.1%	Credits %





## **Department of Electrical Engineering**

## Scheme of Evaluation

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

						Maxim	um Mark	s Allotted					( Н	Conta	ict ner				Duratio
	<u> </u>	Catego			<b>Theory</b>	Block		Practical	Block	MO	OCs			weel	s ser		Mode		n
S. No.	Course	ry	Course Name	Contin	nuous Eval	uation	Major			Assign		Total Marks				Credits	of Learnin	Mode of Exam.	of Major
		Code		Minor Evaluation I	Minor Evaluation II	Quiz/ Assignment	Evaluatio n	Continuous Evaluation	Major Evaluation	- ment	Exam		L	Т	Р		g		Evaluati on.
1.	132442xx	DE	Departmental Elective* (DE-5)	-	-	-	-	-	-	25	75	100	3			3	Online	MCQ	3 Hrs
2.	132442yy	OC	<b>Open Category Course</b> *( <b>OC-3</b> )	-	-	-	-	-	-	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		- 20	4	2	Interactive	SO	· ] · <del>]</del> · ] ·
			Total	-	-	-	-	280	170	50	150	650	06	-	24	18	-	-	-
			Summer	Semester of	ˈsix-eight v	veek durat	ion will be	conducted	to comple	te any	backlo	g course	s.						

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

<sup>##</sup>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, club activities, club activities, club activities, 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	. 1	. 0	1	0	0	0 0	0	. 0	1	· . · . 1. · . · .	0	0

Mode of Learning								Mode of Examination				
Theory		Lab					Theory			Lab		10tal Credite
Face to Face	Online	Interactive	Experiential	Experimental	Face to Face	Blended	PP	MCQ	OB	SO	AO	Cicuits
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 %



#### **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. 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



#### **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**

- 1. Sustainable and Renewable Energy Technology
- 2. Distributed Generation & Micro Grids
- 3. Power System Planning, Operation & Control
- 4. Energy Storage Technologies