

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E Semester: 2

Water Resources Management

Subject Name Infra Structure Engineering and Management

Sr.No	Course content
1	Challenges of managing infrastructure
2	Life cycle analysis concept.
3	Infrastructures need assessment, Performance and Indicators.
4	Various Infrastructure Systems such as Transportation Services, Water and Wastewater Systems, Buildings and Structures, Energy Facilities
5	Database Management, Data Need and Data Analysis, Performance Evaluation Modelling and Failure Analysis
6	Maintenance Rehabilitation and Reconstruction Strategies, Dealing with New and Alternatives
7	Integrated infrastructure management systems, Infrastructure management system applications

List of Tutorials

1. Infrastructure and its impact on development
2. Infrastructure need assessment
3. Infrastructure systems
4. Study of transportation network and water resources
5. Collection and analysis of data
6. Infrastructure system application, and case study of any infrastructure project

Reference Books:-

1. Grig N.S., Infrastructure engineering and management, Wiley-Interseience, 1988
2. Hudson W.R., Haas R., Uddin W., Infrastructure Management, McGraw-Hill, 1997