

West Bengal State Council of Technical &
Vocational Education and Skill
Development
(Technical Education Division)



Curriculum Structure
of

Diploma in Electrical Engineering [EE]

Part-II (3rd & 4th Semester) and Part-III (5th
& 6th Semester)

Revised 2022

**Curriculum structure for 3rd, 4th, 5th and 6th semester students of Diploma in
Electrical Engineering**

3rdSemester

Sl.No	Category of course	Code No	Course Title	Credits	Marks	Total Contact Hours per Week	
						L	P
1	Program Core Course		Introduction to Electric Generation Systems	3	100	3	0
2	Program Core Course		Introduction to Electric Generation Systems Laboratory	1	100	0	2
3	Program Core Course		Electrical Circuits	3	100	3	0
4	Program Core Course		Electrical Circuits Laboratory	1	100	0	2
5	Program Core Course		Electrical and Electronic Measurement	3	100	3	0
6	Program Core Course		Electrical and Electronic Measurement Laboratory	1	100	0	2
7	Program Core Course		DC Machines and Transformers	3	100	3	0
8	Program Core Course		DC Machines and Transformers Laboratory	1	100	0	2
9	Program Core Course		Analog and Digital electronics	3	100	3	0
10	Program Core Course		Analog and Digital electronics Laboratory	1	100	0	2
11	Internship		Internship-I	1	100	0	
TOTAL				21	1100	15	10
Total contact hrs/ week =25							

4thSemester

Sl.No	Category of course	Code No	Course Title	Credits	Marks	Contact Hours per Week	
						L	P
1	Program Core Course		Power Electronics Converters and Application	3	100	3	0
2	Program Core Course		Power Electronics Converters and Application Laboratory	1	100	0	2
3	Program Core Course		Electric Power Transmission and Distribution	3	100	3	0
4	Program Core Course		Electric Power Transmission and Distribution Laboratory	1	100	0	2
5	Program Core Course		Induction, Synchronous and Special Electrical Machines	3	100	3	0
6	Program Core Course		Induction, Synchronous and Special Electrical Machines Laboratory	1	100	0	2
7	Program Core Course		Renewable Energy Power Plants	3	100	3	0
8	Program Core Course		Renewable Energy Power Plants Laboratory	1	100	0	2
9	Program Elective course I		Switchgear and protection	3	100	3	0
10	Program Elective course I Lab		Switchgear and Protection Laboratory	1	100	0	2
11	Minor Project			1	100	0	2
TOTAL				21	1100	15	12
Total contact hrs/ week =27							

5thSemester

Sl.No	Category of course	Code No	Course Title	Credits	Marks	Total Contact Hours per Week	
						L	P
1	Program Core Course		Microcontroller and its Applications	3	100	3	0
2	Program Core Course		Microcontroller and its Applications Laboratory	1	100	0	2
3	Program Core Course		Building Electrification	3	100	3	0
4	Program Core Course		Building Electrification Laboratory	1	100	0	2
5	Program Elective course II		<u>Any one of the following subjects to be chosen</u> 1. Industrial Automation &Control 2. Industrial Drives	3	100	3	0
6	Program Elective course II lab		<u>Any one of the following laboratories to be chosen</u> 1. Industrial Automation &Control Laboratory 2. Industrial Drives Laboratory	1	100	0	2
7	Program Elective course III		<u>Any one of the following subjects to be chosen</u> 1. Illumination Practices 2. Electric Traction 3. Solar Power Technologies.	3	100	3	0
8	Program Elective course III Lab		<u>Any one of the following laboratories to be chosen</u> 1. Illumination Practices Laboratory 2. Electric Traction Laboratory 3. Solar Power Technologies Laboratory	1	100	0	2
9	Internship		Internship II	1	100	0	
10	Major Project			2	100	0	4
TOTAL				19	1000	12	12
Total contact hrs/ week = 24							

6th Semester

Sl.No	Category of course	Code No	Course Title	Credits	Marks	Total Contact Hours per Week	
						L	P
1	Program Core Course		Energy conservation and Audit	3	100	3	0
2	Program Core Course		Energy conservation and Audit Laboratory	1	100	0	2
3	Program Elective course IV		<u>Any one of the following subjects to be chosen</u> 1. Industrial Instrumentation and Condition Monitoring 2. Electrical Testing and Commissioning	3	100	3	0
4	Program Elective course IV Lab		<u>Any one of the following subjects to be chosen</u> 1. Industrial Instrumentation and Condition Monitoring lab 2. Electrical Testing and Commissioning Laboratory	1	100	0	2
5	Humanities and Social Science		Entrepreneurship and Start-ups	4	100	4	0
6	Open Elective course-I		Engineering Economics and Project Management	3	100	3	0
7	Open Elective course- II		<u>Any one of the following subjects to be chosen.</u> i. Mechatronics ii. Disaster management iii. Internet of Things iv. Environmental Engineering and Science v. Industrial Management vi. Sustainable development vii. Industrial Safety Engineering viii. Introduction to E-Governance ix. Professional Orientation x. Medical Electronics	3	100	3	0
8	Major Project			2	100	0	4
9	Seminar			1	100	1	0
TOTAL				21	900	17	8
Total contact hrs/ week =25							