

M Tech in Industrial Safety and Pollution Abatement

SCHEME OF STUDY (wef July 2021)

First Semester:

Course No.	Subject	Scheme of Studies periods per week			Total Credits
		L	T	P	
MTH 514	Advanced Mathematics	3	-	-	3
CH 512	Advanced Transport Phenomena	3	-	-	3
CH 513	Advanced Chemical Reaction Engineering	3	-	-	3
CH 514	Advanced Separation Technology	3	-	-	3
HUM 511	Communication Skills	2	-	-	2
	Elective-1 (A)	3	-	-	3
	Elective-2 (A)	3	-	-	3
CH 515	Advanced Chemical Engg. Lab.	-	-	2	1
CH 516	Seminar-1	-	-	2	1
Total Hours: 24 Total Credit: 22		Total Semester Credits			22

Second Semester:

Course No.	Subject	Scheme of Studies periods per week			Total Credits
		L	T	P	
CH 521	Optimization Techniques	3	-	-	3
CH 522	Industrial Pollution Abatement	3	-	-	3
CH 523	Industrial Safety & Hazard Management	3	-	-	3
	Elective-3 (A)	3	-	-	3
	Elective-4 (A)	3	-	-	3
	Elective-5 (C)	3	-	-	3
MTH 524	Research Methodology	1	1	-	2
CH 525	Software Lab	-	-	2	1
CH 526	Seminar-2	-	-	2	1
Total Hours: 24 Total Credits: 44		Total Semester Credits			22

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Third Semester:

Course No.	Subject	Scheme of Studies periods per week			Total Credits
		L	T	P	
CH 611	Dissertation Phase-1	-	-	32	16
Total Hours: 32 Total credits: 60		Total Semester Credits			16

Fourth Semester:

Course No.	Subject	Scheme of Studies periods per week			Total Credits
		L	T	P	
CH 621	Dissertation Phase-2	-	-	40	20
Total Hours: 40 Total Credits: 80		Total Semester Credits			20

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List of Program Electives A		List of Open Electives C	
CH 551	Polymer Science & Technology	ARP - 581	Introduction to Urban Planning
CH 552	Nanotechnology	BSE – 581	Bioprocess Engineering
CH 553	Advanced Oil and Paint Technology	BSE – 582	Biophysics Tools and Techniques
CH 554	Pinch Technology	CE – 581	Solid Waste Management
CH 555	Advanced Fluid Dynamics	CE – 582	Basic Concept of GIS
CH 556	Advanced Process Dynamics and Control	CE – 583	Road Safety
CH 557	Petroleum Engineering & Technology	CSE – 581	Machine Learning
CH 558	Environmental Chemistry & Pollution Acts	CSE – 582	Advanced Data Structures and Algorithms
CH 559	Industrial Catalysis	EE – 581	Electric Machines & Applications
CH 560	Air and Noise Pollution Control	EE – 582	Control and Instrumentation
CH 561	Advanced Environmental Biotechnology	ECE – 581	Introduction to Fuzzy Logic
CH 562	Corrosion Science & Engineering	ECE – 582	Neural Networks and its Applications
CH 563	Solid Waste Management	EC - 581	Energy Resource Technologies
CH 564	Renewable Energy Engineering	HUM – 581	Intellectual Property Rights for Engineers
CH 565	Wastewater Treatment	HUM – 582	Applied Psychology: Human Centered Design and Engineering
CH 566	Advance Heat & Mass transfer	MTH – 581	Advanced Operations Research
CH 567	Advance Thermodynamics in Chemical Engineering	MTH – 582	Computing Technologies
CH 568	Energy Management in Process Industries	ME – 581	Value Engineering
CH 569	Food Processing & Technology	ME – 582	Design Thinking
CH 570	Textile Technology	ME - 583	Mechatronics and NDT in Engineering
CH 571	Multiphase Flow Modeling	MME – 581	Advanced Instrumentation Methods for Material Analysis
CH 572	Paper and Pulp Technology	MME – 582	Smart Materials and their Application
CH 573	Membrane Science and Technology	MBA-581	Engineering Startup Management
CH 574	Economics and Management of Chemical Industries	PHY – 581	Nanotechnology and Nanoscience
CH 575	Fire Safety & Management		
CH 576	Regulatory Procedures for safety and Environment		