

**Curriculum Structure for UG Electrical Engineering ( applicable for batch entered into 2023-24)**

Curriculum Structure for UG Electrical Engineering ( applicable for batch entered into 2023-24)															
S.Y.		B.Tech. Electrical AY 2024-25 onwards													
Sr. No.	Sem	NEP Category	NEP Category	Code	Course Name	L	T	P	Hr	Cr	MSE/LA 1	ISE/LA2	ESE	OE	POE
1	3	Basic Science Course	BSC	7MA203	Mathematics for Electrical Engg.	3			3	3	30	20	50		
2	3	Entrepreneurship/Economics/	EEM	7EE201	Understanding Incubation and Entrepreneurship (NPTEL)	3			3	3	30	20	50		
3	3	Value Education Course	VEC	7VE201	Value Education	2			2	2	30	20	50		
4	3	Professinal Core Course	PCC	7EL201	DC Machines and Transformers	3			3	3	30	20	50		
5	3	Professinal Core Course	PCC	7EL202	Electrical Circuit Analysis	3			3	3	30	20	50		
6	3	Professinal Core Course	PCC	7EL203	Analog and Digital Circuits	3			3	3	30	20	50		
7	3	Professinal Core Course	PCC	7EL251	DC Machines and Transformers Lab			2	2	1	30	30	40		POE
8	3	Professinal Core Course	PCC	7EL252	Electrical Circuit Analysis Lab			2	2	1	30	30	40		POE
9	3	Professinal Core Course	PCC	7EL253	Analog and Digital Circuits Lab			2	2	1	30	30	40		POE
10	3	Community Engagement Project / Field Project	CEP/FP	7CEEL251	Community Engagement Project / Field Project			2	2	1	30	30	40		
11	3	Vocational Skill Enhancement Course	VSEC	7VSEL251	Simulation Lab	1		2	3	2	30	30	40		
<b>Total</b>						<b>18</b>	<b>0</b>	<b>10</b>	<b>28</b>	<b>23</b>					
Sr. No.	Sem	NEP Category	NEP Category	Code	Course Name	L	T	P	Hr	Cr	MSE/LA 1	ISE/LA2	ESE	OE	POE
12	4	Engineering Science Course	ESC	7ESEL201	Signals and Systems	3			3	3	30	20	50		
13	4	Ability Enhancement Course	AEC	7AE201	Employability skills	2			2	2	30	20	50		
14	4	Indian Knowledge System	IKS	Refer List	IKS Elective	2			2	2	30	20	50		
15	4	Professinal Core Course	PCC	7EL221	AC Machines	3			3	3	30	20	50		
16	4	Professinal Core Course	PCC	7EL222	Electrical Transmission and Distribution	3			3	3	30	20	50		
17	4	Professinal Core Course	PCC	7EL223	Power Electronics	3			3	3	30	20	50		
18	4	Multy Disp. Minor	MDM	Refer List	MDM	3			3	3	30	20	50		
19	4	Professinal Core Course	PCC	7EL271	AC Machines Lab			2	2	1	30	30	40		POE
20	4	Professinal Core Course	PCC	7EL272	Power Electronics Lab			2	2	1	30	30	40		POE
21	4	Vocational Skill Enhancement Course	VSEC	7VSEL271	Advanced Simulation Lab	1		2	3	2	30	30	40		
<b>Total</b>						<b>20</b>	<b>0</b>	<b>6</b>	<b>26</b>	<b>23</b>					
T.Y.		B.Tech. Electrical AY 2025-26 onwards													
Sr. No.	Sem	NEP Category	NEP Category	Code	Course Name	L	T	P	Hr	Cr	MSE/LA 1	ISE/LA2	ESE	OE	POE
22	5	Multy Disp. Minor	MDM	Refer List	MDM	3			3	3	30	20	50		
23	5	Open Elective	OE	Refer list	Open Elective - 1	3			3	3	30	20	50		
24	5	Value Education Course	VEC	7VE301	Environmental Science	2			2	2	30	20	50		
25	5	Professinal Core Course	PCC	7EL301	Power System Analysis and Stability	3			3	3	30	20	50		
26	5	Professinal Core Course	PCC	7EL302	Control System Engineering	3			3	3	30	20	50		
27	5	Professinal Core Course	PCC	7EL303	Digital Signal Processsing	3			3	3	30	20	50		
28	5	Professinal Core Course	PCC	7EL304	Energy Storage System for EV	2			2	2	30	20	50		
29	5	Professinal Core Course	PCC	7EL351	Power System Analysis and Stability Lab			2	2	1	30	30	40		
30	5	Professinal Core Course	PCC	7EL352	Control System Engineering Lab			2	2	1	30	30	40		
31	5	Professinal Core Course	PCC	7EL353	Digital Signal Processsing Lab			2	2	1	30	30	40		
<b>Total</b>						<b>19</b>	<b>0</b>	<b>6</b>	<b>25</b>	<b>22</b>					

Sr. No.	Sem	NEP Category	NEP Category	Code	Course Name	L	T	P	Hr	Cr	MSE/LA 1	ISE/LA2	ESE	OE	POE
32	6	Professional Elective Course	PEC	Refer List	Program Elective - 1	3			3	3	30	20	50		
33	6	Multy Disp. Minor	MDM	Refer List	MDM	4			4	4	30	20	50		
34	6	Open Elective	OE	Refer List	Open Elective - 2	3			3	3	30	20	50		
35	6	Entrepreneurship/Economics/	EEM	7EE301	Finance for Engineers	2			2	2	30	20	50		
36	6	Professional Core Course	PCC	7EL321	Industrial Drives and Control	2			2	2	30	20	50		
37	6	Professional Core Course	PCC	7EL322	Microcontroller and Applications	3			3	3	30	20	50		
38	6	Professional Core Course	PCC	7EL323	Power System Protection	2			2	2	30	20	50		
39	6	Professional Core Course	PCC	7EL371	Microcontroller and Applications Lab			2	2	1	30	30	40		
40	6	Professional Core Course	PCC	7EL372	Industrial Drives and Control Lab			2	2	1	30	30	40		
41	6	Professional Core Course	PCC	7EL373	Power System Protection Lab			2	2	1	30	30	40		
42	6	Vocational Skill Enhancement Course	VSEC	7VSEL371	Mini-Project			2	2	1	30	30	40		
<b>Total</b>						<b>19</b>	<b>0</b>	<b>8</b>	<b>27</b>	<b>23</b>					
<b>Final Y. B.Tech. Electrical AY 2026-27</b>															
<b>Sem A</b>															
Sr. No.	Sem	NEP Category	NEP Category	Code	Course Name	L	T	P	Hr	Cr	MSE/LA 1	ISE/LA2	ESE	OE	POE
43	A	Professional Core Course	PEC	Refer List	Program Elective - 2	3			3	3	30	20	50		
44	A	Professional Elective Course	PEC	Refer List	Program Elective - 3	3			3	3	30	20	50		
45	A	Research Methodology	RM	7RM401	Research Methodology	2			2	2	30	20	50		
46	A	INTERNSHIP	INTERNSHIP	7EL445	Internship				0	8	30	30	40		
<b>Total</b>						<b>8</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>16</b>					
<b>Sem B</b>															
Sr. No.	Sem	NEP Category	NEP Category	Code	Course Name	L	T	P	Hr	Cr	MSE/LA 1	ISE/LA2	ESE	OE	POE
47	B	Professional Core Course	PEC	Refer List	Program Elective - 4	3			3	3	30	20	50		
48	B	Professional Core Course	PEC	Refer List	Program Elective - 5	3			3	3	30	20	50		
49	B	Multy Disp. Minor	MDM	Refer List	MDM	4			4	4	30	20	50		
50	B	Professional Core Course	PCC	7EL421	Advanced Power Electronics	3			3	3	30	20	50		
51	B	Professional Core Course	PCC	7EL422	Power System Operation and Control	3			3	3	30	20	50		
52	B	Co-curricular Course Activity	CCA	7CC471	Techno-Socio Activities			2	2	1	30	30	40		
53	B	Vocational Skill Enhancement Course	VSEC	7VSA01	Professional Practice Lab			2	2	1	30	30	40		
54	B	Research Project	PROJECT	7EL491	Project			10	10	5	30	30	40		
<b>Total</b>						<b>16</b>	<b>0</b>	<b>14</b>	<b>30</b>	<b>23</b>					
										<b>174</b>					