

Module Name (Chemical Engineering)	Total Hours
Effluent treatment plant operation & maintenance	40

Topic	Sub Topic	Hours	
		Theory	Practical
1. Introduction to Wastewater Treatment	1.1 Introduction to Wastewater Treatment	01	
	1.2 Wastewater Norms & Disposal	01	
	1.3 Wastewater Treatment Processes	04	01
2. Wastewater Sampling & Analysis	2.1 Sample Collection & Preservation	01	01
	2.2 Physio-Chemical & Biological Analysis of Wastewater	01	03
3. Advance Treatment Methodologies	3.1 Advance Treatment Methodologies	01	02
4. Effluent Treatment Plant Operation & Maintenance	4.1 ETP basics & Operation	01	
	4.2 Parts of ETP, its Operation & Safety Precaution	02	
	4.3 ETP Staff Competency & Maintenance	01	
	4.4 Data Interpretation & Record Keeping	02	03
5. Common Effluent Treatment Plant	5.1 CETP Opportunities	01	
	5.2 Challenges to CETP	02	
	5.3 Wastewater Recycling	01	
	5.4 Industrial Visit to ETP		05
6. Solid & Hazardous Waste	6.1 SHW Generation, Types & Its Management	04	02
	Total	23	17