

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



Curriculum Structure
of

Diploma in Architecture [ARCH]

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

Revised 2022

Curriculum structure for part-II (2nd Year) of the Full-time Diploma Courses in Engineering & Technology

West Bengal State Council of Technical & Vocational Education and Skill Development (Technical Education Division)									
Teaching Scheme for Diploma in Engineering Courses: Branch- Architecture(3 rd Semester)									
Sl no	Category	Code No	Course Title	Credits	periods			Contact hours per week	Marks
					L	TU	PR		
1	Programme core course	ARPC 201	Strength of Material	2	2	0	0	2	100
2	Programme core course	ARPC 203	Materials and Methods of Construction-I	2	2	0	0	2	100
3	Programme core course	ARPC 205	History of Architecture-I	2	2	0	0	2	100
4	Programme core course	ARPC 207	Building services & Equipments-I	2	2	0	0	2	100
5	Programme core course	ARPC 209	Architectural Design –I	1	0	2	0	2	100
6	Programme core course	ARPC 211	Architectural Drawing-III (Sessional)	2	0	1	4	5	100
7	Programme core course	ARPC 213	Architectural Design –I (Sessional)	2	0	0	3	3	100
8	Programme core course	ARPC 215	Working Drawing-I (Sessional)	3	0	1	4	5	100
9	Programme core course	ARPC 217	Computer Lab-I (Sessional)	2	0	1	4	5	100
10	Internship-I	SI 201		1	-	-	-	-	100
			Total Credit	19				28	1000

West Bengal State Council of Technical & Vocational Education and Skill Development (Technical Education Division)									
Teaching Scheme for Diploma in Engineering Courses: Branch- Architecture(4 th Semester)									
Sl no	Category	Code No	Course Title	Credits	periods			Contact hours per week	Marks
					L	TU	PR		
1	Programme core course	ARPC 202	Theory of structure	2	2	0	0	2	100
2	Programme core course	ARPC 204	Materials and Methods of Construction-II	2	2	0	0	2	100
3	Programme core course	ARPC 206	History of Architecture-II	2	2	0	0	2	100
4	Programme core course	ARPC 208	Building services & Equipments-II	2	2	0	0	2	100
5	Programme core course	ARPC 210	Architectural Design –II	1	0	2	0	2	100
6	Programme core course	ARPC 212	Architectural Drawing-IV (Sessional)	2	0	1	3	4	100
7	Programme core course	ARPC 214	Architectural Design –II (Sessional)	2	0	0	3	3	100
8	Programme core course	ARPC 216	Working Drawing-II (Sessional)	3	0	1	4	5	100
9	Programme core course	ARPC 218	Computer Lab-II(Sessional)	2	0	1	3	4	100
10	Programme elective course	ARPE 202	(Elective-I)- (Sessional)	2	0	1	2	3	100
			Total Credit	20				29	1000

Curriculum structure for part-III (3rd Year) of the Full-time Diploma Courses in Engineering & Technology

West Bengal State Council of Technical & Vocational Education and Skill Development (Technical Education Division)									
Teaching Scheme for Diploma in Engineering Courses: Branch- Architecture(5 th Semester)									
Sl no	Category	Code No	Course Title	Credits	periods			Contact hours per week	Marks
					L	TU	PR		
1	Programme core course	ARPC 301	DOS	2	2	0	0	2	100
2	Programme core course	ARPC 303	ECSV-I	2	2	0	0	2	100
3	Programme core course	ARPC 305	Contemporary architecture-I	2	2	0	0	2	100
4	Programme core course	ARPC 307	Architectural Professional Practice	2	2	0	0	2	100
5	Programme core course	ARPC 309	Architectural Design –III	1	0	2	0	2	100
6	Programme core course	ARPC 311	Architectural Design –III (Sessional)	2	0	0	3	3	100
7	Programme core course	ARPC 313	Working Drawing-III (Sessional)	3	0	1	4	5	100
8	Programme elective	ARPE 301	Programme Elective-II	2	2	0	0	2	100
9	Programme elective	ARPE303	Programme Elective-III (Sessional)	2	0	1	2	3	100
10	Internship-II	SI301		1	-	-	-	-	100
11	Architectural Project	PR302		-	0	2	3	5	-
			Total Credit	19				28	1000

West Bengal State Council of Technical & Vocational Education and Skill Development (Technical Education Division)									
Teaching Scheme for Diploma in Engineering Courses: Branch- Architecture(6 th Semester)									
Sl no	Category	Code No	Course Title	Credits	periods			Contact hours per week	Marks
					L	TU	PR		
1	Programme core course	HS302	Entrepreneurship and start ups	3	2	0	0	2	100
2	Programme core course	ARPC 302	ECSV-II	2	2	0	0	2	100
3	Programme core course	ARPC 304	Contemporary architecture-II	2	2	0	0	2	100
4	Programme core course	ARPC 306	Architectural Design –IV	1	0	2	0	2	100
5	Programme core course	ARPC 308	Architectural Design –IV (Sessional)	2	0	0	3	3	100
6	Programme core course	ARPC 310	Working Drawing-IV (Sessional)	3	0	1	4	5	100
7	Programme elective	ARPE302	Programme Elective-I V(Sessional)	2	0	1	2	3	100
8	Open elective	AROE 302	Open Elective-I	3	2	0	0	2	100
9	Open elective	AROE 304	Open Elective-II	3	2	0	0	2	100
10	Architectural Project & Seminar	PR302	-----	5	0	0	6	6	100
			Total	26				29	1000

**LIST OF PROGRAMME ELECTIVE (PE) COURSES OF DIPLOMA IN ARCHITECTURE,
WBSCT&VE and SD (IV semester –VI semester)**

Course Code	Course Title	Hours Per Week			Semester	Credit
		L	TU	PR		
ARPE 202	Elective-I(Any one to be selected)					
	Surveying	0	1	2	IV	2
	Alternate Building Technology	0	1	2	IV	2
ARPE 301	Elective-II(Any one to be selected)					
	Building Maintenance& Repairing	2	0	0	V	2
	Steel Architecture	2	0	0	V	2
ARPE303	Elective-III(Any one to be selected)					
	Interior Design(Sessional)	0	1	2	V	2
	Illumination (Sessional)	0	1	2	V	2
ARPE302	Elective-IV(Any one to be selected)					
	Landscape Architecture(Sessional)	0	1	2	VI	2
	Architectural Conservation(Sessional)	0	1	2	VI	2

LIST OF OPEN ELECTIVE (OE) COURSES OF DIPLOMA IN ARCHITECTURE

Course Code	Course Title	Hours Per Week			Semester	Credit
		L	TU	PR		
AROE 302	Elective-I					
	Engineering Economics &Accountancy	2	0	0	VI	3
AROE 304	Elective-II (Any one to be selected)					
	Project Management	2	0	0	VI	3
	Disaster Management	2	0	0	VI	3
	Environmental planning& sustainable design	2	0	0	VI	3

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

West Bengal State Council of Technical &
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(Technical Education Division)



Curriculum Structure
of

Diploma in Automobile Engineering [AE]

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

Revised 2022

Semester-wise Detailed Curriculum
Semester III (Second year)
Branch/Course: Automobile Engineering

Sl. No.	Category	Code	Course Title	Hours per week			Total contact hours/ week	Credits
				Lecture	Tutorial	Practical		
1	Program Core Course	AEPC 301	Strength of Materials	2	1	0	3	3
2	Program Core Course	AEPC 302	Heat Power Engineering	3	0	0	3	3
3	Program Core Course	AEPC 303	Automotive Materials and Manufacturing Process	3	0	0	3	3
4	Program Core Course	AEPC 304	Automotive Chassis	3	0	0	3	3
5	Program Core Course	AEPC 305	Automotive Engines	3	0	0	3	3
6	Program Core Course	AEPC 306	Heat Power Engineering Lab	0	0	2	2	1
7	Program Core Course	AEPC 307	Automotive Materials and Manufacturing Process Lab	0	0	2	2	1
8	Program Core Course	AEPC 308	Automotive Chassis Lab	0	0	2	2	1
9	Program Core Course	AEPC 309	Automotive Engine Lab	0	0	3	3	1.5
10	Internship - I after II nd Sem	SI 301	Internship	0	0	0	0	1
Total				14	1	9	24	20.5

Semester-wise Detailed Curriculum
Semester IV (Second year)
Branch/Course: Automobile Engineering

Sl. No.	Category	Code	Course Title	Hours per week			Total contact hours/ week	Credits
				Lecture	Tutorial	Practical		
1	Program Core Course	AEPC 401	Automotive Powertrain	3	0	0	3	3
2	Program Core Course	AEPC 402	Fluid Mechanics & Machines	2	1	0	3	3
3	Program Core Courses	AEPC 403	Theory of Machines & Mechanism	2	1	0	3	3
4	Program Elective Course	AEPC 404	Automotive Component Design	3	0	0	3	3
5	Program Elective Course	AEPE 411/412	Any one Programme Elective	3	0	0	3	3
6	Program Core Course	AEPC 405	Automotive Powertrain Lab	0	0	2	2	1
7	Program Core Course	AEPC 406	Strength of Material and Fluid Mechanics Lab	0	0	3	3	1.5
8	Program Core Course	AEPC 407	Automobile Engineering Drawing and Computer Graphics Lab	0	0	4	4	2
9	Minor Project	PR 402		0	0	4	4	2
Total				13	2	13	28	21.5

List of Programme Electives for Fourth Semester

1. AEPE 411: Automotive Pollution & Control
2. AEPE 412: Alternate Fuels and Energy Systems

Semester-wise Detailed Curriculum
Semester V (Third year)
Branch/Course: Automobile Engineering

Sl. No.	Category	Code	Course Title	Hours per week			Total contact hours/ week	Credits
				Lecture	Tutorial	Practical		
1	Program Core Course	AEPC 501	Fluid Power	3	0	0	3	3
2	Program Core Course	AEPC 502	Automotive Electrical & Electronics	3	0	0	3	3
3	Program Core Course	AEPC 503	M. V. Act & Transport Management	3	0	0	3	3
4	Program Elective Course	AEPE 511/ 512	Any one Programme Elective	3	0	0	3	3
5	Program Elective Course	AEPE 513/ 514	Any one Programme Elective	3	0	0	3	3
6	Program Core Course	AEPC 504	Automotive Electrical & Electronics Lab	0	0	2	2	1
7	Internship-II after IV th Sem	SI 501		0	0	0	0	1
8	Major Project	PR 502		0	0	2	2	1
Total				15	0	4	19	18

List of Programme Electives for Fifth Semester

1. AEPE 511: CAD/CAM and Modern Manufacturing Methods
2. AEPE 512: Automobile Air Conditioning
3. AEPE 513: Earth Moving Equipments & Farm Machinery
4. AEPE 514: Two & Three Wheelers

Semester-wise Detailed Curriculum
Semester VI (Third year)
Branch/Course: Automobile Engineering

Sl. No.	Category	Code	Course Title	Hours per week			Total contact hours/ week	Credits
				Lecture	Tutorial	Practical		
1	Program Core Course	AEPE 601	Garage Practice	3	0	0	3	3
2	Humanities and Social Science Course	HS 602	Entrepreneurship and Start-ups	3	1	0	4	4
3	Open Elective	AEOE 621	Engineering Economics and Project Management	3	0	0	3	3
4	Open Elective	AEOE 622/ 623/ 624/ 625	Any one Open Elective	3	0	0	3	3
5	Program Elective Course	AEPE 611/ 612	Any one Programme Elective	3	0	0	3	3
6	Program Core Course	AEPE 602	Garage Practice Lab	0	0	2	2	1
7	Program Core Course	AEPE 603	Driving Practice Lab	0	0	2	2	1
8	Major Project	PR 602		0	0	6	6	3
9	Seminar	SE 602		1	0	0	1	1
Total				16	1	10	27	22

List of Programme Electives for Sixth Semester

1. AEPE 611: Modern Vehicle Technology
2. AEPE 612: Vehicle Aerodynamics & Design

List of Open Electives for Sixth Semester

1. AEOE 621: Engineering Economics and Project Management
2. AEOE 622: Electric Vehicle Technology
3. AEOE 623: Industrial Management
4. AEOE 624: Industrial Safety Engineering
5. AEOE 625: Disaster Management

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

West Bengal State Council of Technical &
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Curriculum Structure
of
Diploma in Chemical Engineering [CHE]
Part-II (3rd & 4th Semester) and Part-III (5th
& 6th Semester)

Revised 2022

***CURRICULAR STRUCTURE FOR PART-II (SEMESTER 3) OF THE FULL-TIME
DIPLOMA COURSES IN CHEMICAL ENGINEERING***

BRANCH: CHEMICAL ENGINEERING						Semester 3				
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program core	CHEPC201	Outlines of Chemical Engineering	3	-	3	3	100	40	60
2	Program core	CHEEPC203	Momentum Transfer	3	-	3	3	100	40	60
3	Program core	CHEEPC205	Engineering Thermodynamics	3	-	3	3	100	40	60
4	Program core	CHEPC207	Mechanical Operations	3	-	3	3	100	40	60
5	Program core	CHEPC209	Energy Engineering	3	-	3	3	100	40	60
6	Program core	CHEPC211	Chemical Technology-I	3	-	3	3	100	60	40
7	Program core	CHEPC213	Momentum Transfer Lab	-	3	2	1	100	60	40
8	Program core	CHEPC215	Mechanical Operations Lab	-	3	2	1	100	60	40
9	Internship	SI201	Internship-I	-	-	0	1	100	60	40
Total				14	12	26	21	900	440	460
STUDENT CONTACT HOURS PER WEEK: 24 hours (Lecture-18 hours; Practical-6 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-900 (Internal Marks-440; ESE Marks-460) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Core	20
Internship 1	1
Total	21

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

***CURRICULAR STRUCTURE FOR PART-II (SEMESTER 4) OF THE FULL-TIME
DIPLOMA COURSES IN CHEMICAL ENGINEERING***

BRANCH: CHEMICAL ENGINEERING					SEMESTER 4					
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program Core	CHEPC202	Process Heat Transfer	3	0	3	3	100	40	60
2	Program Core	CHEPE202	Mass Transfer – I	3	0	3	3	100	40	60
3	Program Core	CHEPC204	Chemical Engineering Thermodynamics	3	0	3	3	100	40	60
4	Program Core	CHEPC206	Chemical Technology-II	3	0	3	3	100	40	60
5	Program Core	CHEPC208	Industrial Chemistry	3	0	3	3	100	40	60
6	Program Elective	CHEPE202	Material Science/Food Technology	3	0	3	3	100	60	40
7	Program Core	CHEPC210	Heat Transfer Lab	0	3	3	1	100	60	40
8	Minor Project	PR202	Minor Project	0	3	3	1	100	60	40
Total				18	06	24	20	800	380	420
STUDENT CONTACT HOURS PER WEEK: 24 hours (Lecture-18 hours; Practical-06 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-800 (Internal Marks-380; ESE Marks-420) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Elective	3
Program Core	16
Project	1
Total	20

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

Program Elective(Without Lab)		Total Credit
Material Science[Sub Code: CHEPE204/1]	Any one	3
Food Technology[Sub Code: CHEPE204/2]		

***CURRICULAR STRUCTURE FOR PART-III (SEMESTER 5) OF THE FULL-TIME
DIPLOMA COURSES IN CHEMICAL ENGINEERING***

BRANCH: CHEMICAL ENGINEERING					SEMESTER 5					
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program Core	CHEPC301	Mass Transfer - II	3	-	3	3	100	40	60
2	Program Core	CHEPC303	Chemical Reaction Engineering	3	-	3	3	100	40	60
3	Program Core	CHEPC311	Process Control	3	-	3	3	100	40	60
4	Program Core	CHPC309	Instrumentation	3	-	3	3	100	40	60
5	Program Elective	CHPE301	Plant Utilities/Ceramic Technology	3	-	3	3	100	40	60
6	Program Elective	CHPE303	Petroleum Refinery Engineering/Safety in Chemical Process Industries	3	-	3	3	100	40	60
7	Program Core	CHPC313	Mass Transfer Lab	-	3	3	1	100	60	40
8	Program Core	CHPC315	Chemical Reaction Engineering Lab	-	3	3	1	100	60	40
9	Major Project	PR301	Major Project	-	3	3	1	100	60	40
10	Internship	SI301	Internship - II	-	-	-	1	100	100	0
Total				18	9	27	22	1000	520	480
STUDENT CONTACT HOURS PER WEEK: 27 hours (Lecture-18 hours; Practical-9hours) Theory and Practical Period of 60 minutes each. FULL MARKS-1000 (Internal Marks-520; ESE Marks-480) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Core	14
Program Elective	6
Project	1
Internship 2	1
Total	22

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

Program Elective (without Lab)		Credit
1. Plant Utilities (Sub code: CHEPE301/1)	Any one	3
2. Ceramic Technology (Sub code: CHEPE301/2)		
3. Petroleum Refinery Engineering (Sub code: CHEPE303/1)	Any one	3
4. Safety in Chemical Process Industries (Sub code: CHEPE303/2)		
Total		6

**CURRICULAR STRUCTURE FOR PART-III (SEMESTER 6) OF THE FULL-TIME DIPLOMA
COURSES IN CHEMICAL ENGINEERING**

BRANCH: CHEMICAL ENGINEERING					SEMESTER 6					
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program Core	CHEPC302	Process Equipment Design and Drawing	3	-	3	3	100	40	60
2	Program Elective	CHEPE302	Petrochemicals/ Waste Management	3	-	3	3	100	40	60
3	Humanities and Social Science	HS302	Entrepreneurship and start-ups	3	-	3	3	100	40	60
4	Open Elective	CHEOE302	Open Elective (Compulsory)	3	-	3	3	100	40	60
5	Open Elective	CHEOE304	Open Elective	3	-	3	3	100	40	60
6	Major Project	PR302	Major Project	-	6	6	3	100	60	40
7	Seminar	SE302	Seminar	3	-	3	1	100	100	0
Total				18	6	24	19	700	360	340
STUDENT CONTACT HOURS PER WEEK: 26hours (Lecture-18 hours; Practical-8 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-700 (Internal Marks-380; ESE Marks-320) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Core	1
Program Elective	3
Open Elective	6
Project + Seminar	4
Humanities and Social Science	3
Total	19

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

Sl. No.	Program Elective	Credit
1.	Petroleum Refinery Engineering	Any one 3
2.	Waste Management	

Sl. No.	Open Elective	Credit
1.	Engineering Economics Project Management (<i>Compulsory for all Branches</i>) [Sub code: CHEOE302]	3
2.	Environmental Engineering and Science [Sub Code: CHEOE304/1]	Any one 3
3.	Industrial Management [Sub Code: CHEOE304/2]	
4.	Renewable Energy [Sub Code: CHEOE304/3]	

Total = 6

FULL-TIME DIPLOMA COURSES IN CHEMICALCAL ENGINEERING

List of Program Core Subjects for Different Semesters				
Sl.No.	Category	Semester	Title of Course	Credit
1	Program Core	Sem 3	Outlines of Chemical Engineering	3
2	Program Core	Sem 3	Momentum Transfer	3
3	Program Core	Sem 3	Engineering Thermodynamics	3
4	Program Core	Sem 3	Mechanical Operations	3
5	Program Core	Sem 3	Energy Engineering	3
6	Program Core	Sem 3	Chemical Technology-I	3
7	Program Core	Sem 3	Momentum Transfer Lab	1
8	Program Core	Sem 3	Mechanical Operations Lab	1
9	Program Core	Sem 4	Process Heat Transfer	3
10	Program Core	Sem 4	Mass Transfer – I	3
11	Program Core	Sem 4	Chemical Engineering Thermodynamics	3
12	Program Core	Sem 4	Chemical Technology-II	3
13	Program Core	Sem 4	Industrial Chemistry	3
14	Program Core	Sem 4	Heat Transfer Lab	1
15	Program Core	Sem 5	Mass Transfer - II	3
16	Program Core	Sem 5	Chemical Reaction Engineering	3
17	Program Core	Sem5	Process Control	3
18	Program Core	Sem 5	Instrumentation	3
19	Program Core	Sem5	Mass Transfer Lab	1
20	Program Core	Sem 5	Chemical Reaction Engineering Lab	1
21	Program Core	Sem 6	Process Equipment Design and Drawing	3
Total:				53

FULL-TIME DIPLOMA COURSES IN CHEMICAL ENGINEERING

List of Program Elective (PE) Subjects		Semester	Choice	Credit
	Material Science	4	Any One	3
	Food Technology	4		
	Plant Utilities	5	Any One	3
	Ceramic Technology	5		
	Petroleum Refinery Engineering	5	Any One	3
	Safety in Chemical Process Industries	5		
	Petrochemicals	6	Any One	3
	Waste Management	6		
Total:				12

List of Open Elective (OE)Subjects			Credit
Any one for Semester 6	Environmental Engineering and Science	Any one	3
	Industrial Management		
	Renewable Energy		
Compulsory for Semester 6	Engineering Economics Project Management		3
Total			6

<i>Semester wise and course category wise credit distribution</i>					
	<i>S3</i>	<i>S4</i>	<i>S5</i>	<i>S6</i>	<i>Total</i>
Program Core	20	16	14	3	53
Program Elective	0	3	6	3	12
Open Elective	0	0	0	6	6
Project + Internship + Seminar	1	1	2	4	8
Humanities and Social Science	0	0	0	3	3
Semester wise Total	21	20	22	19	82
Total credit allotted in S3, S4, S5 & S6:					82
Total credit allotted in SEM 1 & 2:					38
Grand Total:					120

Semester wise marks distribution:

Semester wise Marks Distribution	
Semester 3	900
Semester 4	800
Semester 5	1000
Semester 6	700

Total: 3400

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Civil Engineering [CE]

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

Revised 2022

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

SL. NO.	SUBJECT CODE	SUBJECT OF STUDY	HOURS PER WEEK			CREDITS
		THEORETICAL PAPERS	LECTURE	TUTORIAL	PRACTICAL	
1	CEPC301	Construction Materials	2	0	0	2
2	CEPC302	Basic Surveying	3	0	0	3
3	CEPC303	Mechanics of Materials	3	0	0	3
4	CEPC304	Building Construction	2	0	0	2
5	CEPC305	Concrete Technology	2	0	0	2
6	CEPC306	Civil Engineering Planning and Drawing	1	0	0	1
7	CEPC307	Transportation Engineering	2	0	0	2
		LABORATORY/ SESSIONAL PAPERS				
8	CEPC308S	Civil Engineering Planning and Drawing Practices	0	0	4	2
	CEPC309S: Civil Engineering Lab - I (consisting of following four Modules with 8 Practical Classes and 4 Credits)					
9	CEPC309S/I	Module-I: Construction Material Lab	0	0	2	1
10	CEPC309S/II	Module-II: Mechanics of Materials Lab	0	0	2	1
11	CEPC309S/III	Module-III: Concrete Technology Lab	0	0	2	1
12	CEPC309S/IV	Module-IV: Transportation Engineering Lab	0	0	2	1
		INTERNSHIP				
13	CEI310S	Internship-I after 2nd Semester	0	0	0	1
		TOTAL	15	0	12	22

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

SL. NO.	SUBJECT CODE	SUBJECT OF STUDY	HOURS PER WEEK			CREDITS
		THEORETICAL PAPERS	LECTURE	TUTORIAL	PRACTICAL	
1	CEPC401	Hydraulics	2	0	0	2
2	CEPC402	Advanced Surveying	3	0	0	3
3	CEPC403	Theory of Structure	3	0	0	3
4	CEPC404	Geotechnical Engineering	3	0	0	3
5	CEPC405	Design of RCC and Steel Structure	3	0	0	3
		LABORATORY/ SESSIONAL PAPERS				
6	CEPC406S	Basic Surveying Field Practices	0	0	2	1
	CEPC407S: Civil Engineering Lab - II (consisting of following two Modules with 4 Practical Classes and 2 Credits)					
7	CEPC407S/I	Module-V: Hydraulics Lab	0	0	2	1
8	CEPC407S/II	Module-VI: Geotechnical Engineering Lab	0	0	2	1
		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
10	CEPR409S	Minor Project	0	0	4	2
		TOTAL	17	0	10	22

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

SL. NO.	SUBJECT CODE	SUBJECT OF STUDY	HOURS PER WEEK			CREDITS
		THEORETICAL PAPERS	LECTURE	TUTORIAL	PRACTICAL	
1	CEPC501	Water Resource Engineering	2	0	0	2
2	CEPC502	Estimating, Costing and Valuation	3	0	0	3
		LABORATORY/ SESSIONAL PAPERS				
3	CEPC503S	Design of RCC and Steel Structure Practices	0	0	2	1
4	CEPC504S	Estimating, Costing and Valuation Practices	0	0	2	1
5	CEPC505S	Water Resource Engineering Practices	0	0	2	1
		ELECTIVE, PROJECT AND INTERNSHIP				
6	CEPE506	Elective - II: one subject out of Advanced Design of Structures (CEPE506/I)/ Pavement Design & Maintenance (CEPE506/II)	3	0	0	3
7	CEPE507	Elective - III: one subject out of Building Services and Maintenance (CEPE507/I) / Traffic Engineering (CEPE507/II)	3	0	0	3
8	CEI508S	Internship-II after fourth Semester	0	0	0	1
9	CEPR509S	Major Project I	0	0	4	2
10	CEPC510	Construction Management	2	0	0	2
		TOTAL	13	0	10	19

***Pavement Design & Maintenance (CEPE506/II)/ Traffic Engineering (CEPE507/II) - both from same subject. So both subjects or one of them may be changed if found necessary in future while framing the detailed syllabus.**

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

SL. NO.	SUBJECT CODE	SUBJECT OF STUDY	HOURS PER WEEK			CREDITS
		THEORETICAL PAPERS	LECTURE	TUTORIAL	PRACTICAL	
1	CEPC601	Public Health Engineering	2	0	0	2
		LABORATORY/ SESSIONAL PAPERS				
2	CEPC602S	Civil Engineering Lab- III: Module-VII: Public Health Engineering Lab	0	0	2	1
3	CEPC603S	Advanced Surveying Practices	0	0	2	1
		ELECTIVE AND SEMINAR				
4	CEPE604	Elective IV: one subject out of Tendering and Accounts (CEPE604/I) Advanced Construction Technology & Safety Practices in Construction (CEPE604/II)	3	0	0	3
5	CEHS605	Entrepreneurship and Start-ups	3	0	0	3
6	CEOE606	Common Open Elective: Open Elective I Engineering Economics & Project Management	3	0	0	3
7	CEOE607	Open Elective II: one subject out of Disaster Management (CEPE607/I) Industrial Safety Engineering (CEPE607/II)	3	0	0	3
8	CEPR608S	Major Project-II	0	0	4	2
9.	CESE609	Seminar	1	0	0	1
		TOTAL	15	0	8	19

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

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

West Bengal State Council of Technical &
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Development
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Curriculum Structure
of

Diploma in Computer Science and
Technology [CST], Computer Science and
Engineering [CSE], Computer Software
Technology [CSWT] & Information
Technology [IT]

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

Revised 2022



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

**Semester-wise Detailed Curriculum Structure for Semester III, IV, V and VI of
Computer Science and Technology, Computer Science and Engineering, Computer
Software Technology & Information Technology**

Semester III

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits
				L	T	P		
1.	Program core course	COPC201	Computer Program- ming	2	0	0	2	2
2.	Program core course	COPC203	Scripting Languag- es (Python, Perl, etc - any one)	2	0	0	2	2
3.	Program core course	COPC205	Data Structures	2	0	0	2	2
4.	Program core course	COPC207	Computer System Organisation	3	1	0	4	4
5.	Program core course	COPC209	Algorithms	3	1	0	4	4
6.	Summer Internship-I (4 weeks) after IInd Sem	SI201	Summer Intern- ship-1					2
7.	Program core course	COPC211	Computer Program- ming Lab	0	0	4	4	2
8.	Program core course	COPC213	Scripting Languag- es Lab	0	0	4	4	2
9.	Program core course	COPC215	Data Structures Lab	0	0	2	2	1
Total Credits								21



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

Semester IV

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits
				L	T	P		
1.	Program core course	COPC202	Operating Systems	2	0	0	2	2
2.	Program core course	COPC204	Introduction to DBMS	2	0	0	2	2
3.	Program core course	COPC206	Computer Networks	2	0	0	2	2
4.	Program core course	COPC208	SSAD/Software Engineering	3	0	0	3	3
5.	Program core course	COPC210	Web Technologies	2	0	0	2	2
7.	Minor Project	Proj.202	Minor Project	0	0	4	4	2
8.	Program core course	COPC212	Operating Systems Lab	0	0	2	2	1
9.	Program core course	COPC214	Introduction to DBMS Lab	0	0	2	2	1
10.	Program core course	COPC216	Computer Networks Lab	0	0	2	2	1
11.	Program core course	COPC218	Web Technologies Lab	0	0	2	2	1
12.	Mandatory Course	AU202	Essence of Indian Knowledge and Tradition	2	0	0	2	0
Total Credits								21



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

Semester V

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits
				L	T	P		
1.	Program core course	COPC301	Introduction to e-Governance	2	1	0	3	3
2.	Program core course	COPC303	IoT	2	1	0	3	3
3.	Program Elective Course	COPE304 / ***	Program Elective-1 (any one) i) Mobile Computing ii) Advanced Computer Network	3	1	0	4	4
4.	Program Elective course	COPE305 / ***	Program Elective-2 (any one) i) Microprocessor & Microcontroller (based on 8086 & 8051) ii) Fundamentals of AI	3	1	0	4	4
5.	Open Elective	OE301/* **	Open Elective-1 (Any one) i) Engineering Economics and Project Management	3	0	0	3	3
6.	Summer Internship-II (6 weeks) after IVth Sem	SI301	Summer Internship-2					3
7.	Major Project	PR302		0	0	2	2	^
Total Credits								20



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

Semester VI								
Sl. No	Category	Code No.	Course Title	Hours per			Total contact hrs/ week	Credits
				L	T	P		
1.	Program Elective course	COPE306/***	Program Elective-3 (any one) i) Information Security ii) FOSS (Free & Open Source Software)	3	1	0	4	4
2.	Program Elective course	COPE307/***	Program Elective-4 (any one) i) Data Sciences: Data Warehousing & Data Mining, ii) Cloud Computing.	3	1	0	4	4
3.	Humanities and Social Science course	HS302	Entrepreneurship and Start-ups	3	1	0	4	4
4.	Open Elective	OE302/***	Open Elective-2 (any one) i) Industrial Management ii) Environmental Engineering and Sciences	3	0	0	3	3
5.	Major Project	PR302		0	0	6	6	4^
6.	Seminar	SE302		1	0	0	1	1
Total Credits								20

*** Will be mentioned by the subject name.

^1 credit is carried forward from the Vth semester major project evaluation.

Total Credit Point = 82 (Sem 3,4,5,6)

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Electrical & Electronics
Engineering [EEE]

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

Revised 2022

EEE Curriculum structure for 3rd, 4th, 5th and 6th semester students of Diploma

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		Electronic Devices and Circuits	3	100	3	0
10	Program Core Course		Electronic Devices and Circuits 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		Fundamentals of Power Electronics	3	100	3	0
2	Program Core Course		Fundamentals of Power Electronics 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		Digital Techniques	3	100	3	0
8	Program Core Course		Digital Techniques Laboratory	1	100	0	2
9	Program Elective course I(Compulsory)		Consumer Electronics	3	100	3	0
10	Program Elective course I Lab (Compulsory)		Consumer Electronics 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		Microprocessor and Microcontroller	3	100	3	0
2	Program Core Course		Microprocessor and Microcontroller Laboratory	1	100	0	2
3	Program Core Course		Switchgear& Protection	3	100	3	0
4	Program Core Course		Switchgear& Protection Laboratory	1	100	0	2
5	Program Elective course II		<u>Any one of the following subjects to be chosen</u> 1.Communication Systems 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. Communication Systems 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. Electric Traction 2. 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. Electric Traction Laboratory 2. 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. Electric Vehicles	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. Electric Vehicles Laboratory	1	100	0	2
5	Humanities and Social Science		Entrepreneurship and Start-ups	4	100	4	0
6	Open Elective course-I (compulsory)		Engineering Economics and Project Management	3	100	3	0
7	Open Elective course- II		Any one of the following subjects to be chosen. 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 xi. Artificial Intelligence xii. Internet of Things	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							

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

West Bengal State Council of Technical &
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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 (Compulsory)		Switchgear and protection	3	100	3	0
10	Program Elective course I Lab (Compulsory)		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 (compulsory)		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							

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Electrical Engineering
(Industrial Control) [EEIC]

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 (Industrial Control)

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		Industrial Instrumentation & Control System	3	100	3	0
8	Program Core Course		Industrial Instrumentation & Control System Laboratory	1	100	0	2
9	Program Elective course I		<u>Any one of the following subjects to be chosen</u> 1. Switchgear and protection 2. Building Electrification	3	100	3	0
10	Program Elective course I Lab		<u>Any one of the following subjects to be chosen</u> 1. Switchgear and Protection Laboratory 2. Building Electrification 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		Industrial Automation and Embedded Systems	3	100	3	0
4	Program Core Course		Industrial Automation and Embedded Systems Laboratory	1	100	0	2
5	Program Elective course II		<u>Any one of the following subjects to be chosen</u> 1. Electric Vehicle 2. Industrial Drives 3. Electrical Testing & Commissioning	3	100	3	0
6	Program Elective course II lab		<u>Any one of the following laboratories to be chosen</u> 1. Electric Vehicle Laboratory 2. Industrial Drives Laboratory 3. Electrical Testing & Commissioning Laboratory	1	100	0	2
7	Program Elective course III		<u>Any one of the following subjects to be chosen</u> 1. Non-Conventional Energy Sources 2. Utilization of Electrical Power 3. Communication Technologies	3	100	3	0
8	Program Elective course III Lab		<u>Any one of the following laboratories to be chosen</u> 1. Non-Conventional Energy Sources Laboratory 2. Utilization of Electrical Power Laboratory 3. Communication 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. Object Oriented Programming and Networking 2. Solar Power Technologies 3. Industrial Measurement and Condition Monitoring	3	100	3	0
4	Program Elective course IV Lab		<u>Any one of the following subjects to be chosen</u> 1. Object Oriented Programming and Networking Laboratory 2. Solar Power Technologies Laboratory 3. Industrial Measurement and Condition Monitoring Laboratory	1	100	0	2
5	Humanities and Social Science		Entrepreneurship and Start-ups	4	100	4	0
6	Open Elective course-I (compulsory)		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] Medical Electronics [x] Illumination Practice	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							

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Electrical Power System [EPS]

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 Power Systems

3rd Semester

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		Switchgear and protection	3	100	3	0
8	Program Core Course		Switchgear and Protection Laboratory	1	100	0	2
9	Program Elective course I		<u>Any one of the following subjects to be chosen</u> 1. Renewable Energy Power Plants 2. Building Electrification 3. Numerical Methods	3	100	3	0
10	Program Elective course I Lab		<u>Any one of the following subjects to be chosen</u> 1. Renewable Energy Power Plants Laboratory 2. Building Electrification Laboratory 3. Numerical Methods 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		Power System Operation, Control and Power Quality	3	100	3	0
4	Program Core Course		Power System Operation, Control and Power Quality Laboratory	1	100	0	2
5	Program Elective course II		<u>Any one of the following subjects to be chosen</u> 1. Electrical Testing & Commissioning 2. Electric Vehicle	3	100	3	0
6	Program Elective course II lab		<u>Any one of the following laboratories to be chosen</u> 1. Electrical Testing & Commissioning Laboratory 2. Electric Vehicle Laboratory	1	100	0	2
7	Program Elective course III		<u>Any one of the following subjects to be chosen</u> 1. Solar Power Technologies 2. Utilization of Electrical Power 3. Industrial Drives	3	100	3	0
8	Program Elective course III Lab		<u>Any one of the following laboratories to be chosen</u> 1. Solar Power Technologies Laboratory 2. Utilization of Electrical Power Laboratory 3. Industrial Drives 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. Object Oriented Programming and Networking 2. Control System 3. Industrial Instrumentation and Condition Monitoring	3	100	3	0
4	Program Elective course IV Lab		<u>Any one of the following subjects to be chosen</u> 1. Object Oriented Programming and Networking Laboratory 2. Control System Laboratory 3. Industrial Instrumentation and Condition Monitoring Laboratory	1	100	0	2
5	Humanities and Social Science		Entrepreneurship and Start-ups	4	100	4	0
6	Open Elective course-I (compulsory)		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] Illumination Practice	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							

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Electronics & Instrumentation
Engineering [EIE]

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

Revised 2022

Curriculum Structure

Electronics & Instrumentation Engineering

Semester III									
Sl No.	Category	Code No.	Course Title	Hours Per week			Total Contact hrs/week	Credits	Marks
				L	T	P			
1	Program Core Course	EIEPC201	Analog Electronics	2	1		3	3	100
2	Program Core Course	EIEPC203	Electrical Machine and Measurement	2			2	2	100
3	Program Core Course	EIEPC205	Circuit Theory	2	1		3	3	100
4	Program Core Course	EIEPC207	Programming in C	2	1		3	3	100
5	Program Core Course	EIEPC209	Fundamentals of Instrumentation	2	1		3	3	100
6	Program Core Course	EIEPC211	Analog Electronics Lab			2	2	1	100
7	Program Core Course	EIEPC213	Electrical Machine and Measurement Lab			2	2	1	100
8	Program Core Course	EIEPC215	Circuit Theory Lab			3	3	1.5	100
9	Program Core Course	EIEPC217	Programming in C Lab			3	3	1.5	100
10	Internship-I (after Semester II)	SI201						1	100
	TOTAL						24	20	1000

Semester IV	
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[illegible]

Semester V	
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[illegible]

Semester VI

Sl No.	Category	Code No.	Course Title	Hours Per week			Total Contact hrs/week	Credits	Marks
				L	T	P			
1	Program Core Course	EIEPC302	Microcontroller	2	1		3	3	100
2	Program Core Course	EIEPC304	Microcontroller Lab			3	3	1.5	100
3	Program Core Course	EIEPC306	PCB design & Control Simulation Lab			3	3	1.5	100
4	Program Elective Course	EIEPE302	Industrial Buses and Networks Or Process Plant Instrumentation	2			2	2	100
5	Humanities and Social Science	HS302	Entrepreneurship and Start-ups	3			3	3	100
6	Open Elective Course	EIEOE302	Engineering Economics & Project Management	2	1		3	3	100
7	Open Elective Course	EIEOE304	Industrial Safety Engineering Or Environmental Engineering and Science Or Electric Vehicle Technology	2	1		3	3	100
8	Major Project	PR302				4	4	2	100
9	Seminar	SE302				2	2	1	100
	TOTAL						26	20	900

Summary

Sem	Subject	Credit	Marks
I	10	18	1000
II	10	20	1000
III	10	20	1000
IV	10	21	1000
V	11	21	1100
VI	9	20	900
SUM	60	120	6000

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Food Processing Technology
[FPT]

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

Revised 2022

PROPOSED CURRICULUM STRUCTURE FOR THE PART - II (2ND YEARS) OF THE FULL TIME DIPLOMA COURSE IN FOOD PROCESSING TECHNOLOGY

WEST BENGAL STATE COUNCIL OF TECHNICAL & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT										
TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES										
COURSE NAME: FOOD PROCESSING TECHNOLOGY										
COURSE CODE: FPT										
SEMESTER: THIRD										
DURATION OF COURSE: 6 SEMESTERS										
Sl. No.	Category of Course	Code No	Course Title	Hours Per Week		Total Contact Hours Per Week	Credit	Full Marks	Internal	ESE
				L	P					
1	Program Core Course	FPTPC 201	Food Microbiology	2	0	2	2	100	40	60
2	Program Core Course	FPTPC 203	Chemistry of Food	2	0	2	2	100	40	60
3	Program Core Course	FPTPC 205	Unit Operation of Chemical Engineering-I	2	0	2	2	100	40	60
4	Program Core Course	FPTPC 207	Engineering Thermodynamics and Chemical Kinetics	2	0	2	2	100	40	60
5	Program Core Course	FPTPC 209	Fundamental Chemistry	2	0	2	2	100	40	60
6	Program Core Course	FPTPC 211	Technology of Food Preservation	3	0	3	3	100	40	60
7	Program Core Course	FPTPC 213	Food Microbiology Lab.	0	3	3	1.5	100	60	40
8	Program Core Course	FPTPC 215	Chemistry of Food Lab.	0	4	4	2	100	60	40
9	Program Core Course	FPTPC 217	Unit Operation of Chemical Engineering-I Lab.	0	3	3	1.5	100	60	40
10	Program Core Course	FPTPC 219	Food Preservation Lab.	0	4	4	2	100	60	40
11	Internship	SI201	Internship-I	0	0	0	1	100	100	0
TOTAL				13	14	27	21*	1100	580	520

STUDENT CONTACT HOURS PER WEEK: 27 hours (Lecture-13 hours; Practical-14 hours)
Theory and Practical Period of 60 minutes each.
FULL MARKS-1100 (Internal Marks= 580; ESE Marks = 520)
L-Lecture, P-Practical, ESE- End Semester Examination

DURATION OF COURSE: 6 SEMESTERS

L-Lecture, P-Practical, ESE- End Semester Examination

DURATION OF COURSE: 6 SEMESTERS

L-Lecture, P-Practical, ESE- End Semester Examination

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Footwear Technology [FWT]

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

Revised 2022

CURRICULAR STRUCTURE OF DIPLOMA IN FOOTWEAR TECHNOLOGY													
WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT													
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES													
THIRD SEMESTER													
S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
										External Assessment	Internal Assessment		
				L	T	P				End Semester Examination	Mid Semester Test	Quizzes/ Viva Voce/ Assignment	Class Attendance
THEORETICAL SUBJECTS													
1.	Programme Core Course	FWTPC 201	Principles of Footwear Manufacture	3	0	0	3	2	100	60	20	10	10
2.	Programme Core Course	FWTPC 203	Elements of Footwear Designing & Pattern Cutting	3	0	0	3	2	100	60	20	10	10
3.	Programme Core Course	FWTPC 205	Footwear Manufacturing Techniques I	3	0	0	3	2	100	60	20	10	10
4.	Programme Core Course	FWTPC 207	Footwear Material Study I	3	0	0	3	2	100	60	20	10	10
5.	Programme Core Course	FWTPC 209	Footwear Auxiliary Materials	3	0	0	3	2	100	60	20	10	10
PRACTICAL SUBJECTS													
S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
				L	T	P				Practical Internal Assessment		Practical External Assessment	
6.	Programme Core Course	FWTPC 211	Design Process and Pattern Engineering I	0	0	6	6	3	100	60	40		
7.	Programme Core Course	FWTPC 213	Footwear Upper Fabrication Technology I	0	0	6	6	1.5	100	60	40		
8.	Programme Core Course	FWTPC 215	Footwear Bottom Fabrication Technology I	0	0			1.5	100	60	40		
9.	Programme Core Course	FWTPC 217	Fundamentals of Computer Graphics Designing Lab	0	0	3	3	2	100	60	40		
10.	Programme Core Course	FWTPC 219	Communication Skills II Lab	0	0	2	2	1	100	60	40		
11.	Internship	SI201	Summer Internship I	1	0	0	1	1	100				
TOTAL				16	00	17	33	20	1100				

CURRICULAR STRUCTURE OF DIPLOMA IN FOOTWEAR TECHNOLOGY													
WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT													
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES													
FOURTH SEMESTER													
S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
										External Assessment	Internal Assessment		
				L	T	P				End Semester Examination	Mid Semester Test	Quizzes/ Viva Voce/ Assignment	Class Attendance
THEORETICAL SUBJECTS													
1.	Programme Core Course	FWTPC 202	Footwear Manufacturing Techniques II	3	0	0	3	2	100	60	20	10	10
2.	Programme Core Course	FWTPC 204	Footwear Machinery Sciences I	3	0	0	3	2	100	60	20	10	10
3.	Programme Core Course	FWTPC 206	Footwear Costing and Quality Management	3	0	0	3	2	100	60	20	10	10
4.	Programme Core Course	FWTPC 208	Footwear Material Study II	2	0	0	2	2	100	60	20	10	10
5.	Programme Elective Course I	FWTPE I	Programme Elective I	3	0	0	3	2	100	60	20	10	10
PRACTICAL SUBJECTS													
S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
				L	T	P				Practical Internal Assessment	Practical External Assessment		
6.	Programme Core Course	FWTPC 210	Design Process and Pattern Engineering II	0	0	6	6	2	100	60	40		
7.	Programme Core Course	FWTPC 212	Footwear Upper Fabrication Technology II	0	0	3	3	1.5	100	60	40		
8.	Programme Core Course	FWTPC 214	Footwear Bottom Fabrication Technology II	0	0			1.5	100	60	40		
9.	Programme Core Course	FWTPC 216	Computer Aided Design Applications I Lab	0	0	3	3	2	100	60	40		
10.	Programme Core Course	FWTPC 218	Personality Development and Soft Skill	0	0	2	2	2	100	60	40		
11.	Minor Project	FWT Proj.202	Project on Footwear Technology	0	0	3	3	2	100	60	40		
TOTAL				14	00	17	31	21	1100				

CURRICULAR STRUCTURE OF DIPLOMA IN FOOTWEAR TECHNOLOGY

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

TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

FIFTH SEMESTER

S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
										External Assessment	Internal Assessment		
				L	T	P				End Semester Examination	Mid Semester Test	Quizzes/ Viva Voce/ Assignment	Class Attendance

THEORETICAL SUBJECTS

1.	Programme Core Course	FWTPC 301	Industrial Engineering & Management	3	0	0	3	2	100	60	20	10	10
2.	Programme Core Course	FWTPC 303	Footwear Fashion and Trend Forecasting	3	0	0	3	2	100	60	20	10	10
3.	Programme Core Course	FWTPC 305	Footwear Machinery Sciences II	2	0	0	2	2	100	60	20	10	10
4.	Programme Elective Course II	FWTPE II	Programme Elective II	3	0	0	3	2	100	60	20	10	10
5.	Programme Elective Course III	FWTPE III	Programme Elective III	3	0	0	3	2	100	60	20	10	10

PRACTICAL SUBJECTS

S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME	
				L	T	P				Practical Internal Assessment	Practical External Assessment
6.	Programme Core Course	FWTPC 307	Footwear Material & Product Testing Lab	0	0	4	4	2	100	60	20
7.	Programme Core Course	FWTPC 309	Advance Footwear Designing I	0	0	6	6	2	100	60	40
8.	Programme Core Course	FWTPC 311	Advance Footwear Manufacturing Techniques	0	0	3	3	2	100	60	40
9.	Programme Core Course	FWTPC 313	Computer Aided Design Applications II Lab	0	0	3	3	2	100	60	40
10.	Major Project	FWT Proj.301	Project on Advance Leather/Non Leather Footwear Manufacture	0	0	2	2	1	100	60	40
11.	Internship	SI301	Summer Internship II	1	0	0	1	2	100		

TOTAL

15

00

18

33

21

1100

CURRICULAR STRUCTURE OF DIPLOMA IN FOOTWEAR TECHNOLOGY													
WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT													
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES													
SIXTH SEMESTER													
S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
				L	T	P				External Assessment	Internal Assessment		
										End Semester Examination	Mid Semester Test	Quizzes/ Viva Voce/ Assignment	Class Attendance
THEORETICAL SUBJECTS													
1.	Humanities & Social Science	HS 302	Entrepreneurship & Start-Ups	3	0	0	3	3	100	60	20	10	10
2.	Programme Elective Course IV	FWTPE IV	Programme Elective IV	3	0	0	3	2	100	60	20	10	10
3.	Open Elective I	FWTOE I	Engineering Economics and Project Management	3	0	0	3	3	100	60	20	10	10
4.	Open Elective II	FWTOE II	Open Elective II	3	0	0	3	3	100	60	20	10	10
PRACTICAL SUBJECTS													
S.L No	Course Category	Code	Course Title	Hours Per Week			Total Contact Hours/Week	Credits	Marks	EXAMINATION SCHEME			
				L	T	P				Practical Internal Assessment	Practical External Assessment		
5.	Programme Core Course	FWTPC 302	Advance Footwear Designing II	0	0	6	6	2	100	60	40		
6.	Programme Core Course	FWTPC 304	Seminar	1	0	1	2	1	100	60	40		
7.	Programme Core Course	FWTPC 306	Port Folio/Wellington Book Presentation	0	0	3	3	2	100	60	40		
8.	Major Project	FWT Proj.302	Project on Advance Leather/Non Leather Footwear Manufacture	0	0	8	8	4	100	60	40		
TOTAL				13	00	18	31	20	800				

List of Programme Elective Courses [PE]

Sl No	Code No	Course Title	Hours Per Week			Semester	Credits	Marks
			L	T	P			
1.	FWTPE I (Any One)	Footwear Construction.	3	0	0	Fourth	2	100
		Application of Polymers in Footwear Industry.						
2.	FWTPE II (Any One)	Leather Goods Technology I.	3	0	0	Fifth	2	100
		Footwear Production and Operation Management.						
	FWTPE III (Any One)	Footwear Merchandising Practices.						
		Supply Chain & Export Management.						
3.	FWTPE IV (Any One)	Footwear Marketing and E-Commerce.	3	0	0	Sixth	2	100
		Leather Goods Technology II.	3	0	0			

List of Open Elective Courses [OE]

Sl No	Code No	Course Title	Hours Per Week			Semester	Credits	Marks
			L	T	P			
1.	FWTOE I (Mandatory)	Engineering Economics and Project Management.	3	0	0	Sixth	3	100
2.	FWTOE II (Any One)	Occupational Health and Safety Engineering. Disaster Management.	3	0	0		3	100

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Geographic Information System
& Global Positioning System [GISGPS]

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

Revised 2022

CURRICULAR STRUCTURE OF DIPLOMA IN GIS AND GPS

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

TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

BRANCH: GIS & GPS

SEMESTER: III

SL NO	CATEGORY	CODE	COURSE TITLE	CREDIT	CLASS/WK			EVALUATION SCHEME						
								INTERNAL			ESE	PIA	PEA	TOTAL
					L	T	P	INT	AS/QZ	ATD				
1	Program core course	GISPC201	Spatial Statistics-I	3	2	1		20	10	10	60			100
2	Program core course	GISPC202	Cartography In GIS	2	2			20	10	10	60			100
3	Program core course	GISPC203	Basic Concept of Navigation	2	2			20	10	10	60			100
4	Program core course	GISPC204	Problem Solving and Coding	3	3			20	10	10	60			100
5	Program core course	GISPC205	Applied Surveying	3	3			20	10	10	60			100
6	Program core course	GISPC206	Computer Programming Lab	1			2					60	40	100
7	Program core course	GISPC207	Computer Aided Drafting	2			4					60	40	100
8	Program core course	GISPC208	Field Survey Practice-I	3			6					60	40	100
9	Summer Internship	SI201	Summer Internship-I	1								100		100
TOTAL				20	12	1	12							

STUDENT CONTACT HOURS PER WEEK: 25 Hrs. Theories and Practical Period of 60 Minutes each.

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance ESE - End Semester Exam, PIA-Practical Internal Assessment PEA-Practical External Assessment.

BRANCH: GIS & GPS

SEMESTER: IV

SL NO	CATEGORY	CODE	COURSE TITLE	CREDIT	CLASS/WK			EVALUATION SCHEME						
								INTERNAL			ESE	PIA	PEA	TOTAL
					L	T	P	INT	AS/QZ	ATD				
1	Program core course	GISPC209	Spatial Statistics-II	3	2	1		20	10	10	60			100
2	Program core course	GISPC210	Advance Surveying-I	3	3			20	10	10	60			100
3	Program core course	GISPC211	Digital Image Processing	2	2			20	10	10	60			100
4	Program core course	GISPC212	Geographic Information System-I	3	3			20	10	10	60			100
5	Program Elective course	GISPE201	PROGRAMME ELECTIVE I	2	2			20	10	10	60			100
6	Program core course	GISPC213	Digital Image Processing-I	2			4					60	40	100
7	Program core course	GISPC214	GIS LAB-I	1			2					60	40	100
8	Program core course	GISPC215	Field Survey Practices – II	3			6					60	40	100
9	Minor Project	PR 202	PROJECT ON GIS	2			4					60	40	100
TOTAL				21	12	1	16							

GISPE201: Any one of the two subjects: 1. Database Management System Post GIS 2. Database Administration

STUDENT CONTACT HOURS PER WEEK: 29 Hrs. Theories and Practical Period of 60 Minutes each.

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance ESE - End Semester Exam, PIA-Practical Internal Assessment PEA-Practical External Assessment.

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Instrumentation & Control
Engineering [ICE]

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

Revised 2022

Curriculum Structure

Instrumentation & Control Engineering

Semester III									
Sl No.	Category	Code No.	Course Title	Hours Per week			Total Contact hrs/week	Credits	Marks
				L	T	P			
1	Program Core Course	ICEPC201	Analog Electronics	2	1		3	3	100
2	Program Core Course	ICEPC203	Electrical Machine and Measurement	2	1		3	3	100
3	Program Core Course	ICEPC205	Fundamentals of Electrical Circuit and network	2	1		3	3	100
4	Program Core Course	ICEPC207	Programming in C	2	1		3	3	100
5	Program Core Course	ICEPC209	Basic Instrumentation & Control	2	1		3	3	100
6	Program Core Course	ICEPC211	Analog Electronics Lab			3	3	1.5	100
7	Program Core Course	ICEPC213	Electrical Machine and Measurement Lab			3	3	1.5	100
8	Program Core Course	ICEPC215	Electrical Circuit and network Lab			3	3	1.5	100
9	Program Core Course	ICEPC217	Programming in C Lab			3	3	1.5	100
10	Internship-I (after Semester II)	SI201						1	100
	TOTAL						27	22	1000

Semester IV	
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[illegible]

[illegible][illegible]

Semester VI									
Sl No.	Category	Code No.	Course Title	Hours Per week			Total Contact hrs/week	Credits	Marks
				L	T	P			
1	Program Core Course	ICEPC302	Microcontroller	2	1		3	3	100
2	Program Core Course	ICEPC312	Microcontroller Lab			3	3	1.5	100
3	Program Core Course	ICEPC314	PCB Design and control Simulation Lab			3	3	1.5	100
4	Program Elective course	ICEPE302	Renewable energy Or Power Plant Instrumentation & Control	2	1		3	3	100
5	Humanities and Social Science	HS302	Entrepreneurship and Start-ups	3			3	3	100
6	Open Elective course	ICEOE302	Engineering Economics & Project Management	2	1		3	3	100
7	Open Elective course	ICEOE304	Industrial Safety Engineering Or Disaster Management Or Sustainable Development Or Industrial Management	2	1		3	3	100
8	Major Project	PR302				4	4	2	100
9	Seminar	SE302				2	2	1	100
	TOTAL						27	21	900

Summary			
Sem	Subject	Credit	Marks
I	10	18	1000
II	10	20	1000
III	10	22	1000
IV	10	21	1000
V	11	22	1100
VI	9	21	900
SUM	60	124	6000

Note: In semester IV, Minor project has been omitted. Instead of that Circuit Simulation lab and Python Programming has been included.

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of
Diploma in Interior Decoration [ID]
Part-II (3rd & 4th Semester) and Part-III (5th
& 6th Semester)

Revised 2022

CURRICULUM STRUCTURE: INTERIOR DECORATION

West Bengal State Council of Technical and Vocational Education and Skill Development

Third Semester

Sl. No	Category of course	Code No	Course Title	Hours per week			Credits	Marks
				L	T	P		
1	Pro. C.C.	IDPC201	Evolution of Interior Design -I	2	0	0	2	100
2	Pro. C.C.	IDPC203	Materials and Construction-I	2	0	0	2	100
3	Pro. C.C.	IDPC205	Interior Design Fundamentals-II	1	0	0	1	100
4	Pro. C.C.	IDPC207	Services-I	2	0	0	2	100
5	Pro. C.C.	IDPC209	Indian Art	1	0	0	1	100
6	Pro. C.C.	IDPC211	Introduction to Structure	2	1	0	3	100
7	Pro. C.C.	IDPC213	Space Planning	0	0	2	1	100
8	Pro. C.C.	IDPC215	Graphics-I(Lab)	0	0	4	2	100
9	Pro. C.C.	IDPC217	Interior Design & Drawing-I(Lab)	0	0	4	2	100
10	Pro. C.C.	IDPC219	Cad Lab-I(Lab)	0	0	4	2	100
11	Pro. C.C.	IDPC221	Market Study-I(Lab)	0	0	2	1	100
12	Summer Internship-I	SI201	Summer Internship	0	0	0	1	100
TOTAL				27			20	1200

Total Contact Periods per week -27

PRO. C.C. - Programme Core Course

CURRICULUM STRUCTURE: INTERIOR DECORATION

West Bengal State Council of Technical and Vocational Education and Skill Development

Fourth Semester

Sl. No.	Category of course	Code No.	Course Title	Hours per week			Credits	Marks
				L	T	P		
1	Pro. C. C.	IDPC202	Evolution of Interior Design -II	2	0	0	2	100
2	Pro. C. C.	IDPC204	Materials & Construction-II	2	0	0	2	100
3	Pro. C. C.	IDPC206	Services-II	2	0	0	2	100
4	Pro. C. C.	IDPC208	Interior Landscape	2	0	0	2	100
5	Pro. C. C.	IDPC210	Design & Drawing-A (6 hr. Exam)	1	0	0	1	100
6	Pro. C. C.	IDPC212	Graphics-(4 hr. Exam)	1	0	0	1	100
7	Pro. C. C.	IDPC214	Graphics-II(Lab)	0	0	4	2	100
8	Pro. C. C.	IDPC216	CAD Lab-II(Lab)	0	0	2	1	100
9	Pro. C. C.	IDPC218	Interior Design & Drawing-II (Lab)	0	0	4	2	100
10	Pro. C. C.	IDPC220	Interior Working Drawing-I(Lab)	0	0	4	2	100
11	Pro. C. C.	IDPC222	Market Study-II	0	0	2	1	100
12	Pro. E. C.	IDPE224	a. Low Cost Building Technology b. Green Building & Energy Conservation	2	0	0	2	100
13	Minor Project	PR202	Furniture Design	0	0	2	1	100
TOTAL				30			21	1300

Total Contact Periods per week-30

PRO. E.C. - Programme Elective Course-1 No

CURRICULUM STRUCTURE: INTERIOR DECORATION

West Bengal State Council of Technical and Vocational Education and Skill Development

Fifth Semester

Sl. No.	Category of course	Code No.	Course Title	Hours per week			Credits	Marks
				L	T	P		
1	Pro. C. C.	IDPC301	Estimating, Specification and Costing	3	0	0	3	100
2	Pro. C. C.	IDPC303	Materials & Construction-III	3	0	0	3	100
3	Pro. C. C.	IDPC305	Services-III	3	0	0	3	100
4	Pro. E. C.	IDPE307	Elective Subject-I A. Illumination B. Vaastu	2	0	0	2	100
5	Pro. E. C.(Lab)	IDPE309	Elective Sessional-I A. Illumination B. Vaastu	0	0	4	2	100
6	Pro. C. C. (Lab)	IDPC311	Interior Design & Drawing-II(Lab)	0	0	4	2	100
7	Pro. C. C. (Lab)	IDPC313	Interior Working Drawing-II(Lab)	0	0	4	2	100
8	Major Project	PR302	Project Part-A	0	0	4	2	100
9	Summer Internship-II(6 weeks)	SI301	Summer Internship	0	0	0	1	100
TOTAL				27			20	900

Total Contact Periods per week -27

PRO. E.C. - Programme Elective Course-2 Nos.

CURRICULUM STRUCTURE: INTERIOR DECORATION

West Bengal State Council of Technical and Vocational Education and Skill Development

Sixth Semester

Sl. No.	Category of course	Code No.	Course Title	Hours per week			Credits	Marks
				L	T	P		
1	Pro. C. C.	IDPC302	Interior Maintenance	2	0	0	2	100
2	Pro. C. C.	IDPC304	Design & Drawing-B (6 hr. Exam)	0	0	2	1	100
3	Pro. E. C.	IDPE306	Elective Subject-II a. Interior of Heritage Structures b. Modular Design	2	0	0	2	100
4	Open Elective -I	IDOE308	Engineering Economics and Project Management	3	0	0	3	100
5	Open Elective -II	IDOE310	a.Environmental Engineering and Science b.Disaster Management	3	0	0	3	100
6	Humanities and Social Science	HS302	Entrepreneurship and Start-ups	3	1	0	4	100
7	Pro. C. C.	IDPC312	Interior Working Drawing-III(Lab)	0	0	4	2	100
8	Major Project	PR302	Project Part -B	0	0	6	3	100
9	Seminar	SE302	Seminar on thematic interior work	1	0	0	1	100
TOTAL				27			21	900

Total Contact Periods per week -27

PRO. E.C. - Programme Elective Course-1 No

OE-Open Elective Course -2 Nos.

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Leather Goods Technology
[LGT]

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

Revised 2022

BRANCH:LEATHER GOODS TECHHNOLOGY , SEMESTER:3

SLNO	CATEGORY	CODE	COURSE TITLE	CREDITS	Class/Week			Contact Hours	Marks
					L	T	P		
1	Prog core	LGTPC301	History of Art and Fashion	2	2	0	0	2	100
2	Prog core	LGTPC302	Designing Principles and Development	3	2	1	0	3	100
3	Prog core	LGTPC303	Fashion Studies for leather goods	2	2	1	0	3	100
4	Prog core	LGTPC304	Fundamental of leather Goods Manufacturing	3	3	0	0	3	100
5	Prog core	LGTPC305	Essential management Studies for Leather Goods Industry	2	3	0	0	3	100
6	Prog core	LGTPC306	Creative, Technical Drawing & Pattern Making -1	2	0	0	6	6	100
7	Prog core	LGTPC307	Leather Goods Making Workshop-1	2	0	0	6	6	100
8	Prog core	LGTPC308	Essential Computer Application - 1	1.5	0	0	3	3	100
9	Prog core	LGTPC309	Communication Skill - II	1.5	0	0	3	3	100
10	S-Intern-I	SI201	Internship Programme (Tannery)	2	0	0	1	1	100
TOTAL				21				33	1000

STUDENT CONTACTHOURS PER WEEK:33 Hrs. Theories and Practical Period of 60 Minutes each.

L-Lecture –Tutorial –Practical, INT- Internal Assessment AS/QZ – Assignment/Quiz ATD- Attendance ESE- End Semester Exam,PIA-Practical Internal Assessment , PEA-Practical External Assessment.

BRANCH: LEATHER GOODS TECHHNOLOGY SEMESTER: 4

SL NO	CATEGORY	CODE	COURSE TITLE	CREDITS	Class/Week			Contact Hours	Marks
					L	T	P		
1	Prog core	LGTPC401	Designing problems and Solutions	2	2	0	0	2	100
2	Prog core	LGTPC402	Production planning and quality assurance	2	2	1	0	3	100
3	Prog core	LGTPC403	Leather Goods Costing	2	2	1	0	3	100
4	Prog core	LGTPC404	Leather Goods Construction Technique	3	3	0	0	3	100
5	Prog core	LGTPC405	Leather Goods Marketing & Merchandising	2	3	0	0	3	100
6	Prog Elec	LGTPC406	PROGRAMME ELECTIVE I	2	2	0	0	2	100
7	Prog core	LGTPC407	Leather Goods Making Workshop -II	1.5	0	0	3	3	100
8	Prog core	LGTPC408	Creative, Technical Drawing & Pattern Making -II	1.5	0	0	3	3	100
9	Prog core	LGTPC409	Personality Development with Communication skill	1.5	0	0	3	3	50
10	Prog core	LGTPC409	Essential Computer Application-II	1.5	0	0	3	3	50
11	Min Pro	PR 202	Project on Hard Leather Goods	2	0	0	4	4	100
TOTAL				21				32	1000

STUDENT CONTACT HOURS PER WEEK: 33 Hrs. Theories and Practical Period of 60 Minutes each.

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance ESE - End Semester Exam, PIA-Practical Internal Assessment PEA-Practical External Assessment.

PROGRAMME ELECTIVE I: Fundamental of Footwear Technology | Fundamental of Leather Garments

BRANCH: LEATHER GOODS TECHNOLOGY SEMESTER: 5

SL NO	CATEGORY	CODE	COURSE TITLE	CREDITS	Class/Week			Contact Hours	Marks
					L	T	P		
1	Prog core	LGTPC501	Leather Goods Machinery	2	3	0	0	3	100
2	Prog core	LGTPC502	Material Science for Leather Goods II	3	2	1	0	3	100
3	Prog Elec	LGTPE2	PROGRAMME ELECTIVE II	3	2	1	0	3	100
4	Prog Elec	LGTPE3	PROGRAMME ELECTIVE III	3	3	0	0	3	100
5	Open Elec	LGTOE1	OPEN ELECTIVE I	3	3	0	0	3	100
6	Prog core	LGTPC504	Leather goods Lab testing & Analysis	2	0	1	3	4	100
7	Prog core	LGTPC505	Fashion and Product Photography and Styling	2	0	0	4	4	100
8	S-int-2	SI301	Summer Internship II	1	0	0	0	-	100
9	Maj Pro	PR302	PROJECT	1	0	0	2	2	100
TOTAL				20				25	900

PROGRAMME ELECTIVE II: Creative & Technical Drawing (Footwear)/ Leather Garment Designing

PROGRAMME ELECTIVE III: Retail Management | E-Commerce

OPEN ELECTIVE I Eng. Economics and Accountancy

STUDENT CONTACT HOURS PER WEEK: 32 Hrs. Theories and Practical Period of 60 Minutes each.

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance ESE - End Semester Exam, PIA-Practical Internal Assessment PEA-Practical External Assessment.

BRANCH: LEATHER GOODS TECHNOLOGY SEMESTER: 6

SL NO	CATEGORY	CODE	COURSE TITLE	CREDITS	Class/Week			Contact Hours	Marks
					L	T	P		
1	Prog core	LGTPC601	Leather Goods Packaging and Labeling	3	2	1	0	3	100
2	Pro-Ele	LGTPE3	PROGRAMME ELECTIVE IV	3	2	1	0	3	100
3	Humanities	HS302	Entrepreneurship and Start-ups	3	3	0	0	3	100
4	Prog core	LGTPE602	Fundamentals of Safety Leather Gloves	2	3	0	0	3	100
5	Op-elec	LGTOE2	OPEN ELECTIVE II	3	3	0	0	3	100
6	Semi	SE302	Seminar	1	1	0	0	1	100
7	Prog core	LGTPC603	Port Folio Development	2	0	0	4	4	100
8	Maj Pro	PR 302	PROJECT	3	0	0	6	6	100
TOTAL				20				26	800

PROGRAMME ELECTIVE IV: Basic Pattern Making (Footwear) / Basic Pattern Making (Leather Garments)

OPEN ELECTIVE II Export Import Management | Industrial Management and Safety

STUDENT CONTACT HOURS PER WEEK: 27 Hrs. Theories and Practical Period of 60 Minutes each.

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance ESE - End Semester Exam, PIA-Practical Internal Assessment PEA-Practical External Assessment.

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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

[A Statutory Body under West Bengal Act XXVI of 2013]

(Formerly West Bengal State Council of Technical Education)

“Karigori Bhavan”, 4th Floor, Plot No. B/7, Action Area-III, New Town, Rajarhat, Kolkata-700160



**CURRICULUM STRUCTURE
TEACHING AND EXAMINATION SCHEME
FOR
DIPLOMA IN MECHANICAL ENGINEERING COURSE

DURATION OF COURSE: 6 SEMESTERS**

**CURRICULUM STRUCTURE FOR PART-II (SEMESTER 3) OF THE
FULL-TIME DIPLOMA COURSES IN MECHANICAL ENGINEERING**

BRANCH: MECHANICAL ENGINEERING				Semester 3						
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program core	MEPC201	Mechanical Engineering Drawing	2	-	2	2	100	40	60
2	Program core	MEPC203	Mechanical Engineering Materials	3	-	3	3	100	40	60
3	Program core	MEPC205	Strength of Materials	3	-	3	3	100	40	60
4	Program core	MEPC207	Manufacturing Processes-I	3	-	3	3	100	40	60
5	Program core	MEPC209	Thermal Engineering -I	3	-	3	3	100	40	60
6	Program core	MEPC211	Mechanical Engineering Drawing Practice	-	4	4	2	100	60	40
7	Program core	MEPC213	Materials Testing Lab	-	2	2	1	100	60	40
8	Program core	MEPC215	Thermal Engineering -I Lab	-	2	2	1	100	60	40
9	Program core	MEPC217	Manufacturing Processes -I Practice	-	4	4	2	100	60	40
10	Internship	SI201	Internship-I	-	-	0	1	100	60	40
Total				14	12	26	21	1000	500	500
STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-14 hours; Practical-12 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-1000 (Internal Marks-500; ESE Marks-500) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Core	20
Internship 1	1
Total	21

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

**CURRICULUM STRUCTURE FOR PART-II (SEMESTER 4) OF THE
FULL-TIME DIPLOMA COURSES IN MECHANICAL ENGINEERING**

BRANCH: MECHANICAL ENGINEERING				SEMESTER 4						
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program Core	MEPC202	Theory of Machine	3		3	3	100	40	60
2	Program Elective	MEPE202	Program Elective (with Lab)	2		2	2	100	40	60
3	Program Core	MEPC204	Manufacturing Process-II	3		3	3	100	40	60
4	Program Core	MEPC206	Thermal Engineering-II	3		3	3	100	40	60
5	Program Core	MEPC208	Engineering Metrology	3		3	3	100	40	60
6	Program Core	MEPC210	Computer Aided Machine Drawing Practice		3	3	1.5	100	60	40
7	Program Core	MEPC212	Thermal Engineering-II Lab		2	2	1	100	60	40
8	Program Core	MEPC214	Engineering Metrology and Mechanical Measurement Lab		2	2	1	100	60	40
9	Program Elective	MEPE204	Program Elective Lab		2	2	1	100	60	40
10	Minor Project	PR202	Minor Project		3	3	1.5	100	60	40
Total				14	12	26	20	1000	500	500
STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-14 hours; Practical-12 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-1000 (Internal Marks-500; ESE Marks-500) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Elective	3
Program Core	15.5
Project	1.5
Total	20

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

Program Elective (with Lab)		Total Credit
1. Refrigeration & Air Conditioning (Sub code: MEPE202/1)	Any one	3
2.Tool Engineering (Sub code: MEPE202/2)		

**CURRICULUM STRUCTURE FOR PART-III (SEMESTER 5) OF THE
FULL-TIME DIPLOMA COURSES IN MECHANICAL ENGINEERING**

BRANCH: MECHANICAL ENGINEERING				SEMESTER 5						
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program Core	MEPC301	Power Engineering	3		3	3	100	40	60
2	Program Core	MEPC303	Advanced Manufacturing Processes	3		3	3	100	40	60
3	Program Core	MEPC309	Fluid Mechanics and Machinery	3		3	3	100	40	60
4	Program Elective	MEPE301	Program Elective (without Lab)	2		2	2	100	40	60
5	Program Elective	MEPE303	Program Elective (with Lab)	2		2	2	100	40	60
6	Program Core	MEPC311	Power Engineering Lab		2	2	1	100	60	40
7	Program Core	MEPC313	Advance Manufacturing Processes Lab		2	2	1	100	60	40
8	Program Core	MEPC315	Fluid Mechanics and Machinery Lab		2	2	1	100	60	40
9	Program Elective	MEPE305	Program Elective Lab (for Sl. No. 5)		2	2	1	100	60	40
10	Major Project	PR301	Major Project		2	2	1	100	60	40
11	Internship	SI301	Internship - II	-	-		1	100	100	0
Total				13	10	23	19	1100	600	500
STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-16 hours; Practical-10 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-1100 (Internal Marks-600; ESE Marks-500) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Core	12
Program Elective	5
Project	1
Internship 2	1
Total	19

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

Program Elective (without Lab)		Total Credit
1. Power Plant Engineering (Sub code: MEPE301/1)	Any one	2
2. Material Handling System (Sub code: MEPE301/2)		
Program Elective (with Lab)		
1. Computer Aided Design & Manufacturing (Sub code: MEPE303/1)	Any one	3
2. Automobile Engineering (Sub code: MEPE303/2)		

**CURRICULUM STRUCTURE FOR PART-III (SEMESTER 6) OF THE
FULL-TIME DIPLOMA COURSES IN MECHANICAL ENGINEERING**

BRANCH: MECHANICAL ENGINEERING				SEMESTER 6						
SL No	Category	Code No	Course Title	L	P	Total Class per week	Credit	Full marks	Internal Marks	ESE Marks
1	Program Core	MEPC302	Design of Machine Elements	3		3	3	100	40	60
2	Program Core	MEPC304	Work, Organization & Management	3		3	3	100	40	60
3	Program Elective	MEPE302	Program Elective (with Lab)	2		2	2	100	40	60
4	Humanities and Social Science	HS302	Entrepreneurship and start-ups	3		3	3	100	40	60
5	Open Elective	MEOE302	Open Elective (Compulsory)	3		3	3	100	40	60
6	Open Elective	MEOE304	Open Elective	3		3	3	100	40	60
7	Program Elective	MEPE304	Program Elective Lab		2	2	1	100	60	40
8	Major Project	PR302	Major Project		6	6	3	100	60	40
9	Seminar	SE302	Seminar	1		1	1	100	100	0
Total				18	8	26	22	900	460	440
STUDENT CONTACT HOURS PER WEEK: 26hours (Lecture-18 hours; Practical-8 hours) Theory and Practical Period of 60 minutes each. FULL MARKS-900 (Internal Marks-460; ESE Marks-440) L-Lecture, P-Practical, ESE- End Semester Examination										

Credit Distribution	Credit
Program Core	6
Program Elective	3
Open Elective	6
Project + Seminar	4
Humanities and Social Science	3
Total	22

Pass Criterion: Students have to obtain at least 40% marks (pass marks) in both internal assessment and end semester examination separately in each subject.

Sl. No.	Program Elective (with Lab)	Credit
1.	Mechatronics (Sub code: MEPE302/1)	Any one 3
2.	Oil Hydraulics & Pneumatics (Sub code: MEPE302/2)	

Sl. No.	Open Elective	Credit
1.	Engineering Economics Project Management (Compulsory for all Branches) [Sub code: MEOE302]	3
2.	Electrical Machines& Controls(Sub code: MEOE304/1)	Any one 3
3.	Environment Engineering & Science(Sub code: MEOE304/2)	

FULL-TIME DIPLOMA COURSES IN MECHANICAL ENGINEERING

List of Program Core Subjects for Different Semesters				
Sl.No.	Category	Semester	Title of Course	Credit
1	Program Core	Sem 3	Mechanical Engineering Drawing	2
2	Program Core	Sem 3	Mechanical Engineering Materials	3
3	Program Core	Sem 3	Strength of Materials	3
4	Program Core	Sem 3	Manufacturing Processes- I	3
5	Program Core	Sem 3	Thermal Engineering - I	3
6	Program Core	Sem 3	Mechanical Engineering Drawing Practice	2
7	Program Core	Sem 3	Materials Testing Lab	1
8	Program Core	Sem 3	Thermal Engineering-I Lab	1
9	Program Core	Sem 3	Manufacturing Processes-I Practice	2
10	Program Core	Sem 4	Theory of Machine	3
11	Program Core	Sem 4	Manufacturing Process-II	3
12	Program Core	Sem 4	Thermal Engineering -II	3
13	Program Core	Sem 4	Engineering Metrology	3
14	Program Core	Sem 4	Computer Aided Machine Drawing Practice	1.5
15	Program Core	Sem 4	Thermal Engineering -II Lab	1
16	Program Core	Sem 4	Engineering Metrology and Measurement Lab	1
17	Program Core	Sem5	Power Engineering	3
18	Program Core	Sem 5	Advanced Manufacturing Processes	3
19	Program Core	Sem5	Work, Organisation & Management	3
20	Program Core	Sem5	Fluid Mechanics and Machinery	3
21	Program Core	Sem5	Power Engineering Lab	1
22	Program Core	Sem5	Advance Manufacturing Processes Lab	1
23	Program Core	Sem5	Fluid Mechanics and Machinery Lab	1
24	Program Core	Sem 6	Design of Machine Elements	3
Total:				53.5

FULL-TIME DIPLOMA COURSES IN MECHANICAL ENGINEERING

List of Program Elective (PE) Subjects		Semester		Credit
With Lab (Any one in each Semester)	1. Refrigeration & Air Conditioning	4	Any One	3
	2. Tool Engineering	4		
	3. Computer Aided Design & Manufacturing	5	Any One	3
	4. Automobile Engineering	5		
	5. Mechatronics	6	Any One	3
	6. Oil Hydraulics & Pneumatics	6		
Without Lab (for Semester 5) [Any one]	1. Power Plant Engineering	5	Any One	2
	2. Material Handling System	5		

Total: 11

List of Open Elective (OE)Subjects			Credit
Any one for Semester 6	1. Electrical Machines & Controls	Any one	3
	2. Environment Engineering & Science		
Compulsory for Semester 6	1. Engineering Economics & Project Management		3

Total: 6

Semester wise and course category wise credit distribution					
	S3	S4	S5	S6	Total
Program Core	20	15.5	12	6	53.5
Program Elective		3	5	3	11
Open Elective				6	6
Project + Internship + Seminar	1	1.5	2	4	8.5
Humanities and Social Science				3	3
Semester wise Total	21	20	19	22	82
Total credit allotted in S3, S4, S5 & S6:					82
Total credit allotted in SEM 1 & 2:					38
Grand Total:					120

Semester wise marks distribution:

Semester wise Marks Distribution	
Semester 3	1000
Semester 4	1000
Semester 5	1100
Semester 6	900

Total: 4000

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Mechanical Engineering
(Production) [MEP]

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

Revised 2022

Diploma in Mechanical Engineering (Production)

CURRICULAM STRUCTURE: 3RD SEM

SL NO.	CATEGORY	Code No	Course Title	L	P	TOTAL CLASS PER WEEK	CREDIT	FULL MARKS	INTERNAL MARKS	ESE MARKS
1	Program core	MEPC201	MECHANICAL ENGINEERING DRAWING	2	0	2	2	100	40	60
2	Program core	MEPC203	MECHANICAL ENGG. MATERIALS	3	0	3	3	100	40	60
3	Program core	MEPC205	STRENGTH OF MATERIALS	3	0	3	3	100	40	60
4	Program core	ME(P)PC207	INDUSTRIAL PRODUCTION TECH.-I	3	0	3	3	100	40	60
5	Program core	ME(P)PC209	HEAT POWER ENGG.-I	3	0	3	3	100	40	60
6	Program core	MEPC211	M.E. DRAWING PRACTICE	0	4	4	2	100	40	60
7	Program core	MEPC213	MATERIALS TESTING LAB	0	2	2	1	100	40	60
8	Program core	ME(P)PC215	HEAT POWER ENGG.-LAB	0	2	2	1	100	40	60
9	Program core	ME(P)PC217	INDUSTRIAL PRODUCTION TECH.-1 LAB	0	4	4	2	100	40	60
10	INTRENSHIP-1(4WEEKS)AFTER SEM-II	S1201	INTERNSHIP AFTER 2ND SEM	0	0	0	1	100	40	60
			TOTAL	14	12	26	21	1000	400	600

STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-14 hours; Practical-12 hours)

Theory and Practical Period of 60 minutes each.

FULL MARKS-1000 (Internal Marks-500; ESE Marks-500)

L-Lecture, P-Practical, ESE- End Semester Examination

Diploma in Mechanical Engineering (Production)

CURRICULAM STRUCTURE: 4TH SEM

SL NO.	CATEGORY	CODE NO	COURSE TITLE	L	P	TOTAL CLASS PER WEEK	CREDIT	FULL MARKS	INTERNAL MARKS	ESE MARKS
1	Program core	MEPC202	THEORY OF MACHINES	3	0	3	3	100	40	60
2	Program Elective	ME(P)PE202	PROGRAM ELECTIVE(with lab)	2	0	2	2	100	40	60
3	Program core	ME(P)PC204	INDUSTRIAL PRODUCTION TECH.-II	3	0	3	3	100	40	60
4	Program core	ME(P)PC206	HEAT POWER ENGG.-II	3	0	3	3	100	40	60
5	Program core	MEPC208	ENGINEERING METROLOGY	3	0	3	3	100	40	60
6	Program core	MEPC210	COMPUTER AIDED MACHINE DRAWING PRACTICE	0	3	3	1.5	100	60	40
7	Program core	ME(P)PC212	INDUSTRIAL PRODUCTION TECHNOLOGY -II LAB	0	2	2	1	100	60	40
8	Program core	MEPC214	ENGINEERING METROLOGY AND MECHANICAL MEASUREMENTLAB	0	2	2	1	100	60	40
		ME(P)PE204	PE LAB	0	2	2	1	100	60	40
10	MINOR PROJECT	PR202	MINOR PROJECT	0	3	3	1.5	100	60	40
			TOTAL	14	12	26	20	1000	500	500

STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-14 hours; Practical-12 hours)

Theory and Practical Period of 60 minutes each.

FULL MARKS-1000 (Internal Marks-500; ESE Marks-500)

L-Lecture, P-Practical, ESE- End Semester Examination

Diploma in Mechanical Engineering (Production)

CURRICULAM STRUCTURE: 5TH SEM

SL NO.	CATEGORY	Code No	Course Title	L	P	HOURS /WEEK	CREDIT	MARKS	INTERNAL MARKS	ESE MARKS
1	Program core	MEPC301	POWER ENGINEERING	3	0	3	3	100	40	60
2	Program core	ME(P)PC303	AUTOMATION AND CNC MACHINES	3	0	3	3	100	40	60
3	Program core	MEPC305	WORK,ORGANISATION AND MANAGEMENT	3	0	3	3	100	40	60
4	Program core	MEPC309	FLUID MECHANICS AND MACHINERY	3	0	3	3	100	40	60
5	Program Elective	ME(P)PE301	PE(FROM THE LIST)(WITHOUT LAB)	2	0	2	2	100	40	60
6	Program Elective	ME(P)PE303	PE(FROM THE LIST)(WITH LAB)	2	0	2	2	100	40	60
7	Program core	MEPC311	POWER ENGINEERING LAB	0	2	2	1	100	60	40
8	Program core	ME(P)PC313	AUTOMATION AND CNC MACHINES LAB	0	2	2	1	100	60	40
9	Program core	MEPC315	FLUID MECHANICS AND MACHINERY LAB	0	2	2	1	100	60	40
10	Program Elective	ME(P)PE305	PE LAB FOR COURSE SL.6	0	2	2	1	100	60	40
11	Major Project	PR301	MAJOR PROJECT	0	2	2	0	0	0	0
12	INTRENSHIP-1(4WEEKS)AFTER SEM-IV	S1301	INTERNSHIP II	0	0	0	1	100	60	40
			TOTAL	16	10	26	21	1100	540	560

STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-16 hours; Practical-10 hours)

Theory and Practical Period of 60 minutes each.

FULL MARKS-1100 (Internal Marks-540; ESE Marks-560)

L-Lecture, P-Practical, ESE- End Semester Examination

Diploma in Mechanical Engineering (Production)

CURRICULAM STRUCTURE: 6TH SEM

SL NO.	CATEGORY	Code No	Course Title	L	P	TOTAL CLASS/ WEEK	CREDIT	MARKS	INTERNAL MARKS	ESE MARKS
1	Program Core	MEPC302	DESIGN OF MACHINE ELEMENTS	3	0	3	3	100	40	60
2	Program Elective	ME(P)PE302	PROGRAM ELECTIVE (FROM THE LIST) (WITH LAB)	2	0	2	2	100	40	60
3	Humanities and social science	HS302	ENTREPRENEURSHIP AND START UPS	3	0	3	3	100	40	60
4	Open Elective	ME(P)OE302	OPEN ELECTIVE (FROM THE LIST) (WITH LAB)	2	0	2	2	100	40	60
5	Open Elective	ME(P)OE304	OPEN ELECTIVE (FROM THE LIST) (WITHOUT LAB)	3	0	3	3	100	40	60
6	Program Elective	ME(P)PE304	PROGRAM ELECTIVE LAB AS PER SL.NO.2	0	2	2	1	100	60	40
7	Open Elective	ME(P)OE306	OPEN ELECTIVE LAB AS PER SL.NO.4	0	2	2	1	100	60	40
9	Major Project	PR302	MAJOR PROJECT	0	6	6	4	100	60	40
10	Seminar	SE302	SEMINAR	1	0	1	1	100	60	40
			TOTAL	14	10	24	20	900	440	460

STUDENT CONTACT HOURS PER WEEK: 26 hours (Lecture-14 hours; Practical-12 hours)

Theory and Practical Period of 60 minutes each.

FULL MARKS-1000 (Internal Marks-500; ESE Marks-500)

L-Lecture, P-Practical, ESE- End Semester Examination

Program Core Subjects for Different Semesters				
Sl. No.	Category	Semester	Title of Course	Credit
1	Program Core	Sem 3	Mechanical Engineering Drawing	2
2	Program Core	Sem 3	Mechanical Engineering Materials	3
3	Program Core	Sem 3	Strength of Materials	3
4	Program Core	Sem 3	Industrial Production Technology -I	3
5	Program Core	Sem 3	Heat Power Engg.-I	3
6	Program Core	Sem 3	Mechanical Engineering Drawing Practice	2
7	Program Core	Sem 3	Materials Testing Lab	1
8	Program Core	Sem 3	Heat Power Engg.Lab	1
9	Program Core	Sem 3	Industrial Production Technology-I Lab	2
10	Program Core	Sem 4	Theory of Machines	3
11	Program Core	Sem 4	Industrial Production Technology-II	3
12	Program Core	Sem 4	Heat Power Engg.-II	3
13	Program Core	Sem 4	Engineering Metrology	3
14	Program Core	Sem 4	Computer Aided Machine Drawing Practice	1.5

15	Program Core	Sem 4	Industrial Production Technology -II Lab	1
16	Program Core	Sem 4	Engineering Metrology and Measurement Lab	1
17	Program Core	Sem5	POWER ENGINEERING	3
18	Program Core	Sem 5	Automation and CNC Machines	3
19	Program Core	Sem5	Work, Organisation & Management	3
20	Program Core	Sem5	Fluid Mechanics and Machinery	3
21	Program Core	Sem5	POWER ENGINEERING LAB	1
22	Program Core	Sem5	Automation and CNC Machines Lab	1
23	Program Core	Sem5	Fluid Mechanics and MachineryLab	1
24	Program Core	Sem 6	Design of Machine Elements	3
Total:				53.5

List of Program Elective (PE) Courses		Credit
With Lab (Any one in each Semester)	1. Tool Engg. (Sem-4)	3
	2.Refrigeration and Air-conditioning (Sem-4)	3
	3. Computer Aided Design & Manufacturing - (Sem 5)	3
	4. Automobile Engineering - (Sem 5)	3
	5. Material Handling - (Sem 6)	3
	6. Industrial Robotics (Sem 6)	3
Without Lab (for Semester 5) [Any one]	1. Power Plant Engineering	2
	2. Computer Integrated Manufacturing	2

List of Open Elective (OE) Courses		Credit
With Lab (Semester 6)	1. Electrical Machines & Controls	3
	2. Environment Engineering & Science	3
Without Lab (Semester 6)	1. Engineering Economics & Project Management	3

Semester wise and course category wise credit distribution					
	S3	S4	S5	S6	Total
Program Core	20	15.5	15	3	53.5
Program Elective		3	5	3	11
Open Elective				6	6
Project + Internship + Seminar	1	1.5	1	5	8.5
Humanities and Social Science				3	3
Semester wise Total	21	20	21	20	82
Total credit allotted in S3, S4, S5 & S6					82
Total credit allotted in SEM 1 & 2					38
Grand Total					120

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100



**West Bengal State Council of Technical, Vocational Education and
Skill Development**

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

Technical Education Division
[Diploma in Engineering & Technology]

Curriculum Structure & Syllabus

of

**Diploma in
Medical Laboratory Technology
[MLT]**

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

**Revised
2022**

**West Bengal State Council of Technical, Vocational Education and Skill Development**

(Technical Education Division)

Curriculum Structure for Part-II, (2nd Year) of the Full Time Diploma in MLT

Program: Medical Laboratory Technology
Program Level: Diploma in Engineering & Technology

Program Code: MLT
Duration: 3 Years

SEMESTER – 3rd													
Sr No	Course Code	Course Name	Credit	Contact Hr./Week			Evaluation / Assessment Scheme						Full Marks
							Internal				External		
				L	T	P	CA	TA	MST	P	P	ESE	
Theoretical													
1	MLTPC301	Human Anatomy & Physiology	3	3	-	-	10	10	20	-	-	60	100
2	MLTPC302	Hematology & Body Fluids	2	2	-	-	10	10	20	-	-	60	100
3	MLTPC303	Biomedical Instrumentation -I	3	3	-	-	10	10	20	-	-	60	100
4	MLTPC304	Analog Electronics	2	2	-	-	10	10	20	-	-	60	100
5	MLTPC305	Electrical & Electronics Measurement	2	2	-	-	10	10	20	-	-	60	100
6	MLTPC306	Programming in C	2	2	-		10	10	20	-	-	60	100
Sessional													
7	MLTPC301P	Human Anatomy & Physiology Lab	1		-	2	-	-	-	60	40	-	100
8	MLTPC302P	Hematology & Body Fluids Lab	1		-	2	-	-	-	60	40	-	100
9	MLTPC303P	Biomedical Instrumentation –I Lab.	1		-	2	-	-	-	60	40	-	100
10	MLTPC304P	Analog Electronics Lab	1		-	2	-	-	-	60	40	-	100
11	MLTPC305P	Electrical & Electronics Measurement Lab.	1		-	2	-	-	-	60	40	-	100
12	MLTPC306P	Programming in C Lab.	1		-	2	-	-	-	60	40	-	100
13	*I301	Internship-I	1	-	-	-	-	-	-	60	*40	-	100
		TOTAL:	21										

SEMESTER – 4th													
Sr N o	Course Code	Course Name	Credit	Contact Hr./Week			Evaluation / Assessment Scheme						Full Mar ks
							Internal				External		
				L	T	P	CA	TA	MST	P	P	ESE	
Theoretical													
1	MLTPC407	Clinical Biochemistry & Biophysics	2	2	-	-	10	10	20	-	-	60	100
2	MLTPC408	Serology & Histopathology	2	2	-	-	10	10	20	-	-	60	100
3	MLTPC409	Biomedical Instrumentation -II	3	3	-	-	10	10	20	-	-	60	100
4	MLTPC410	Diagnostic Techniques	2	2	-	-	10	10	20	-	-	60	100
5	MLTPC411	Digital Electronics	2	2	-	-	10	10	20	-	-	60	100
6	MLTPE41#	Elective-I:	2	2	-	-	10	10	20	-	-	60	100
Sessional													
7	MLTPC407P	Clinical Biochemistry & Biophysics Lab.	1		-	2	-	-	-	60	40	-	100
8	MLTPC408P	Serology & Histopathology Lab.	1		-	2	-	-	-	60	40	-	100
9	MLTPC409P	Biomedical Instrumentation –II Lab.	1		-	2	-	-	-	60	40	-	100
10	MLTPC410P	Diagnostic Techniques Lab.	1		-	2	-	-	-	60	40	-	100
11	MLTPC411P	Digital Electronics Lab.	1		-	2	-	-	-	60	40	-	100
12	*PR401	Minor Project	2		-	4	-	-	-	60	40	-	100
			20										

Code System:

Program (i.e. MLT) _Course Category (i.e. PC) _Semester (i.e. 3/ 4/5/6) _ Course No (i.e. 01, 02, ...)

Program (i.e. MLT) _Course Category (i.e. PC) _Semester (i.e. 3/ 4/5/6) _ Course No (i.e. 01, 02, ...) _ P (for Practical)



West Bengal State Council of Technical, Vocational Education and Skill Development

(Technical Education Division)

Curriculum Structure for Part-III, (3rd Year) of the Full Time Diploma in MLT

Program: Medical Laboratory Technology

Program Code: MLT

Program Level: Diploma in Engineering & Technology

Duration: 3 Years

SEMESTER – 5th														
Sr N o	Course Code	Course Name	Credit	Contact Hr./Week			Evaluation / Assessment Scheme						Full Ma rks	
								Internal				External		
				L	T	P	CA	TA	MST	P	P	ESE		
Theoretical														
1	MLTPC512	Clinical Microbiology & Parasitology	3	3	-	-	10	10	20	-	-	60	100	
2	MLTPC513	Medical Imaging	2	2	-	-	10	10	20	-	-	60	100	
3	MLTPC514	Advanced Bio-Medical Engineering	3	2	1	-	10	10	20	-	-	60	100	
4	MLTPC515	Microprocessor & Microcontroller	3	2	1	-	10	10	20	-	-	60	100	
5	MLTPE52#	Elective-II:	2	2	-	-	10	10	20	-	-	60	100	
6	MLTPE53#	Elective-III:	2	2	-	-	10	10	20	-	-	60	100	
Sessional														
7	MLTPC512P	Clinical Microbiology & Parasitology Lab	1		-	2	-	-	-	60	40	-	100	
8	MLTPC513P	Medical Imaging Lab	1		-	2	-	-	-	60	40	-	100	
9	MLTPC514P	Bio-Medical Engineering Lab	1		-	2	-	-	-	60	40	-	100	
10	MLTPC515P	Microprocessor & Microcontroller Lab	1		-	2	-	-	-	60	40	-	100	
11	*PR502	Major Project	-		-	2	-	-	-	-	-	-	-	
12	*I502	Internship-II	1	-	-	-	-	-	-	60	*40	-	100	
		TOTAL:	20											

SEMESTER – 6th													
Sr N o	Course Code	Course Name	Credit	Contact Hr./Week			Evaluation / Assessment Scheme						Full Ma rks
							Internal				External		
				L	T	P	CA	TA	MST	P	P	ESE	
Theoretical													
1	MLTPC616	Installation & Maintenance of Medical Equipment	3	2	1	-	10	10	20	-	-	60	100
2	MLTPE64#	Elective-IV:	2	2	-	-	10	10	20	-	-	60	100
3	*OE611	Open Elective-I:	3	3	-	-	10	10	20	-	-	60	100
4	*OE62#	Open Elective-II :	3	3	-	-	10	10	20	-	-	60	100
5	*HS604	Entrepreneurship and Start-ups	4	3	1	-	10	10	20	-	-	60	100
Sessional													
6	MLTPC616P	Installation & Maintenance of Medical Equipment Lab.	1	-	-	2	-	-	-	60	40	-	100
7	*PR603	Major Project	4		-	6	-	-	-	60	40	-	100
8	*SE601	Seminar	1	-	-	-	-	-	-	60	40	-	100
		TOTAL:	21										

Code System:

Program (i.e. MLT) _Course Category (i.e. PC) _Semester (i.e. 3/ 4/5/6) _ Course No (i.e. 01, 02, ...)

Program (i.e. MLT) _Course Category (i.e. PC) _Semester (i.e. 3/ 4/5/6) _ Course No (i.e. 01, 02, ...) _ P (for Practical)



West Bengal State Council of Technical, Vocational Education and Skill Development

(Technical Education Division)

Program Elective (PE) Course								
Sr N o	Course Code	Course Name	Semester	Credit	Contact Hr./Week			Full Marks
					L	T	P	
Elective-I (Any one course to be selected)			4 th	2	2	-	-	100
1	MLTPE411	Biomaterial						
2	MLTPE412	Tissue Engineering						
Elective-II (Any one course to be selected)			5 th	2	2	-	-	100
3	MLTPE521	Artificial Organs & Rehabilitation Engineering						
4	MLTPE522	Basic Bioinformatics						
Elective-III (Any one course to be selected)			6 th	2	2	-	-	100
5	MLTPE631	Hospital Management						
6	MLTPE632	Medical Image Processing						
	Elective-IV (Any one course to be selected)		6 th	2	2	-	-	100
7	MLTPE641	Nano-Technology & Drug Delivery						
8	MLTPE642	Micro-Electro Mechanical System						

Code System:

Program (i.e. MLT) _Course Category (i.e. PE) _Semester (i.e. 4/5/6) _ Elective No (i.e. 1/2/3/4) _ Course No (i.e. 1, 2, ...)

Open Elective (OE) Course								
Sr No	Course Code	Course Name	Semester	Credit	Contact Hr./Week			Full Marks
					L	T	P	
1	*OE61#	Open Elective-I	6 th	3	3	0	0	100
1.1	*OE611	Engineering Economics & Project Management						
2	*OE62#	Open Elective-II (Any one course to be selected)	6 th	3	3	0	0	100
2.1	*OE621	Environmental Engineering & Science						
2.2	*OE622	Artificial Intelligence						
2.3	*OE623	Industrial Management						

Code System:

Program (All i.e. *) _Course Category (i.e. OE) _Semester (6th) _Open Elective No (i.e. 1 or 2) _Course No (i.e. 1, 2, ...)

Examination Scheme										
Course	Internal					External				Full Marks
	MST	Quiz / Assignment	Attendance	Class Performance	Total	ESE	Assignment	Viva-Voce	Total	
Theory	20	10	10	-	40	60	-	-	60	100
Sessional	-	30	10	20	60	-	20	20	40	100
Pass Marks: Students have to obtain at least 40% marks (pass marks) in both Internal assessment and External separately.										

CA: Class Attendance

TA: Teacher's Assessment is based on Average Marks obtained in Assignments/ quiz/ Viva-Voce on each Unit.

MST: Best of two MST marks obtained by the student.

I: Internship may be duration of 2- 4 weeks at Hospital/Diagnostic Centre/Industry.

Note: Internship – 1) 60% (Internal) will be assessed by the Institute, based on Internship Report, Assignment and Viva-Voce.
2) 40% marks (External), will be assessed during internship by the concern authority of the Institute/ hospital/ Industry etc. where students will go for their Internship based on performance, attendance, report etc.



West Bengal State Council of Technical, Vocational Education and Skill Development

(Technical Education Division)

Distribution of Credits for Diploma in MLT			
Sr. No	Semester	Credit	Remarks
1	Sem-1	18	Part-I : 38
2	Sem-2	20	
3	Sem-3	21	Part-II : 41
4	Sem-4	20	
5	Sem-5	20	Part-III: 41
6	Sem-6	21	
Total:		120	DMLT: 120

Code	Definition
MLT	Medical Laboratory Technology
PC	Program Core Course
PE	Program Elective Course
OE	Open Elective Course
HS	Humanities & Social Science Course
AU	Audit Course
I	Internship
PR	Project
SE	Seminar
L	Lecture
T	Tutorial
P	Practical
CA	Class Attendance
TA	Teacher's Assessment
MST	Mid Semester Test
ESE	End Semester Exam

Definition of Credit	Credit
1 Hr. Lecture (L) per Week	1
1 Hr. Tutorial (T) per Week	1
1 Hr. Practical (P) per Week	0.5

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of
Diploma in Metallurgical Engineering
[MET]
Part-II (3rd & 4th Semester) and Part-III (5th
& 6th Semester)

Revised 2022

PROPOSED DRAFT SYLLABUS

DIPLOMA IN METALLURGY

SEMESTER - III

Sl. No	Category of Course	Code No.	Course Title	Hours per week			Total contact hrs / week	Credits	Marks
				L	T	P			
1.	Program core course	MTPC201	Physical Metallurgy – I	2	1	0	3	3	100
2.	Program core course	MTPC203	Fuels , Furnaces & Refractories	2	1	0	3	3	100
3.	Program core course	MTPC205	Metallurgical Thermodynamics Fundamentals of Mechanical Engineering	1	1	0	2	2	100
4.	Program core course	MTPC207	Extractive Metallurgy	1	1	0	2	2	100
5.	Program core course	MTPC209	Fundamentals of Mechanical Engineering	1	1	0	2	2	100
6.	Program core course	MTPC211	Physical Metallurgy - I Lab	0	0	4	4	2	100
7.	Program core course	MTPC213	Fundamentals of Mechanical Engineering Lab	0	0	2	2	1	100
8.	Program core course	MTPC215	Extractive Metallurgy Lab	0	0	2	2	1	100
9.	Program core course	MTPC217	Computer Aided Drafting Lab	0	0	2	2	1	100
10.	Summer Internship-I (4 weeks) after II nd. Sem)	SI201						2	200
	Total			7	5	10	22	19	1100

SEMESTER - IV

Sl. No	Category of Course	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MTPC202	Physical Metallurgy – II	2	1	0	3	3	100
2.	Program core course	MTPC204	Metal Working Process	1	1	0	2	2	100
3.	Program core course	MTPC206	Ferro Alloy & DRI	1	1	0	2	2	100
4.	Program core course	MTPC208	Testing of Metals	1	1	0	2	2	100
5.	Program core course	MTPC210	Blast Furnace Iron Making Process	2	1	0	3	3	100
6.	Program core course	MTPC212	Physical Metallurgy - II Lab	0	0	2	2	1	100
7.	Program core course	MTPC214	Destructive Testing of Metals Lab	0	0	2	2	1	100
8.	Program Elective course	MTPE202	Alloy Steel & Cast Iron	2	1	0	3	3	100
9.	Minor Project	MTPR202		0	0	4	4	2	200
10.	Mandatory Course	MTAU202	Essence of Indian Knowledge and Tradition	2	0	0	2	0	100
	Total			11	6	8	25	19	1100

SEMESTER - V

Sl. No	Category of Course	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MTPC301	Primary Steel Making	1	1	0	2	2	100
2.	Program core course	MTPC303	Foundry Technology	1	1	0	2	2	100
3.	Program core course	MTPC305	Heat Treatment Technology	1	1	0	2	2	100
4.	Program core course	MTPC307	Foundry Technology Lab	0	0	2	2	1	100
5.	Program core course	MTPC309	Heat Treatment Technology Lab	0	0	2	2	1	100
6.	Program core course	MTPC311	Non - Destructive Testing of Metals Lab	0	0	2	2	1	100
7.	Program Elective course	MTPE301	Advance Engineering Materials	2	1	0	3	3	100
8.	Program Elective course	MTPE303	Corrosion & Oxidation	2	1	0	3	3	100
9.	Open Elective	MTOE301	Economic Policies in India	2	1	0	3	3	100
10.	Summer Internship-II (6 weeks) after IV th Sem	SI301		0	0	0	0	3	200
11.	Major Project	PR302		0	0	2	2	1	100
	Total						23	22	1200

SEMESTER - VI

Sl. No	Category of Course	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MTPC302	Secondary Steel Making Process	1	1	0	2	2	100
2.	Program core course	MTPC304	Energy & Environment Control in Metallurgical Industries	1	1	0	2	2	100
3.	Program core course	MTPC306	Welding Technology	1	1	0	2	2	100
4.	Program core course	MTPC308	Welding Technology Lab	0	0	3	3	1.5	100
5.	Program Elective course	MTPE302	Advance Foundry & Forging Technology	2	1	0	3	3	100
6.	Humanities and Social Science course	HS302	Entrepreneurship and Start-ups	2	1	0	3	3	100
7.	Open Elective	MTOE302	Renewable Energy Technologies	2	1	0	3	3	100
8.	Open Elective	MTOE304	Engineering Economics & Accountancy	2	1	0	3	3	100
9.	Mandatory Course	AU302	Indian Constitution	2	0	0	2	0	100
10.	Major Project	PR302		0	0	3	3	1.5	100
11.	Seminar	SE302		1	0	0	1	1	100
Total							27	22	1100

MARKS DISTRIBUTION

Sem	Subject	Credit	Marks	Total contact hrs / week
I	10	18	1000	25
II	10	20	1000	27
III	9	19	1100	22
IV	11	19	1100	25
V	11	22	1200	23
VI	11	22	1100	27
SUM	62	120	6500	

Total available contact hours per week = 27

Monday to Friday = $5 \times 5 = 25$

Saturday = $1 \times 2 = 2$

Total Credit point and total marks will remain fixed : 120 & 6500 .

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Mining Engineering [MIN]

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

Revised 2022

WBSCTVESD Curriculum for Diploma in Mining Engineering
Semester-wise Detailed Curricular Structure

Semester III

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MINPC 301	Introduction to Mining Technology	3	0	0	3	3	100
2.	Program core course	MINPC 302	Underground Mine Environment	2	0	0	2	2	100
3.	Program core course	MINPC 303	Drilling & Blasting	2	0	0	2	2	100
4.	Program core course	MINPC 304	Underground Coal Mining	2	0	0	2	2	100
5.	Program core course	MINPC 305	Surface Mining	3	0	0	3	3	100
6.	Program core course	MINPC 306	Mining Geology	2	0	0	2	2	100
7.	Program core course	MINPC 311	Underground Mine Environment Lab.	0	0	2	2	1	100
8.	Program core course	MINPC 312	Drilling & Blasting Lab.	0	0	2	2	1	100
9.	Program core course	MINPC 313	Mining Operations Lab.	0	0	2	2	1	100
10.	Program core course	MINPC 314	Mining Geology Lab.	0	0	2	2	1	100
11.	Internship-I after Semester II	MINSI 341		0	0	0	0	1	100
	TOTAL						22	19	1100

L- LECTURE, T- TUTORIAL, P- PRACTICAL/ LAB

Semester IV

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MINPC 401	Mine Ventilation	3	0	0	3	3	100
2.	Program core course	MINPC 402	Underground Metalliferous Mining	2	0	0	2	2	100
3.	Program core course	MINPC 403	Mine Survey-I	3	0	0	3	3	100
4.	Program core course	MINPC 404	Elementary Rock Mechanics & Strata Control	2	0	0	2	2	100
5.	Program core course	MINPC 405	Electro- technology in Mining	2	0	0	2	2	100
6.	Program core course	MINPC 411	Mine Ventilation Lab.	0	0	2	2	1	100
7.	Program core course	MINPC 412	Mine Survey-I Lab.	0	0	4	4	2	100
8.	Program core course	MINPC 413	Strata Control Lab.	0	0	2	2	1	100
9.	Program core course	MINPC 414	Electro- technology in Mining Lab.	0	0	2	2	1	100
10.	Program elective course	MINPE 42*	Elective-I	2	0	0	2	2	100
a.	ANY ONE COURSE HAS TO BE TAKEN FROM a & b	MINPE 421	Special Underground Mining						
b.		MINPE 422	Surface Mining-II						
11.	Minor Project	MINPR 451		0	0	4	4	2	100
	TOTAL						28	21	1100

L- LECTURE, T- TUTORIAL, P- PRACTICAL/ LAB

Semester V

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MINPC 501	Mine Management Legislation & Safety-I	3	0	0	3	3	100
2.	Program core course	MINPC 502	Mine Hazards & Safety	3	0	0	3	3	100
3.	Program core course	MINPC 503	Mechanical Engineering in Mining	2	0	0	2	2	100
4.	Program core course	MINPC 511	Mine Hazards & Safety Lab.	0	0	2	2	1	100
5.	Program core course	MINPC 512	Mechanical Engineering in Mining Lab.	0	0	2	2	1	100
6.	Program core course	MINPC 513	Computer Aided Design & Drafting Lab.	0	0	2	2	1	100
7.	Program elective course	MINPE 52*	Elective-II	3	0	0	3	3	100
a.	ANY ONE COURSE HAS TO BE TAKEN FROM a & b	MINPE 521	Mine Survey-II						
b.		MINPE 522	Petroleum & Natural Gas Engineering						
8.	Program elective course	MINPE 52*	Elective-III	3	0	0	3	3	100
c.	ANY ONE COURSE HAS TO BE TAKEN FROM c & d	MINPE 523	Impact of Mining Operation on Environment						
d.		MINPE 524	Mineral Dressing						
9.	Internship-II after Semester IV	MINSI 541		0	0	0	0	1	100
10.	Major Project	MINPR 551		0	0	4	4	2	100
	TOTAL						24	20	1000

L- LECTURE, T- TUTORIAL, P- PRACTICAL/ LAB

Semester VI

Sl. No	Category	Code No.	Course Title	Hours per week			Total contact hrs/ week	Credits	Marks
				L	T	P			
1.	Program core course	MINPC 601	Mine Management Legislation & Safety-II	3	0	0	3	3	100
2.	Program core course	MINPC 602	Mine Machinery-I	3	0	0	3	3	100
3.	Program core course	MINPC 611	Mine Machinery-I Lab.	0	0	2	2	1	100
4.	Program elective course	MINPE 62*	Elective-IV	3	0	0	3	3	100
a.	ANY ONE COURSE HAS TO BE TAKEN FROM a & b	MINPE 621	Mine Machinery- II						
b.		MINPE 622	Mineral Economics						
5.	Humanities and Social Science course	HS 302	Entrepreneurship and Start- ups	3	0	0	3	3	100
6.	Open elective course		Engineering Economics & Project Management	3	0	0	3	3	100
7.	Open elective course		Open Elective- II* (ANY ONE COURSE HAS TO BE TAKEN FROM THE LIST)	3	0	0	3	3	100
8.	Major Project	MINPR 651		0	0	4	4	2	100
9.	Seminar	MINSE 661		0	0	2	2	1	100
	TOTAL						26	22	900

L- LECTURE, T- TUTORIAL, P- PRACTICAL/ LAB

***LIST OF OPEN ELECTIVE-II COURSES**

S No.	Code No.	Course Title	Hours per week			Credit
			L	T	P	
1.		Environmental Engineering & Science	3	0	0	3
2.		Industrial Management	3	0	0	3
3.		Disaster Management	3	0	0	3
4.		Sustainable Development	3	0	0	3
5.		Industrial Safety Engineering	3	0	0	3
6.		Introduction to E-Governance	3	0	0	3
7.		Renewable Energy Technologies	3	0	0	3
8.		Soft Computing Techniques	3	0	0	3
9.		Operations Research	3	0	0	3
10.		Professional Orientation	3	0	0	3

SUMMARY			
Semester	No. of Subjects	Credit	Marks
III	11	19	1100
IV	11	21	1100
V	10	20	1000
VI	9	22	900
Total		120 (Including Sem I & II)	6100 (Including Sem I & II)

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Modern Office Practice &
Management [MOPM]

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

Revised 2022

**CURRICULAR STRUCTURE FOR PART-II (2nd YEAR) OF THE
FULL-TIME DIPLOMA COURSE IN MODERN OFFICE PRACTICE & MANAGEMENT
MODERN OFFICE PRACTICE & MANAGEMENT: Semester III**

Sl No.	Category of Courses	Course Title	L	T	P	Contact Hours	Credit	Marks
1	Management	Secretarial Practice	2	0	0	2	2	100
2	Management	Business Statistics -II	3	0	0	3	3	100
3	Management	Conversational English -II	2	0	0	2	2	100
4	Humanities & Social Science	Advanced Accountancy	3	0	0	3	3	100
5	Humanities & Social Science	Principles of Auditing	2	0	0	2	2	100
6	Management	Secretarial Practice Lab	0	0	2	2	1	100
7	Engg Science	Data Analysis Lab-I	0	0	2	2	1	100
8	Humanities & Social Science	Conversational English Lab	0	0	2	2	1	100
9	Engg. Science	Financial Accounting Lab - I	0	0	3	3	1.5	100
10	Engg Science	C Programming	0	0	3	3	1.5	100
11	Engg Science	Multimedia Lab-I	0	0	2	2	1	100
12	Management	Industry Visit & Seminar-I	0	0	0	0	1	100
Total Credits and Marks							20	1200

MODERN OFFICE PRACTICE & MANAGEMENT: Semester IV

Sl No.	Category of courses	Course Title	L	T	P	Contact Hours	Credit	Marks
1	Humanities & Social Science	Quantitative Technique	2	0	0	2	2	100
2	Humanities & Social Science	Entrepreneurship Development	2	0	0	2	2	100
3	Engg. Science	Principles of Banking	2	0	0	2	2	100
4	Management	Office Equipment & Communication System	2	0	0	2	2	100
5	Humanities & Social Science	Financial Management	2	0	0	2	2	100
6	Management	Marketing Management	2	0	0	2	2	100
7	Engg. Science	Data Analysis Lab-II	0	0	2	2	1	100
8	Humanities & Social Science	Entrepreneurship Development Lab	0	0	2	2	1	100
9	Engg. Science	Office Equipment & Communication System Lab	0	0	2	2	1	100
10	Engg. Science	Financial Accounting Lab-II	0	0	2	2	1	100
11	Management	Market Study	0	0	2	2	1	100
12	Humanities & Social Science	Professional Orientation-I	0	0	2	2	1	100
13	Engg Science	Multimedia Lab-II	0	0	2	2	1	100
14	Management	Industry Visit & Seminar -II	0	0	0	0	1	100
Total Credits and Marks							20	1400

MODERN OFFICE PRACTICE & MANAGEMENT: Semester V

Sl No.	Category of Courses	Course Title	L	T	P	Contact Hours	Credit	Marks
1	Management	Management Information System	3	0	0	3	3	100
2	Management	Human Resource management	3	0	0	3	3	100
3	Management	Total Quality Management	3	0	0	3	3	100
4	Humanities & Social Science	Office & business Correspondence	3	0	0	3	3	100
5	Humanities & Social Science	Industrial Relations	3	0	0	3	3	100
6	Humanities & Social Science	Elective: 1. Office Administration I 2. Record Management Principles -I	3	0	0	3	3	100
7	Humanities & Social Science	Elective Lab 1. Office Administration I Lab Record Management Principles –I Lab	0	0	2	2	1	100
8	Humanities & Social Science	Project & Seminar on any Specific Field of Management	0	0	2	2	1	100
9	Humanities & Social Science	Professional Orientation-II			2	2	1	100
Total Credits and Marks							21	900

MODERN OFFICE PRACTICE & MANAGEMENT: Semester VI

Sl No.	Category of courses	Course Title	L	T	P	Contact Hours	Credit	Marks
1	Humanities & Social Science	Supply Chain Management	3	0	0	3	3	100
2	Humanities & Social Science	Indian Constitution	3	0	0	3	3	100
3	Humanities & Social Science	Current Economic Problems	3	0	0	3	3	
4	Humanities & Social Science	Elective : 1.Office Administration II 2. Record Management Principles -II	3	0	0	3	3	100
5	Management	Company Law	3	0	0	3	3	100
6	Humanities & Social Science	Elective Lab 1. Office Administration II Lab 2.Record Management Principles –II Lab	0	0	2	2	1	100
7	Internship	Industrial Training	0	0	0	0	2	100
8	Internship	Project	0	0	4	4	2	100
9	Management	Seminar	0	0	2	2	1	100
Total Credits and Marks							21	900

Total Credits, Contact Hours & Marks

Semester	1 st	2 nd	3 rd	4 th	5 th	6 th	Total
Credit Point	18	20	20	20	21	21	120
Contact Hours	24	26	26	26	24	23	149
Marks	1000	1000	1200	1400	900	900	6400

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Multi Media Technology [MT]

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

Revised 2022

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Packaging Technology [PT]

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

Revised 2022

Proposed course curriculum for 3rd, 4th, 5th and 6th semester - Diploma in Packaging Technology

Semester-III

Sl. No.	Category of Course	Code No.	Course Title	Credit	Marks	Total Contact Hours/week		
						L	T	P
1.	Program Core Course		Introduction to Packaging Technology	3	100	3	0	0
2.	Program Core Course		Cellulose and Fiberboard Technology	3	100	3	0	0
3.	Program Core Course		Principles of Thermodynamics & Heat Transfer	4	100	3	1	0
4.	Program Core Course		Metal Packaging	3	100	3	0	0
5.	Program Core Course		Glass Packaging	3	100	3	0	0
6.	Program Core Course		Packaging Technology Lab	1	100	0	0	2
7.	Program Core Course		Paper and Corrugated Technology Lab	1	100	0	0	2
8.	Program Core Course		Thermodynamics & Heat Transfer Lab	1	100	0	0	2
9.	Internship-I (4 weeks) after the end of second semester (Semester-II)		Should be undertaken in an industry/ Govt. or Pvt. Certified agencies which are in social sector/ Govt. Skill Centers/Institutes/ Schemes	1	100	0	0	2
Total				20	900	15	1	8
Total Contact Hours/week=24								

Semester-IV

Sl. No.	Category of Course	Code No.	Course Title	Credit	Marks	Total Contact Hours/week		
						L	T	P
1.	Program Core Course		Plastic Packaging	3	100	3	0	0
2.	Program Core Course		Ancillary Packaging Materials	3	100	3	0	0
3.	Program Core Course		Package Testing and Evaluation	3	100	3	0	0
4.	Program Core Course		Fluid Mechanics and Pneumatics	3	100	2	1	0
5.	Program Core Course		Drug and Pharmaceutical Packaging	3	100	3	0	0
6.	Program Elective course		i) Security Printing ii) Coding System for Packaging	3	100	3	0	0
7.	Program Core Course		Packaging Materials Testing Lab	1	100	0	0	2
8.	Program Core Course		Fluid Mechanics and Pneumatics Lab	1	100	0	0	2
9.	Program Core Course		Identification of Plastics Lab	1	100	0	0	2
Total				21	900	17	1	6
Total Contact Hours/week=24								

Semester-V

Sl. No.	Category of Course	Code No.	Course Title	Credit	Marks	Total Contact Hours/week		
						L	T	P
1.	Program Core Course		Food Preservation and Packaging	3	100	3	0	0
2.	Program Core Course		Packaging Technique and Machinery	3	100	3	0	0
3.	Program Core Course		Package Printing Technology	3	100	3	0	0
4.	Program Elective Course		i) Packaging Rules and Regulation ii) Flexible Packaging	3	100	3	0	0
5.	Program Elective Course		i) Application of Computer in Packaging ii) Hazardous Material Packaging	3	100	3	0	0
6.	Program Core Course		Food Packaging Lab	1	100	0	0	2
7.	Program Core Course		Package Printing Lab	2	100	0	0	3
8.	Major Project	PR302		2	100	0	0	3
9.	Internship	SI301	Internship II	1	100	0	0	2
Total				21	900	15	0	10
Total Contact Hours/week=25								

Semester-VI

Sl. No.	Category of Course	Code No.	Course Title	Credit	Marks	Total Contact Hours/week		
						L	T	P
1.	Program Core Course		Package Design	3	100	2	1	0
2.	Program Core Course		Principle of Refrigeration and Cold Storage	3	100	2	1	0
3.	Humanities and Social Science	HS302	Entrepreneurship and Start-ups	3	100	3	0	0
4.	Open Elective Course	OE302	Engineering Economics and Project Management	3	100	3	0	0
5.	Open Elective Course	OE304	Environmental Engineering and Science	3	100	3	0	0
6.	Program Core Course		Package Design Lab	2	100	0	0	3
7.	Major Project	PR302		2	100	0	0	3
8.	Seminar	AC202		1	100	0	0	2
Total				20	800	13	2	8
Total Contact Hours/week=23								

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

West Bengal State Council of Technical &
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Curriculum Structure
of

Diploma in Photography [PHO]

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

Revised 2022

Revised curricular structure for Diploma in Photography, RIPT as per AICTE 2019 norms

Revised curricular structure for Diploma in Photography, RIPT as per AICTE 2019 norms																				
Photography						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional					Total Marks					
Semester III	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment			End Semester Assessment							
						Mid Sem Test	Class Assignment	Class Attendance		Teacher's Assessment & Laboratory Notebook	Class Performance	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce						
Principles of Photography	3	0	0	3	3	20	10	10	60						100					
Indoor and Outdoor Still Photography I	3	0	0	3	3	20	10	10	60						100					
Lighting Technique	3	0	0	3	3	20	10	10	60						100					
Digital Still Photography	3	0	0	3	3	20	10	10	60						100					
Photo Design	0	0	3	3	1.5					30	20	10	20	20	100					
Indoor and Outdoor Still Photography Lab I	0	0	3	3	1.5					30	20	10	20	20	100					
Digital Lab Techniques in Still Photography	0	0	3	3	1.5					30	20	10	20	20	100					
Photo Design Lab	0	0	3	3	1.5					30	20	10	20	20	100					
Professional Practice I (Still Photography Photography)	0	0	0	0	1										100					
				24	19										900					
Photography						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional					Total Marks					
Semester IV	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment			End Semester Assessment							
						Mid Sem Test	Class Assignment	Class Attendance		Teacher's Assessment & Laboratory Notebook	Class Performance	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce						
Development of Life Skill-II	3	0	0	3	3	20	10	10	60						100					
Digital Photography	3	0	0	3	3	20	10	10	60						100					
Indoor and Outdoor Still Photography II	3	0	0	3	3	20	10	10	60						100					
Multimedia and Animation I	3	0	0	3	3	20	10	10	60						100					
Videography I	3	0	0	3	3	20	10	10	60						100					
Digital Photography Lab	0	0	3	3	1.5										30	20	10	20	20	100
Indoor and Outdoor Still Photography Lab II	0	0	3	3	1.5										30	20	10	20	20	100
Indoor and Outdoor Still Photography Lab II	0	0	3	3	1.5										30	20	10	20	20	100
Multimedia and Animation Lab I	0	0	3	3	1.5					30	20	10	20	20	100					
Professional Practice II (Videography)	0	0	4	4	2										100					
				31	23										1000					
Photography						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional					Total Marks					
						Internal Scheme								End Semester Assessment						

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Printing Technology [DP]

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

Revised 2022

Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester III	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Paper & Ink Technology	3	0	0	3	3	20	10	10	60					100
Graphics Reproduction	3	0	0	3	3	20	10	10	60					100
Relief & Recess Printing	3	0	0	3	3	20	10	10	60					100
Electronic Composing	3	0	0	3	3	20	10	10	60					100
Paper & Ink Technology Laboratory	0	0	3	3	1.5					50	10	20	20	100
Graphic Reproduction Laboratory	0	0	3	3	1.5					50	10	20	20	100
Relief & Recess Printing Workshop	0	0	3	3	1.5					50	10	20	20	100
Electronic Composing Laboratory	0	0	3	3	1.5					50	10	20	20	100
Internship I (after Semester II)	0	0	0	0	1									100
				24	19									900
Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester IV	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Printing Image Carrier Preparation	3	0	0	3	3	20	10	10	60					100
Color Technology in Printing	3	0	0	3	3	20	10	10	60					100
Digital Pre-press	3	0	0	3	3	20	10	10	60					100
Offset Printing Technology	3	0	0	3	3	20	10	10	60					100
Programme Elective I: Digital and Security Printing or Electronic Imaging	3	0	0	3	3	20	10	10	60					100
Printing Image Carrier Preparation Laboratory	0	0	3	3	1.5					50	10	20	20	100
Color Technology in Printing Laboratory	0	0	3	3	1.5					50	10	20	20	100
Digital Pre-press Practical	0	0	3	3	1.5					50	10	20	20	100
Offset Printing Technology Workshop	0	0	3	3	1.5					50	10	20	20	100
Minor Project	0	0	4	4	2									100
				31	23									1000
Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester V	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Printer's Costing & Estimating	2	0	0	2	2	20	10	10	60					100
Graphics Design	3	0	0	3	3	20	10	10	60					100
Print Converting & Packaging Techniques	3	0	0	3	3	20	10	10	60					100
Programme Elective II: Digital Publishing or Color Management	3	0	0	3	3	20	10	10	60					100
Programme Elective III: Print Production Management (Workflow) or Quality management in Printing	3	0	0	3	3	20	10	10	60					100
Graphics Design practical	0	0	3	3	1.5					50	10	20	20	100
Print Converting & Packaging Techniques Workshop	0	0	3	3	1.5					50	10	20	20	100
Major Project	0	0	4	4	2									100
Internship II (after Semester IV)	0	0	0	0	1									100
				24	20									900
Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester VI	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Printing Machine Maintenance	3	0	0	3	3	20	10	10	60					100
Entrepreneurship and Start-ups	3	0	0	3	3	20	10	10	60					100
Programme Elective IV: Press standardization or Advanced Packaging Techniques	3	0												

Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester III	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Paper & Ink Technology	3	0	0	3	3	20	10	10	60					100
Graphics Reproduction	3	0	0	3	3	20	10	10	60					100
Relief & Recess Printing	3	0	0	3	3	20	10	10	60					100
Electronic Composing	3	0	0	3	3	20	10	10	60					100
Paper & Ink Technology Laboratory	0	0	3	3	1.5					50	10	20	20	100
Graphic Reproduction Laboratory	0	0	3	3	1.5					50	10	20	20	100
Relief & Recess Printing Workshop	0	0	3	3	1.5					50	10	20	20	100
Electronic Composing Laboratory	0	0	3	3	1.5					50	10	20	20	100
Internship I (after Semester II)	0	0	0	0	1									100
				24	19									900
Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester IV	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Printing Image Carrier Preparation	3	0	0	3	3	20	10	10	60					100
Color Technology in Printing	3	0	0	3	3	20	10	10	60					100
Digital Pre-press	3	0	0	3	3	20	10	10	60					100
Offset Printing Technology	3	0	0	3	3	20	10	10	60					100
Programme Elective I: Digital and Security Printing or Electronic Imaging	3	0	0	3	3	20	10	10	60					100
Printing Image Carrier Preparation Laboratory	0	0	3	3	1.5					50	10	20	20	100
Color Technology in Printing Laboratory	0	0	3	3	1.5					50	10	20	20	100
Digital Pre-press Practical	0	0	3	3	1.5					50	10	20	20	100
Offset Printing Technology Workshop	0	0	3	3	1.5					50	10	20	20	100
Minor Project	0	0	4	4	2									100
				31	23									1000
Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester V	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Printer's Costing & Estimating	2	0	0	2	2	20	10	10	60					100
Graphics Design	3	0	0	3	3	20	10	10	60					100
Print Converting & Packaging Techniques	3	0	0	3	3	20	10	10	60					100
Programme Elective II: Digital Publishing or Color Management	3	0	0	3	3	20	10	10	60					100
Programme Elective III: Print Production Management (Workflow) or Quality management in Printing	3	0	0	3	3	20	10	10	60					100
Graphics Design practical	0	0	3	3	1.5					50	10	20	20	100
Print Converting & Packaging Techniques Workshop	0	0	3	3	1.5					50	10	20	20	100
Major Project	0	0	4	4	2									100
Internship II (after Semester IV)	0	0	0	0	1									100
				24	20									900
Printing Technology						Evaluation Scheme of Theoretical Paper				Evaluation Scheme of Practical/Sessional				Total Marks
Semester VI	L	T	P	Contact Hours	Credit	Internal Scheme			End Semester Examination	Continuous Assessment		End Semester Assessment		
						Class Test	Quizzes/Assignments/Student Activity	Class Attendance		Continuous Evaluation	Class Attendance	Viva-Voce	Assignment on the day of Viva-voce and Practical report Submission	
Printing Machine Maintenance	3	0	0	3	3	20	10	10	60					100
Entrepreneurship and Start-ups	3	0	0	3	3	20	10	10	60					100
Programme Elective IV: Press standardization or Advanced Packaging Techniques	3	0	0	3	3	20	10	10	60					100
Open Elective I: Engineering Economics & Project Management	3		0	3	3	20	10	10	60					100
Open Elective II: Industrial Management or Professional Orientation or Disaster Management	3		0	3	3	20	10	10	60					100
Printing Machine Maintenance Workshop	0	0	2	2	1					50	10	20	20	100
Major Project	0	0	6	6	3									100
Seminar	1		0	1	1									100
				24	20									800

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of
Diploma in Survey Engineering [SE]
Part-II (3rd & 4th Semester) and Part-III (5th
& 6th Semester)

Revised 2022

WEST BENGAL STATE COUNCIL OF TECHNICAL & VOCATIONAL EDUCATION AND SKILL DEVELOPMENT
TEACHING & EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES

4TH SEMESTER													
SL NO	CODE	COURSE TITLE	CREDIT	CLASS/WK			EXAMINATION SCHEME						
							INTERNAL			ESE	PIA	PEA	TOTAL
				L	T	P	INT	AS/QZ	ATD				
1	SEPC202	Surveying -III	2	2	-	-	20	10	10	60	-	-	100
2	SEPC204	Photogrammetry and Remote Sensing	3	3	-	-	20	10	10	60	-	-	100
3	SEPC206	Tunnel and Mine Survey	2	2	-	-	20	10	10	60	-	-	100
4	SEPC208	Geodesy and Astronomy	2	2	-	-	20	10	10	60	-	-	100
5	SEPC210	Triangulation & Trilateration	2	2	-	-	20	10	10	60			100
6	SEPE202	Program Elective -I	3	3	-	-	20	10	10	60	-	-	100
7	SEPC212	Computer Aided Drawing and Survey Software	2	-	-	4	-	-	-	-	60	40	100
8	SEPC214	Field Survey Practices -II	2	-	-	4	--	-	-	--	60	40	100
9	PR202	Minor Project	2	-	-	4	-	-	-	-	60	40	100
TOTAL			20	14	-	12	-	-	-	-	-	-	900

SEPE1: Any one of the three subjects: 1. Estimating, Costing, Specification and Valuation, 2. Theory of Structure, 3. Mining Technology.

STUDENT CONTACT HOURS PER WEEK: 26 Hrs. Theories and Practical Period of 60 Minutes each.
L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment, AS/QZ – Assignment / Quiz, ATD- Attendance, ESE – EndSemester Exam, PIA-Practical Internal Assessment, PEA-Practical External Assessment.

5TH SEMESTER

SL NO	CODE	COURSE TITLE	CREDIT	CLASS/WK			EXAMINATION SCHEME						
							INTERNAL			ESE	PIA	PEA	TOTAL
				L	T	P	INT	AS/QZ	ATD				
1	SEPC301	Design of R.C.C. Structure	3	3	-	-	20	10	10	60	-	-	100
2	SEPC303	Carto-GIS	2	2	-	-	20	10	10	60	-	-	100
3	SEPC305	Advanced Survey	2	2	-	-	20	10	10	60	-	-	100
4	SEPC307	Route Survey	3	3	-	-	20	10	10	60	-	-	100
5	SEPE301	Program Elective -II	3	3	-	-	20	10	10	60	-	-	100
6	SEPE303	Program Elective -III	3	3	-	-	20	10	10	60	-	-	100
7	SEPC309	Field Survey Practices – III	3	-	-	6	-	-	-	-	60	40	100
8	SEPC311	Quantity Survey	1	-	-	2	-	-	-	-	60	40	100
9	SI301	Internship -II	1	-	-	-	-	-	-	-	100	-	100
10	PR301	Major Project	1	-	-	2	-	-	-	-	60	40	100
TOTAL			22	16		10	-	-	-	-	-	-	1000

SEPE3: Any one of the three subjects 1. Setting out Survey, 2. Construction Management, 3. Landscape Design

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance
ESE - EndSemester Exam, PIA-Practical Internal Assessment, PEA-Practical External Assessment.

6TH SEMESTER

SL NO	CODE	COURSE TITLE	CREDIT	CLASS/WK			EXAMINATION SCHEME						
							INTERNAL			ESE	PIA	PEA	TOTAL
				L	T	P	INT	AS/QZ	ATD				
1	SEPC302	Transmission Line Survey	3	3	-	-	20	10	10	60	-	-	100
2	HU302	Entrepreneurship and Start-up	3	3	-	-	20	10	10	60	-	-	100
3	SEPE302	Program Elective-IV	3	3	-	-	20	10	10	60	-	-	100
4	SEOE302	Open Elective –I	3	3	-	-	20	10	10	60	-	-	100
5	SEOE304	Open Elective -II	3	3	-	-	20	10	10	60	-	-	100
6	SESE302	Seminar	1	1	-	-	-	-	-	-	100	-	100
7	PR302	Major Project	3	-	-	6	-	-	-		60	40	100
8	SEPC304	Survey Training Camp	2	-	-	4	-	-	-		60	40	100
TOTAL			21	16	-	10	-	-	-	-	-	-	800

SEOE302: 1. Engineering Economics and Project Management

STUDENT CONTACT HOURS PER WEEK: 26 Hrs. Theories and Practical Period of 60 Minutes each.

L – Lecture, T –Tutorial, P – Practical, INT- Internal Assessment AS/QZ – Assignment / Quiz ATD- Attendance ESE - EndSemester Exam, PIA-Practical Internal Assessment PEA-Practical External Assessment.

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Electronics & Tele-
Communication Engineering [ETCE] and
Electronics & Communication Engineering
[ECE]

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

Revised 2022

WEST BENGAL STATE COUNCIL OF TECHNICAL EDUCATION											
TEACHING AND EXAMINATION SCHEME FOR DIPLOMA IN ENGINEERING COURSES											
COURSE NAME: FULL TIME DIPLOMA IN ETCE & ECE											
DURATION OF COURSE: 6 SEMESTERS											
SEMESTER: THIRD											
BRANCH: ELECTRONICS & TELECOMMUNICATION ENGG. and ELECTRONICS & COMMUNICATION ENGG.											
SR. NO.	SUBJECT	CREDITS	PERIODS		EVALUATION SCHEME						Total Marks
			L	PR	THEORETICAL			PRACTICAL			
					TA	CT	Total	ESE	Internal	External	
1.	Principles of Electronic Communication	3	4	-	20	20	40	60	-	-	100
2.	Electronic Devices and Circuits	3	4	-	20	20	40	60	-	-	100
3.	Digital Electronics	2	3	-	20	20	40	60	-	-	100
4.	Electric circuits and network	3	4	-	20	20	40	60	-	-	100
5.	Computer Programming Language	2	3	-	20	20	40	60	-	-	100
6.	Principles of Electronic Communication Lab	1	-	3	-	-	-	-	60	40	100
7.	Electronic Devices and Circuits Laboratory	1	-	3	-	-	-	-	60	40	100
8.	Digital Electronics Laboratory	1	-	2	-	-	-	-	60	40	100
9.	Electric circuits and network Laboratory	1	-	3	-	-	-	-	60	40	100
10.	Computer Programming Language Laboratory	1	-	2	-	-	-	-	60	40	100
11.	Internship-I	1	-	-	-	-	-	-	-	-	100
	Total	19	18	13	100	100	200	300	300	200	1100
<div><div><div><div><div><div>•</div><div>STUDENT CONTACT HOURS PER WEEK: 31+2 = 33 hours (2 hours for Library)</div></div></div><div><div><div>•</div><div>ACADEMIC CONTACT WEEKS PER SEMESTER : 17 weeks (Teaching-15 weeks + Internal Exam-2 weeks)</div></div></div><div><div><div>•</div><div>THEORY AND PRACTICAL PERIODS OF 60 MINUTES EACH</div></div></div><div><div><div>•</div><div>ABBREVIATIONS: L- Lecture, PR- Practical, IA- Internal Assessment, CT- Class Test, ESE- End Semester Exam</div></div></div><div><div><div>•</div><div>IA (Internal Assessment for Theoretical) = 40 marks: CT= 20 Marks, Attendance =10 marks and Quizzes/Assignment/Student Activity = 10 marks.</div></div></div><div><div><div>•</div><div>Minimum qualifying marks for both Theoretical and Sessional subjects (for internal assessment and external assessment separately) are 40%.</div></div></div><div><div><div>•</div><div>IA (Internal Assessment for Practical) =60 marks: 50 marks for continuous evaluation and 10 marks for Class attendance.</div></div></div><div><div><div>•</div><div>Internship-I will be completely assessed internally.</div></div></div></div></div></div>											

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100

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



Curriculum Structure
of

Diploma in Mine Surveying [MIS]

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

Revised 2022

Draft Syllabus for Semester -3 (Part-II) Mine Surveying Dept.

Curricular structure for semester-3 (Part –II) of the Full time Diploma Course in Mine Surveying

Sl. No.	Category of Course	Code no.	Course Title	Class level work			Credit	Full marks
				L	T	P		
1	PCC	MSPC201	Elements of Surveying	2			2	100
2	PCC	MSPC203	Chain Surveying	2			2	100
3	PCC	MSPC205	Traverse Surveying	2	1		3	100
4	PCC	MSPC207	Elements of Mining	2			2	100
5	PCC	MSPC209	Area and Volume Calculation	2			2	100
6	PCC	MSPC211	Levelling and Contouring	2	1		3	100
7	PCC	MSPC213	Chain Surveying Lab			2	1	100
8	PCC	MSPC215	Traverse Surveying Lab			2	1	100
9	PCC	MSPC217	Auto CAD Lab			4	2	100
10	PCC	MSPC219	Levelling and Contouring Lab			2	1	100
11	Summer Internship-I (4 weeks after second Semester)	SI201					1	100
	Total			12	2	10	20	1100

Students contact hours per week: 24 HOURS

Each Theory and Practical period is of one hour each.

L - Lecture, T - tutorial, P - Practical, PCC - Programme Core Course

Evaluation Scheme

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits.

For Theory Courses:

The weightage of Internal assessment is 40% and for End Semester Exam is 60%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment			End Semester External Assessment	Total
Mid. Sem. Tests	Quizzes, Viva-voce, Assignments	Class Attendance	End Sem. Examination	
20	10	10	60	100

For Practical Courses:

The weightage of Internal assessment is 60% and for End Semester Exam is 40%. The student has to obtain at least 40% marks individually both in internal assessment and end semester exams to pass.

Internal Assessment (Continuous Evaluation)			End Semester External Assessment		Total
Assignments in classes	Class Performance	Class Attendance	Assignment on the day of Viva voce	Viva voce	
30	20	10	20	20	100