

CURRICULAR STRUCTURE FOR PART – I FIRST SEMESTER OF THE
FULL-TIME DIPLOMA COURSE IN CHEMICAL ENGINEERING

Sl. No.	SUBJECT CODE	SUBJECT OF STUDY	CONTACT PERIODS / WEEK		EXAMINATION SCHEME				FULL MARKS	
					INTERNAL		EXTERNAL			
					THEORETICAL PAPERS	LECTURE	SESSIONAL	ASSESSMENT	ATTENDANCE	OBJECTIVE
1.	CHEM / 1 / T1 / CSS	COMMUNICATION SKILLS (STUDIES)	2 (L) + 1 (T)	—	10	2.5	—	50	50	—
2.	CHEM / 1 / T2 / PHY1	PHYSICS – I	3	—	10	2.5	—	50	50	—
3.	CHEM / 1 / T3 / CHM1	CHEMISTRY – I	2 (L) + 1 (T)	—	10	2.5	—	50	50	—
4.	CHEM / 1 / T4 / MTH1	MATHEMATICS – I	5	—	20	5	30	70	100	—
5.	CHEM / 1 / T5 / EMK	ENGINEERING MECHANICS	4	—	20	5	30	70	100	—
SESSIONAL PAPERS			LECTURE	SESSIONAL	INTERNAL		EXTERNAL		Th.	Ses.
6.	CHEM / 1 & 2 / S1 / LPHY	PHYSICS LAB – I	—	3	12.5		—		—	—
7.	CHEM / 1 & 2 / S2 / LCHM	CHEMISTRY LAB – I	—	3	12.5		—		—	—
8.	CHEM / 1 & 2 / S3 / SED	ENGINEERING DRAWING (S) – I	—	6	50		—		—	—
9.	CHEM / 1 & 2 / S4 / SWP	WORKSHOP PRACTICE – I	—	6	50		—		—	—
TOTAL			16 (L) + 2 (T)	18	—		—		350	—

CURRICULAR STRUCTURE FOR PART – I SECOND SEMESTER OF THE
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Sl. No.	SUBJECT CODE	SUBJECT OF STUDY	CONTACT PERIODS / WEEK		EXAMINATION SCHEME				FULL MARKS	
					INTERNAL		EXTERNAL			
					THEORETICAL PAPERS	LECTURE	SESSIONAL	ASSESSMENT	ATTENDANCE	OBJECTIVE
1.	CHEM / 2 / T1 / BEA	BUSINESS ECONOMICS & ACCOUNTANCY	4	—	20	5	30	70	100	—
2.	CHEM / 2 / T2 / PHY2	PHYSICS – II	2	—	10	2.5	—	50	50	—
3.	CHEM / 2 / T3 / CHM2	CHEMISTRY – II	2	—	10	2.5	—	50	50	—
4.	CHEM / 2 / T4 / MTH2	MATHEMATICS – II	3	—	20	5	30	70	100	—
5.	CHEM / 2 / T5 / CA	COMPUTER APPLICATIONS	3	—	10	2.5	—	50	50	—
6.	CHEM / 2 / T6 / SOM	STRENGTH OF MATERIALS	3	—	20	5	30	70	100	—
7.	CHEM / 2 / T7 / ETK	ELECTRICAL TECHNOLOGY	2	—	10	2.5	—	50	50	—
8.	CHEM / 2 / T8 / ED	ENGINEERING DRAWING (4 HR. EXAM.)	—	—	20	5	30	70	100	—
SESSIONAL PAPERS			LECTURE	SESSIONAL	INTERNAL		EXTERNAL		Th.	Ses.
9.	CHEM / 1 & 2 / S1 / LPHY	PHYSICS LAB – II	—	2	12.5		25		—	50
10.	CHEM / 1 & 2 / S2 / LCHM	CHEMISTRY LAB – II	—	2	12.5		25		—	50
11.	CHEM / 1 & 2 / S3 / SED	ENGINEERING DRAWING (S) – II	—	6	50		100		—	200
12.	CHEM / 1 & 2 / S4 / SWP	WORKSHOP PRACTICE – II	—	6	50		100		—	200
13.	CHEM / 2 / S5 / LCA	COMPUTER APPLICATIONS LAB	—	3	50		50		—	100
14.	CHEM / 2 / S6 / LETK	ELECTRICAL TECHNOLOGY LAB	—	2	25		25		—	50
TOTAL			19	21	—		—		600	650

q Each of Part I – 1st & 2nd semester is of 17 weeks duration of which 15 weeks are scheduled as contact weeks and 2 weeks are scheduled for holding two Centralised Internal Assessments.

q Part I – 1st & 2nd semester consists of 36 & 40 contact periods per week respectively, and, 8 & 4 periods per week respectively are allocated for Student Centred Activities like Library, Guided Studies etc.

q Marks distribution in Part – I : Theoretical – 950, Sessional – 650; Total – 1600.

**CURRICULAR STRUCTURE FOR PART – II FIRST SEMESTER OF THE
FULL-TIME DIPLOMA COURSE IN CHEMICAL ENGINEERING**

SL. No.	SUBJECT CODE	SUBJECT OF STUDY	CONTACT PERIODS / WEEK		EXAMINATION SCHEME				FULL MARKS		PAGE No.
					INTERNAL		EXTERNAL		Th.	SES.	
					LECTURE	SESSIONAL	ASSESSMENT	ATTENDANCE			
1.	CHEM / 3 / T1 / ENVE	ENVIRONMENTAL ENGINEERING	3	—	20	5	30	70	100	—	7
2.	CHEM / 3 / T2 / C	PROGRAMMING IN C	3	—	20	5	30	70	100	—	9
3.	CHEM / 3 / T3 / BET	BASIC ELECTRONICS	3	—	20	5	30	70	100	—	10
4.	CHEM / 3 / T4 / FOCE	FUNDAMENTALS OF CHEMICAL ENGINEERING	4	—	20	5	30	70	100	—	12
5.	CHEM / 3 / T5 / FMK	FLUID MECHANICS	4	—	20	5	30	70	100	—	13
6.	CHEM / 3 / T5 / CET	CHEMICAL ENGINEERING THERMODYNAMICS	4	—	20	5	30	70	100	—	15
SESSIONAL PAPERS			LECTURE	SESSIONAL	INTERNAL		EXTERNAL		Th.	SES.	—
7.	CHEM / 3 / S1 / LC	PROGRAMMING IN C LAB	—	3	50		—		—	100	16
8.	CHEM / 3 / S2 / LBET	BASIC ELECTRONICS LAB	—	3	50		—		—	100	18
9.	CHEM / 3 / S3 / CHTL	CHEMICAL TECHNOLOGY LAB	—	4	50		—		—	100	18
10.	CHEM / 3 / S4 / LFMK	FLUID MECHANICS LAB	—	4	50		—		—	100	19
11.	CHEM / 3 / S5 / LCET	CHEMICAL ENGINEERING THERMODYNAMICS LAB	—	4	50		—		—	100	19
TOTAL			21	18	—		—		600	500	—

**CURRICULAR STRUCTURE FOR PART – II SECOND SEMESTER OF THE
FULL-TIME DIPLOMA COURSE IN CHEMICAL ENGINEERING**

SL. No.	SUBJECT CODE	SUBJECT OF STUDY	CONTACT PERIODS / WEEK		EXAMINATION SCHEME				FULL MARKS		PAGE No.
					INTERNAL		EXTERNAL		Th.	SES.	
					LECTURE	SESSIONAL	ASSESSMENT	ATTENDANCE			
1.	CHEM / 4 / T1 / CSJ	COMMUNICATION SKILLS (JOB)	2	—	10	2.5	—	50	50	—	20
2.	CHEM / 4 / T2 / PHT	PROCESS HEAT TRANSFER	4	—	20	5	30	70	100	—	21
3.	CHEM / 4 / T3 / MO	MECHANICAL OPERATIONS	4	—	20	5	30	70	100	—	22
4.	CHEM / 4 / T4 / RKD	REACTION KINETICS & REACTION DESIGN	4	—	20	5	30	70	100	—	23
5.	CHEM / 4 / T5 / CONM	COMPUTER ORIENTED NUMERICAL METHODS	4	—	20	5	30	70	100	—	24
SESSIONAL PAPERS			LECTURE	SESSIONAL	INTERNAL		EXTERNAL		Th.	SES.	—
6.	CHEM / 4 / S1 / LCSJ	COMMUNICATION SKILLS (JOB) LAB	—	2	25		25		—	50	25
7.	CHEM / 4 / S2 / LHT	HEAT TRANSFER LAB	—	5	50		100		—	100	26
8.	CHEM / 4 / S3 / LMO	MECHANICAL OPERATIONS LAB	—	5	50		100		—	100	27
9.	CHEM / 4 / S4 / LRKD	REACTION KINETICS LAB	—	5	50		100		—	100	27
10.	CHEM / 4 / S5 / SALF	SCIENTIFIC APPLICATION LAB (FORTRAN)	—	4	50		100		—	100	28
TOTAL			18	21	—		—		450	450	—

q Each of Part II – 1st & 2nd semester consists of 39 contact periods per week and 5 periods per week are allocated for Student Centred Activities like Library, Guided Studies etc.

q Marks distribution in Part – II : Theoretical – 1050, Sessional – 950; Total – 2000.

CURRICULAR STRUCTURE FOR PART - III FIRST SEMESTER OF THE
FULL-TIME DIPLOMA COURSE IN CHEMICAL ENGINEERING

SL. No.	SUBJECT CODE	SUBJECT OF STUDY	CONTACT PERIODS / WEEK		EXAMINATION SCHEME				FULL MARKS		PAGE No.
					INTERNAL		EXTERNAL		TH.	SES.	
					LECTURE	SESSIONAL	ASSESSMENT	ATTENDANCE			
		THEORETICAL PAPERS									
1.	CHEM / 5 / T1 / IMNT	INDUSTRIAL MANAGEMENT	3	—	20	5	30	70	100	—	31
2.	CHEM / 5 / T2 / ENE	ENERGY ENGINEERING	4	—	20	5	30	70	100	—	32
3.	CHEM / 5 / T3 / CHT1	CHEMICAL TECHNOLOGY – I	4	—	20	5	30	70	100	—	34
4.	CHEM / 5 / T4 / SPR1	SEPARATION PROCESS – I	4	—	20	5	30	70	100	—	35
5.	CHEM / 5 / T5 / PCE	PROCESS CONTROL ENGINEERING	4	—	20	5	30	70	100	—	36
6.	CHEM / 5 / *T6 / MMS1	METALLURGY & MATERIAL SCIENCE – I	4	—	20	5	30	70	100	—	44
7.	CHEM / 5 / *T7 / PRE1	PETROLEUM REFINERY ENGINEERING & PETROCHEMICALS - II	4	—	20	5	30	70	100	—	46
		SESSIONAL PAPERS									
8.	CHEM / 5 / S1 / LENE	ENERGY ENGINEERING LAB	—	4	50	—	50	—	—	100	37
9.	CHEM/5&6 / S2 / CPED	CHEMICAL PROCESS EQUIPMENT DESIGN & DRAWING (GROUP-A)	—	4	50	—	—	—	—	—	42
10.	CHEM/5&6 / S3 / LSPR	SEPARATION PROCESS LAB (GROUP – A)	—	4	50	—	—	—	—	—	43
11.	CHEM/5&6 / S4 / CHEP	CHEMICAL ENGINEERING PROJECT WORK (GROUP – A)	—	4	50	—	—	—	—	—	48
TOTAL			23	16	—	—	—	—	600	100	—

CURRICULAR STRUCTURE FOR PART - III SECOND SEMESTER OF THE
FULL-TIME DIPLOMA COURSE IN CHEMICAL ENGINEERING

SL. No.	SUBJECT CODE	SUBJECT OF STUDY	CONTACT PERIODS / WEEK		EXAMINATION SCHEME				FULL MARKS		PAGE No.
					INTERNAL		EXTERNAL		TH.	SES.	
					LECTURE	SESSIONAL	ASSESSMENT	ATTENDANCE			
		THEORETICAL PAPERS									
1.	CHEM / 6 / T1 / INST	INSTRUMENTATION	4	—	20	5	30	70	100	—	38
2.	CHEM / 6 / T2 / CHT2	CHEMICAL TECHNOLOGY – II	4	—	20	5	30	70	100	—	39
3.	CHEM / 6 / T3 / SPR2	SEPARATION PROCESS – II	4	—	20	5	30	70	100	—	40
4.	CHEM / 6 / *T4 / MMS2	METALLURGY & MATERIAL SCIENCE – II	4	—	20	5	30	70	100	—	45
5.	CHEM / 6 / *T5 / PRE2	PETROLEUM REFINERY ENGINEERING & PETROCHEMICALS - II	4	—	20	5	30	70	100	—	47
		SESSIONAL PAPERS									
6.	CHEM / 6 / S1 / LPCE	PROCESS CONTROL ENGINEERING LAB	—	4	50	—	50	—	—	100	41
7.	CHEM/5&6 / S2 / CPED	CHEMICAL PROCESS EQUIPMENT DESIGN & DRAWING (GROUP-B)	—	4	50	—	100	—	—	200	42
8.	CHEM/5&6 / S3 / LSPR	SEPARATION PROCESS LAB (GROUP – B)	—	4	50	—	100	—	—	200	43
9.	CHEM/5&6 / S4 / CHEP	CHEMICAL ENGINEERING PROJECT WORK (GROUP – B)	—	6	50	—	100	—	—	200	48
10.	CHEM / 6 / S5 / SMNR	SEMINAR ON CHEMICAL ENGINEERING PROJECT WORK	—	1	25	—	25	—	—	50	48
11.	CHEM / 6 / S6 / LMMS	METALLURGY & MATERIAL SCIENCE LAB	—	4	25	—	25	—	—	50	45
12.	CHEM / 6 / S7 / LPRE	PETROLEUM REFINERY ENGINEERING & PETROCHEMICALS LAB	—	4	25	—	25	—	—	50	48
13.	CHEM / 6 / S8 / GVV	GENERAL VIVA VOCE	—	—	50	—	50	—	—	100	50
TOTAL			16	23	—	—	—	—	400	900	—

q * Each student is required to opt for any one of the following two elective papers offered:

(a) METALLURGY & MATERIAL SCIENCE (MMS1, MMS2 & LMMS); (b) PETROLEUM REFINERY ENGINEERING & PETROCHEMICALS (PRE1, PRE2 & LPRE).

q Each of Part III – 1st & 2nd semester is of 17 weeks duration of which 15 weeks are scheduled as contact weeks and 2 weeks are scheduled for holding two Centralised Internal Assessments.

q Each of Part III – 1st & 2nd semester consists of 39 contact periods per week and 5 periods per week are allocated for Student Centred Activities like Library, Guided Studies etc.

q **Marks distribution in Part – III : Theoretical – 1000, Sessional – 1000; Total – 2000.**