

# GUJARAT TECHNOLOGICAL UNIVERSITY

M.E Semester: 2

## Water Resources Management

Subject Name Water Supply and Drainage

---

Sr.No	Course content
1	Planning of water supply scheme, feasibility study.
2	Intake, radial collector well, storage sump and service reservoirs, pumps and its selection
3	Measurement of flow and SCADA, Different types of pipe materials, Appurtenances, Losses in pipes, Analysis of pipe network using EPANET.
4	Prediction of flood for urban storm drainage, Rational method, hydraulics of flow in open channel, hydraulic design of storm sewer, Storm water detention and selection of detention pond

### List of Tutorials

1. Feasibility study of water supply and water treatment plant
2. Population forecasting method and estimation of water demand
3. Study of SCADA, EPANET based pipe network
4. Urban storm water drainage parameters and design methods
5. Design of Pumps

### Reference Books:

1. Manual of Water Supply and Treatment, CPHEEO, Ministry of Urban Development, New Delhi
2. Hydrosystem Engineering and Management, Mays, L.W. and Tung, Y.K., McGraw Hill New York
3. Applied Hydrology, Chow, V.T, Maidment, D.R. and Mays, L.W., McGraw Hill
4. Computer Assisted Floodplain Hydrology and Hydraulics, Hoggan, D.H., McGraw hill New York