

**THIRD SEMESTER SCHEME FOR LATERAL ENTRY AND ITI PASSED STUDENTS (ELECTRICAL AND ELECTRONICS ENGINEERING )**

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
3.1	*Applied Mathematics -III	5	-	-	4	20	-	20	50	2 ½	-	-	50	70	
3.2	Electrical and Electronics Instrumentation and Measurement	6	-	4	6	20	20	40	50	2 ½	40	3	90	130	
3.3	Electrical and Electronics Engineering Materials	6	-	-	5	20	-	20	50	2 ½	-	-	50	70	
3.4	Principles of Digital Electronics	5	-	4	5	20	20	40	50	2 ½	40	3	90	130	
3.5	Electrical Machine - I	6	-	4	6	20	20	40	50	2 ½	40	3	90	130	
3.6	*Environmental Studies	3	-	2	3	20	10	30	50	2 ½	20	3	70	100	
#Student Centred Activities including Energy Conservation Awareness		-	-	3	2	-	30	30	-	-	-	-	-	30	
<b>Total</b>		<b>31</b>	<b>-</b>	<b>17</b>	<b>31</b>	<b>120</b>	<b>100</b>	<b>220</b>	<b>300</b>	<b>-</b>	<b>140</b>	<b>-</b>	<b>440</b>	<b>660</b>	

\* Common with other diploma programmes

# Student Centred Activities will comprise of co-curricular activities like extension lectures, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self study etc.

A. COMPULSORY SUBJECT OF I & II SEMESTER ELECTRICAL AND ELECTRONICS ENGINEERING TO BE TAUGHT IN III & IV Sem. TO ITI PASSED STUDENTS OF TRADES ARE AS FOLLOWS :

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		L	T	P		INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
						Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
1.1	*Communication Skills-I	4	-	2	4	-	-	-	50	2 ½	20	3	70	70	
1.2	*Applied Mathematics - I	5	-	-	4	-	-	-	50	2 ½	-	-	50	50	
1.3	*Applied Physics – I	5	-	2	5	-	-	-	50	2 ½	20	3	70	70	
1.4	*Applied Chemistry	5	-	2	5	-	-	-	50	2 ½	20	3	70	70	
		19		6	18	-	-	-	200		60		260	260	

\* Common with other diploma programmes

# Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.

(\* ) It is compulsory to appear & to pass in examination From III Semester To VI Semester, But credit/marks will not be included for division and percentage of obtained marks.

(\* ) Four Semester (Two Years) of Extra Time will be given after diploma curriculum period (If Required) to pass the above paper (1.1 To 1.4 and 2.1 to 2.2) examination (As Per G. O. No. 2221/16-Pra. Shi.-3-2009 Dated 28-08-2009) & Revised G.O. No. 2704/16-Pra.Shi.-3-2013-46(8)/2002 Dated 09-01-2013 and B.T.E Order No. Pra.Shi.Pa/C.D.C./2022/872021 Dated 21.02.22

**FOURTH SEMESTER SCHEME FOR LATERAL ENTRY AND ITI PASSED STUDENTS (ELECTRICAL AND ELECTRONICS ENGINEERING )**

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
4.1	*Communication Skill- II	4	-	2	4	20	10	30	50	2 ½	20	3	70	100	
4.2	Industrial Electronics and Control	5	-	4	6	20	20	40	50	2 ½	40	3	90	130	
4.3	Electrical Design, Drawing and Estimating-I	3	-	4	5	20	20	40	50	3	40	4	90	130	
4.4	Network Filters and Transmission Line	4	-	3	4	20	-	20	50	2 ½	-	-	50	70	
4.5	Transmission and Distribution of Electrical Power	5	1	-	5	20	-	20	50	2 ½	-	-	50	70	
4.6	Principles of Communication Engineering	4	-	3	3	20	10	30	50	2 ½	20	3	70	100	
4.7	Energy Conversion	3	-	2	1	-	20	20	-	-	30	3	30	50	
# Student Centred Activities		-	-	1	1	-	30	30	-	-	-	-	-	30	
<b>Total</b>		<b>28</b>	<b>1</b>	<b>19</b>	<b>29</b>	<b>120</b>	<b>110</b>	<b>230</b>	<b>300</b>	<b>-</b>	<b>150</b>	<b>-</b>	<b>450</b>	<b>680</b>	

Note: Industrial Training for 4 weeks after fourth semester during summer vacation.

# Student Centred Activities will comprise of co-curricular activities like extension lectures, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self study etc.

B. COMPULSORY SUBJECT OF I & II SEMESTER ELECTRONICS AND COMMUNICATION ENGINEERING TO BE TAUGHT IN III & IV Sem.  
ITI PASSED STUDENTS OF TRADES ARE AS FOLLOWS :

Sr. No.	SUBJECTS	STUDY SCHEME Periods/Week			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		L	T	P		INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
						Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
2.1	*Applied Mathematics - II	5	-	-	4	-	-	-	50	2 ½	-	-	50	50	
2.2	*Applied Physics -II	5	-	2	5	-	-	-	50	2 ½	20	3	70	70	
<b>Total</b>		<i>10</i>	-	<b>2</b>	<i>9</i>	-	-	-	<b>100</b>	-	<b>20</b>	-	<b>120</b>	<b>120</b>	

\* Common with other diploma programme

# Student Centred Activities will comprise of co-curricular activities like extension lectures, self study, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities, disaster management and safety etc.  
Industrial training of 4 weeks duration to be organised after 4<sup>th</sup> semester exams

(\* ) It is compulsory to appear & to pass in examination From III Semester To VI Semester, But credit/marks will not be included for division and percentage of obtained marks.

(\* ) Four Semester (Two Years) of Extra Time will be given after diploma curriculum period (If Required) to pass the above paper (1.1 To 1.4 and 2.1 to 2.2) examination (As Per G. O. No. 2221/16-Pra. Shi.-3-2009 Dated 28-08-2009) & Revised G.O. No. 2704/16-Pra.Shi.-3- 2013-46(8)/2002 Dated 09-01-2013 and B.T.E Order No. Pra.Shi.Pa/C.D.C./2022/872021 Dated 21.02.22

**FIFTH SEMESTER SCHEME FOR LATERAL ENTRY AND ITI PASSED STUDENTS (ELECTRICAL AND ELECTRONICS ENGINEERING)**

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
-	Industrial Training	-	-	-	2	-			-	-	50	3	50	50	
5.1	*Industrial Management and Entrepreneurship Development	5	-	-	4	20	-	20	50	2 ½	-	-	50	70	
5.2	Switchgear and Protection	5	1	-	5	20	-	20	50	2 ½	-	-	50	70	
5.3	Microprocessors and peripheral devices	6	-	6	7	20	35	55	50	2 ½	70	3	120	175	
5.4	Electrical Machine – II	6	1	6	8	20	35	55	50	2 ½	70	3	120	175	
5.5	**Elective	6	-	-	5	20	-	20	50	2 ½	-	-	50	70	
#Student Centred Activities(SCA)		-	-	6	2	-	30	30	-	-	-	-	-	30	
<b>Total</b>		28	2	18	33	100	100	200	250	-	190	-	440	640	

\* Common with other diploma programmes

\*\* Elective (Any one out of the following)

5.5.1 Renewable Sources of Energy

5.5.2 Communication Networks

5.5.3 Utilization of Electrical Energy

5.5.4 Electrical Traction

# Student Centred Activities will comprise of co-curricular activities like extension lectures, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self study etc.

**SIXTH SEMESTER SCHEME FOR LATERAL ENTRY AND ITI PASSED STUDENTS (ELECTRICAL AND ELECTRONICS ENGINEERING )**

Sr. No.	SUBJECTS	STUDY SCHEME			Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
		Periods/Week				INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
6.1	Installation, Maintenance and Repair of Electrical Equipment	6	-	6	7	20	35	55	50	2 ½	70	3	120	175	
6.2	Electrical Design, Drawing and Estimating II	4	-	8	7	20	20	40	50	3	40	4	90	130	
6.3	Control System	5	-	-	4	20	-	20	50	2.5	-	-	50	70	
6.4	Application of Computer Software in Electrical Engineering	-	-	2	1	-	20	20	-	-	30	3	30	50	
6.5	Universal Human Values	2	-	1	5	-	50	50	-	-	100	3	100	150	
6.6	Project Work	-	-	12	5	-	50	50	-	-	100	3	100	150	
#Student Centred Activities		-	-	1	2	-	-	30	30	-	-	-	-	-	
<b>Total</b>		<b>17</b>	<b>-</b>	<b>29</b>	<b>31</b>	<b>60</b>	<b>175</b>	<b>265</b>	<b>180</b>	<b>-</b>	<b>340</b>	<b>-</b>	<b>490</b>	<b>725</b>	

# Student Centred Activities will comprise of co-curricular activities like extension lectures, games, hobby clubs e.g. photography etc., seminars, declamation contests, educational field visits, N.C.C., NSS, Cultural Activities and self study etc.