

## STUDY AND EVALUATION SCHEME FOR LATERAL ENTRY AND ITI PASSES STUDENTS ELECTRICAL ENGINEERING

### THIRD SEMESTER

Sr. No.	SUBJECTS	COURSE TYPE & CATEGORY	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	BASICS OF POWER GENERATION SYSTEMS	PROGRAM CORE (THEORY)	03	-	-	3	40	-	40	60	3	-	-	60	100	
3.2	ELECTRIC MACHINE- 1	PROGRAM CORE (THEORY)	04	-	-	4	40	-	40	60	3	-	-	60	100	
3.3	ELECTRICAL CIRCUITS	PROGRAM CORE (PRACTICUM)	01	-	04	3	-	60	60	-	-	40	3	40	100	
3.4	ELECTRICAL AND ELECTRONIC MEASUREMENTS	PROGRAM CORE (PRACTICUM)	02	-	04	4	-	60	60	-	-	40	3	40	100	
3.5	ELECTRIC MACHINE- 1 (Lab)	PROGRAM CORE (PRACTICAL)	-	-	04	2	-	60	60	-	-	40	3	40	100	
3.6	ADVANCE SKILL CERTIFICATION	OPEN ELECTIVE-1*	02	-	-	2	-	-	-	-	-	-	-	-	NA	
3.7	MINOR PROJECT**		-	-	-	2	-	50*	50*	-	-	-	-	-	50*	
#STUDENT CENTERED ACTIVITIES			-	-	12	-	-	50	50	-	-	-	-	-	50	
Total			12		24	20	80	280	360	120		120		240	600	

\* Students can earn 2 credits for Open Elective courses either by completing a relevant certification from recognized external platforms such as TATA Technologies, NPTEL, or similar, upon submission and verification of the certificate; or by completing the course offered by their own polytechnic institute, in which case credits will be awarded based on internal assessment. conducted by the institute.

\*\* Lateral entry students shall undertake a minor project and deliver a presentation on the same. This project will serve as an equivalent to summer internship-I for the purpose of earning the associated credits and marks.

# Student Centered 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, library, Cultural Activities and self-study etc.

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

**I. WIREMAN II. ELECTRICIAN III. ELECTROPLATER IV. ELECTRICAL SECTOR**

Sr. No.	SUBJECTS	STUDY  SCHEME  Periods/Week				Credits	MARKS IN EVALUATION SCHEME									Total Marks of Internal & External
							INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT						
		L	T	P	Total		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot		
1.1	*MATHEMATICS-I	2	1	-	3	3	40	-	40	60	3	-	-	60	100	
1.2	*APPLIED PHYSICS-I	3	-	2	5	4	40	60	100	60	3	40	3	100	200	
1.3	*APPLIED CHEMISTRY	3	-	2	5	4	40	60	100	60	3	40	3	100	200	
1.4	*COMMUNICATION SKILLS IN ENGLISH	3	-	2	5	4	40	60	100	60	3	40	3	100	200	
TOTAL		11	1	6	18	15	160	180	340	240		120		360	700	

\* 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

**STUDY AND EVALUATION SCHEME FOR LATERAL ENTRY AND ITI PASSES STUDENTS ELECTRICAL ENGINEERING  
FOURTH SEMESTER**

Sr. No.	SUBJECTS	COURSE TYPE & CATEGORY	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	ELECTRIC POWER TRANSMISSION AND DISTRIBUTION	PROGRAM CORE (THEORY)	03	-	-	3	40	-	40	60	3	-	-	60	100	
4.2	ELECTRIC MACHINE- II	PROGRAM CORE (THEORY)	03	-	-	3	40	-	40	60	3	-	-	60	100	
4.3	FUNDAMENTALS OF POWER ELECTRONICS	PROGRAM CORE (PRACTICUM)	02	-	04	4	-	60	60	-	-	40	3	40	100	
4.4	PROGRAM ELECTIVE -1	PROGRAM CORE (PRACTICUM)	01		04	3	-	60	60	-	-	40	3	40	100	
4.5	PROGRAM ELECTIVE -2	PROGRAM CORE (THEORY)	03		-	3	40	-	40	60	3			60	100	
4.6	ELECTRIC MACHINE- II (Lab)	PROGRAM CORE (PRACTICAL)	-	-	04	2	-	60	60	-	-	40	3	40	100	
4.7	ADVANCE SKILL CERTIFICATION	OPEN ELECTIVE-2*	02	-	-	2	-	-	-	-	-	-	-	-	NA	
4.8	ESSENCE OF INDIAN KNOWLEDGE AND TRADITION	AUDIT COURSE	02	-	-	-	50	-	50	-	-	-	-	-	NA	
#STUDENT CENTERED ACTIVITIES			-	-	08	-	-	50	50	-	-	-	-	-	50	
Total			16		20	20	120	230	350	180		120		300	650	

\* Students can earn 2 credits for Open Elective courses either by completing a relevant certification from recognized external platforms such as TATA Technologies, NPTEL, or similar, upon submission and verification of the certificate; or by completing the course offered by their own polytechnic institute, in which case credits will be awarded based on internal assessment conducted by the institute.

# Student Centered 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, library, Cultural Activities and self-study etc.

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

**I. WIREMAN II. ELECTRICIAN III. ELECTROPLATER IV. ELECTRICAL SECTOR**

Sr. No.	SUBJECTS	STUDY  SCHEME  Periods/Week				Credits	MARKS IN EVALUATION SCHEME										TOTAL MARKS OF INTERNAL & EXTERNAL
							INTERNAL ASSESSMENT			EXTERNAL ASSESSMENT							
		L	T	P	Total		Th	Pr	Tot	Th	Hrs	Pr	Hrs	Tot			
2.1	*MATHEMATICS-II	3	1	-	4	4	40	-	40	60	3	-	-	60	100		
2.2	*APPLIED PHYSICS-II	3	-	2	5	4	40	60	100	60	3	40	3	100	200		
Total		6	1	2	9	8	80	60	140	120		40		160	300		

\* 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.

Summer Internship (Industrial training) of 4 weeks duration to be organised after 4th 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

**OPEN ELECTIVE-1**

SR.NO.	SUBJECT NAME
1.	ENGINEERING ECONOMICS & ACCOUNTANCY (Course offered by Polytechnic Institute) OR DISASTER MANAGEMENT (Course offered by Polytechnic Institute)
2.	PRODUCT DESIGN AND DEVELOPMENT (Course offered by TATA Technology) OR FUNDAMENTALS OF INNOVATION AND DESIGN THINKING( Course offered by TATA Technology)
3.	ANY COURSE OF MINIMUM 02 CREDIT FROM NPTEL MOOCS THROUGH SWAYAM AICTE-ELIS AND CENTRALLY FUNDED TECHNICAL INSTITUTES C-DAC CERTIFICATIONS CONDUCTED BY THE INSTITUTE OF NATIONAL IMPORTANCE (IIT,NIT,IIIT ETC.) ISRO E-LEARNING OTHER RELEVANT GOVERNMENT, INTERNATIONAL/NATIONAL PLATFORMS OF REPUTE NEILIT

**OPEN ELECTIVE -2**

SR.NO.	SUBJECT NAME
1.	ECONOMIC POLICIES IN INDIA (Course offered by Polytechnic Institute) OR MECHATRONICS (Course offered by Polytechnic Institute)
2.	ELECTRIC VEHICLE (Course offered by TATA Technology) OR INDUSTRIAL ROBOTICS(Course offered by TATA Technology)
3.	ANY COURSE OF MINIMUM 02 CREDIT FROM NPTEL MOOCS THROUGH SWAYAM AICTE-ELIS AND CENTRALLY FUNDED TECHNICAL INSTITUTES C-DAC CERTIFICATIONS CONDUCTED BY THE INSTITUTE OF NATIONAL IMPORTANCE (IIT,NIT,IIIT ETC.) ISRO E-LEARNING OTHER RELEVANT GOVERNMENT, INTERNATIONAL/NATIONAL PLATFORMS OF REPUTE NEILIT

**PROGRAME ELECTIVE-1**

<b>SR.NO.</b>	<b>SUBJECT NAME</b>
1.	INDUSTRIAL AUTOMATION AND CONTROL
2.	INDUSTRIAL INSTRUMENTATION AND CONDITION MONITORING

**PROGRAME ELECTIVE-2**

<b>SR.NO.</b>	<b>SUBJECT NAME</b>
1.	RENEWABLE ENERGY POWER PLANTS
2.	BIOMASS AND MICRO-HYDRO POWER PLANTS