AR-407

CODE	SUBJECT	CREDITS
AR-407	BUILD.SERVICES-I	02
FOCUS		
	To understand requirements of building services –Water supply and drainage in building design.	
CONTE	NT	
	Water Supply: Requirement of water supply to different types of buildings. Sources of water, modes and methods of conveyance of water, fixtures and appurtenances. Distribution of water, methods of distribution, different distribution systems, in a campus, and in a building, overhead and under ground tanks.	
	Drainage: Refuse, different forms of refuse garbage, sullage, toilet waste and storm water collection and disposal systems. General principles of drainage manholes, grease-chambers, etc traps, ventilation of drains and sewers. Principles of design of drainage lines, drainage layouts for building premises. Longitudinal section of drains. Drainage in non municipal areas soak wells, septic tanks. Water closets, flushing valves, flushing tanks, wash basins and its accessories. Rainwater drainage pipes, spouts sizes of rainwater pipes. Disposal system of rain water at ground level, storm water drainage. Rainwater storage, reuse, ground-water recharging principles and methods.	
METHODOLOGY		
	Mainly lecture based. Case Studies and project work.	-
REFERE		
	1.Water Supply & Sanitary Engineering-G.S.Birdie	
	2. Public Health engineering-Rangwala	
	3. Building Services-F.Halls	