

## WEST BENGAL STATE COUNCIL OF TECHNICAL & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT

(A Statutory Body under Government of West Bengal Act XXVI of 2013)

Department of Technical Education, Training & Skill Development, Government of West Bengal Karigari Bhawan, 4th & 5th Floor, Plot No. B/7, Action Area-III, Newtown, Rajarhat, Kolkata–700160

### **WBSCTVESD Curriculum for Diploma Courses in Engineering and Technology**

#### Semester - I

Sl.	Category of	Course Tifle		Hours per week		Total contact	Credits	Marks	
No.	Course		L	Т	P	hrs/ week			
	Theory Subjects								
1.	Basic Science	Mathematics-I	2	1	0	3	3	100	
2.	Basic Science	Applied Physics-I	2	1	0	3	3	100	
3.	Basic Science	Applied Chemistry	2	1	0	3	3	100	
4.	Humanities & Social Science	Communication Skills in English	2	0	0	2	2	100	
	Practical Subjects								
5.	Engineering Science	Engineering Graphics	0	0	3	3	1.5	100	
6.	Engineering Science	Engineering Workshop Practice	0	0	3	3	1.5	100	
7.	Basic Science	Applied Physics-I Lab	0	0	2	2	1	100	
8.	Basic Science	Applied Chemistry Lab	0	0	2	2	1	100	
9.	Humanities & Social Science	Sports and Yoga	0	0	2	2	1	100	
10.	Humanities & Social Science	Communication Skills in English Lab	0	0	2	2	1	100	
		Total	8	3	14	25	18	1000	

### Semester - II

Sl.	Category of	Course Title	Hours per week			Total contact	Credits	Marks
No.	Course		L	Т	P	hrs/ week	GI GUILG	
	7	Theory Subjects						
1.	Basic Science	Mathematics-II	3	1	0	4	4	100
2.	Basic Science	Applied Physics-II	2	1	0	3	3	100
3.	Engineering Science	Introduction to IT Systems	2	0	0	2	2	100
4.	Engineering Science	Fundamentals of Electrical & Electronics Engineering	2	1	0	3	3	100
5.	Engineering Science	Engineering Mechanics	2	1	0	3	3	100
	P	ractical Subjects						
6.	Basic Science	Applied Physics-II Lab	0	0	2	2	1	100
7.	Engineering Science	Introduction to IT Systems Lab	0	0	4	4	2	100
8.	Engineering Science	Fundamentals of Electrical & Electronics Engineering Lab	0	0	2	2	1	100
9.	Engineering Science	Engineering Mechanics Lab	0	0	2	2	1	100
	AUDIT COURSE	S-Mandatory non-credit courses						
10.	Audit	Indian Constitution	2	0	0	2	0	100
		Total	13	4	10	27	20	1000

### CURRICULAR STRUCTURE FOR PART – II FIRST SEMESTER (THIRD SEMESTER) OF THE FULL-TIME DIPLOMA COURSE IN CIVIL ENGINEERING

SL.		SUBJECT OF STUDY	HOURS	PER WEEK		CREDIT	Mark
No ·	SUBJECT CODE	THEORETICAL PAPERS	LECTUR E	TUTORIA L	PRACTICA L	S	s
1	CEPC301	Construction Materials	2	0	0	2	100
2	CEPC302	Basic Surveying	3	0	0	3	100
3	CEPC303	Mechanics of Materials	3	0	0	3	100
4	CEPC304	Building Construction	2	0	0	2	100
5	CEPC305	Concrete Technology	2	0	0	2	100
6	CEPC306	Civil Engineering Planning and Drawing	1	0	0	1	100
7	CEPC307	Transportation Engineering	2	0	0	2	100
		LABORATORY/SESSIONA L PAPERS					
8	CEPC308S	Civil Engineering Planning and Drawing Practices	0	0	4	2	100
	(consisting o	: Civil Engineering Lab- I f following four Modules cal Classes and 4 Credits)					
9	CEPC309S/I	Module-I: Construction Material Lab	0	О	2	1	100
10	CEPC309S/II	Module-II: Mechanics of Materials Lab	0	0	2	1	100
11	CEPC309S/II I	Module-III: Concrete Technology Lab	0	0	2	1	100
12	CEPC309S/I V	Module-IV: Transportation Engineering Lab	0	0	2	1	100
		INTERNSHIP					
13	CEI310S	Internship-I after 2 <sup>nd</sup> Semester	0	0	0	1	100
		TOTAL	15	0	12	22	1300

## TENTATIVE CURRICULAR STRUCTURE FOR PART – II SECOND SEMESTER (FOURTH SEMESTER) OF THE FULL-TIME DIPLOMA COURSE IN CIVIL ENGINEERING

SL.	SUBJECT	SUBJECT OF STUDY	но	URS PER	WEEK	CREDIT S	Mark s
No ·	CODE	THEORETICAL PAPERS	LECTUR E	TUTORIA L	PRACTICA L		
1	CEPC401	Hydraulics	2	0	0	2	100
2	CEPC402	Advanced Surveying	3	0	0	3	100
3	CEPC403	Theory of Structure	3	0	0	3	100
4	CEPC404	Geotechnical Engineering	3	0	0	3	100
5	CEPC405	Design of RCC and Steel Structure	3	0	0	3	100
		LABORATORY/SESSION AL PAPERS					
6	CEPC406S	Basic Surveying Field Practices	0	0	2	1	100
	(consisting	Civil Engineering Lab- II of following two Modules cal Classes and 2 Credits)					
7	CEPC407S/I		0	0	2	1	100
8	CEPC407S/I I	Module-VI: Geotechnical Engineering Lab	0	0	2	1	100
		ELECTIVE & PROJECT					
9	CEPE408	Elective - I:one subject out of Precast and Prestressed Concrete (subject code: CEPE 408/I)/Rural Construction Technology (subject code: CEPE 408/II)	3	0	0	3	100
10	CEPR409S	Minor Project	0	0	4	2	100
		TOTAL	17	0	10	22	1000

<sup>\*</sup> All subjects (theoretical as well as sessional) are full paper with 100 marks in aggregate as per AICTE and WBSCT&VE&SD

<sup>\*</sup> Basic Surveying Field Practices may also be conducted in 2-3 weeks field work continously instead of having 2 practical class per week for the entire semester.

# CURRICULAR STRUCTURE FOR PART – III FIRST SEMESTER (FIFTH SEMESTER) OF THE FULL-TIME DIPLOMA COURSE IN CIVIL ENGINEERING

SL.	SUBJECT	SUBJECT OF STUDY	Н	OURS PER V	VEEK	CREDIT S	Mark s
No ·	CODE	THEORETICAL PAPERS	LECTUR E	TUTORIA L	PRACTICA L		
1	CEPC501	Water Resource Engineering	2	0	0	2	100
2	CEPC502	Estimating, Costing and Valuation	3	0	0	3	100
		LABORATORY/SESSION AL PAPERS					
3	CEPC503 S	Design of RCC and Steel Structure Practices	0	0	2	1	100
4	CEPC504 S	Estimating, Costing and Valuation Practices	0	0	2	1	100
5	CEPC505 S	Water Resource Engineering Practices	0	0	2	1	100
		ELECTIVE, PROJECT AND INTERNSHIP					
6	CEPE506	Elective - II: one subject out of Advanced Design of Structures (CEPE506/I) / Traffic Engineering (CEPE506/II)	3	0	0	3	100
7	CEPE507	Elective - III: one subject out of Building Services and Maintenance (CEPE507/I) /Repair and Maintenance of of Structures (CEPE507/II)	3	0	0	3	100
8	CEI508	Internship-II after fourth Semester	0	0	0	1	100
9	CEPR509 S	Major Project I	0	0	4	2	100
10	CEPC510	Safety Engineering & Management in the Construction Sector	2	0	0	2	100
		TOTAL	13	0	10	19	1000

### CURRICULAR STRUCTURE FOR PART – III SECOND SEMESTER (SIXTH SEMESTER) OF THE FULL-TIME DIPLOMA COURSE IN CIVIL ENGINEERING

SL.	SUBJECT	SUBJECT OF STUDY	н	OURS PER V	WEEK	CREDIT S	Mark s
No	CODE	THEORETICAL PAPERS	LECTUR E	TUTORIA L	PRACTICA L		
1	CEPC601	Public Health Engineering	2	0	0	2	100
		LABORATORY/SESSION AL PAPERS					
2	CEPC602 S	Civil Engineering Lab- III: Module-VII: Public Health Engineering Lab	0	0	2	1	100
3	CEPC603 S	Advanced Surveying Practices	0	0	2	1	100
		ELECTIVE, MANDATORY COURSES AND SEMINAR					
4	CEPE604	Elective IV: one subject out of Tendering and Accounts (CEPE604/I) / Advanced Construction Technology (CEPE604/ II)	3	0	0	3	100
5		Entrepreneurship and Start-ups	3	0	0	3	100
6		Compulsory Open Elective: Open Elective I: Engineering Economics &Project Management	3	O	0	3	100
7		Open Elective II: one subject has to be taken from list of open elective subjects as provided by WBSCT&VE&SD*	3	0	0	3	100
8.	CEPR605 S	Major Project-II	0	0	4	2	100
9.	CESE606 S	Seminar and Viva -Voce	1	0	0	1	100
		TOTAL	15	0	8	19	900

#### NOTE: -

- 1. All subjects (theoretical as well as sessional/practical) are full paper with 100 marks in aggregate as per AICTE and WBSCT&VE&SD
- 2. Advanced Surveying Field Practices may also be conducted in 2-3 weeks field work continuously instead of having 2 practical classes per week for the entire semester.

\*Note: Civil students will be benefited if they choose Solid waste management/ Disaster Management/ Construction Management as the subject for Open Elective II from the list provided by WBSCT&VE&SD\*

### ABSTRACT:

	Lecture	Tutorial	Practical	Credit
Semester 3	15	0	12	22
Semester 4	17	0	10	22
Semester 5	13	0	10	19
Semester 6	15	0	8	19
Total	60	0	40	82