

**DEPARTMENT OF CHEMICAL ENGINEERING
INDIAN INSTITUTE OF TECHNOLOGY ROORKEE**

Program Code: **15** **M.Tech. (Industrial Pollution Abatement)**

Department: **CH** **Department of Chemical Engineering**

Year: **I**

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester- I (Autumn)														
1.	CHN-511	Air Pollution Control Engineering	PCC	4	3	1	0	3	0	25	-	25	50	-
2.	CHN-513	Water Pollution Control Engineering	PCC	4	3	0	2	3	0	15	25	20	40	-
3.	CHN-515	System Approach to Environmental Engineering	PCC	4	3	0	2	3	0	15	25	20	40	-
4.	CHN-517	Biochemical Engineering	PCC	4	3	1	0	3	0	25	-	25	50	-
5.		Programme Elective-I	PEC	4	3	1	0	3	0	25	-	25	50	-
		Total		20	12	1	0							
Semester-II (Spring)														
1.	CHN-512	Solid and Hazardous Waste Management	PCC	4	3	1	0	3	0	25	-	25	50	-
2.	CHN-700	Seminar	SEM	2	0	0	2	-	-	-	-	-	100	-
3.		Programme Elective-II	PEC	4	3	1	0	3	0	25	-	25	50	-
4.		Programme Elective-III	PEC	4	3	1	0	3	0	25	-	25	50	-
5.		Programme Elective-IV	PEC	4	3	1	0	3	0	25	-	25	50	-
		Total		18	3	1	0							

**DEPARTMENT OF CHEMICAL ENGINEERING
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Program Code: 15 M.Tech. (Industrial Pollution Abatement)

Department: CH Department of Chemical Engineering

Year: II

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
Semester- I (Autumn)														
1.	CHN-701A	Dissertation Stage-I (to be continued next semester)	DIS	12	-	-	-	-	-	-	-	-	100	-
		Total		12										
Note: Students can take 1 or 2 audit courses as advised by the supervisor, if required.														
Semester-II (Spring)														
1.	CHN-701B	Dissertation Stage-II (contd. From III semester)	DIS	18	-	-	-	-	-	-	-	-	100	-
		Total		18										

Summary					
Semester		1	2	3	4
Semester-wise Total Credits		20	18	12	18
Total Credits		68			

Program Elective Courses (IPA)

PROGRAM ELECTIVE – I (For Autumn Semester)

Teaching Scheme					Contact Hours/Week			Exam Duration		Relative Weight (%)				
S. No.	Subject Code	Course Title	Subject Area	Credits	L	T	P	Theory	Practical	CWS	PRS	MTE	ETE	PRE
1.	CHN-561	Computational Fluid Dynamics	PEC	4	3	1	0	3	0	25	-	25	50	-
2.	CHN-571	Data Acquisition and Monitoring Techniques	PEC	4	3	1	0	3	0	25	-	25	50	-
3.	CHN-573	Design of Experiments and Parameter Estimation	PEC	4	3	1	0	3	0	25	-	25	50	-

LIST OF PROGRAM ELECTIVES – II, III and IV (For Spring Semester)

4.	CHN-572	Waste to Energy	PEC	4	3	1	0	3	0	25	-	25	50	-
5.	CHN-574	Novel Separation Techniques	PEC	4	3	1	0	3	0	25	-	25	50	-
6.	CHN-582	Environmental Impact Assessment	PEC	4	3	1	0	3	0	25	-	25	50	-
7.	CHN-584	Industrial Safety and Hazards Management	PEC	4	3	1	0	3	0	25	-	25	50	-
8.	CHN-586	Design of Pollution Control Systems	PEC	4	3	1	0	3	0	25	-	25	50	-
9.	CHN-588	Clean Technology	PEC	4	3	1	0	3	0	25	-	25	50	-
10.	CHN-590	Environmental Chemistry	PEC	4	3	1	0	3	0	25	-	25	50	-