



Course Weekly Outline

Week No.	Theoretical	Experimental
1	Quantity of water: Water use; variations in rates of water consumption; design period;	
2	population estimate; fire demand.	
3	Piping materials: Ductile iron piping works; PVC piping works; steel piping works; concrete	
4	piping works; HDPE piping works; GRP piping works; valves.	
5	Water distribution systems: Description of water distribution systems; analysis and design	
6	of water distribution systems.	
7	Water pumping stations: Types of pumping stations; types of pumps; pumps power; system	
8	head curve; pump characteristics curves; pumps connection; pumps selection.	
9	Water treatment: Aim of water treatment; description and design of Intake structure;	
10	description and design of rapid mix unit; coagulation process	
11	Water treatment: description and design of flocculation unit; sedimentation process;	
12	description and design of sedimentation unit	
13	Water treatment: description and design of filtration systems; description and design of	
14	disinfection systems.	
15	Mid-term Exam; Quantity of sanitary sewage and storm water	