

# GUJARAT TECHNOLOGICAL UNIVERSITY

## M.E. (CIVIL) – (Branch-49)-Construction Management

**Year – I (Semester – II) (W.E.F. January 2014)**

### **1724908: - Applied Building Services in Building Construction (Minor Elective – I)**

<b>Sr. No.</b>	<b>Course Content</b>
<b>1</b>	<b>Water supply &amp; Plumbing systems :-</b> Water Supply in high rise building complexes and complex Structures, Quality of water consideration for different uses, issues of water supply and plumbing in various types of building, Operation and maintenance of these Services
<b>2</b>	<b>Sanitation and Waste disposal systems :-</b> Sanitation and Waste disposal systems in high rise building complexes and complex Structures, Collection and disposal systems used in high rise buildings and complex Structures, Effluent treatment plants, recycling and reuse of treated effluent. Rain water harvesting and similar methods of conserving water resources, Operation and maintenance of these Services
<b>3</b>	<b>Mechanical &amp; Communication systems</b> (elevators, escalators, conveyors, etc.). Security systems etc. in high rise building complexes, public buildings, Parking lots and complex structures like Hospitals, public transport terminals etc. Design parameters for determining the loads & requirement, Operation and maintenance of these Services. Case study/ies of such structures and reporting, Operation and maintenance of these Services
<b>4</b>	<b>Miscellaneous :-</b> Lighting, Heating, Ventilation & Air conditioning systems in high rise building complexes, public buildings, Parking lots and structures like Hospitals, public transport terminals etc. Code provisions from NBC for Fire protection and prevention in high rise building complexes, public buildings, Parking lots and complex structures like Hospitals, public transport terminals educational buildings, building types categorized under etc.

#### **Tutorials/Practical:-**

1. Preparation of seminar and reports on above prescribed contents
2. Field Visit and preparation of observations and experiences
3. Tutorials on above contents

#### **Reference:-**

1. Building Services Engineering 0006 Edition (Paperback), by David V. Chadderton, Routledge Publishers, 2012
2. National Building Code NBC(2005)

3. Building Construction By B.C. Punamia, Laxmi Publication
4. Building Planning & Drawing by Dr. N.Kumara Swamy,Charotar publishing
5. The A To Z of Practical Building Construction and its Management by Sandeep Mantri, Satya Prakashan (2011)

***Note : -Detail web reference is associated and available with at each context of subject.***