

GUJARAT TECHNOLOGICAL UNIVERSITY
Syllabus for M. Arch - 2019
SECOND SEMESTER
Subject: Water and Waste management

Course Code: X26106

Credits: 3

Course Objective: Practises to achieve efficiency in use of water and management of wastes.

Course Contents:

To provide a comprehensive understanding of water and waste management from an environmental public health perspective. Identify and discuss the public health, regulatory, planning, technical and economic principles that influence the water and solid waste management system. Principles and techniques for sustainable design to minimize impact on natural water drainage pattern, contamination of drainage basins, rain water harvesting. Sustainable techniques in municipal solid waste management and others: Introduction, Segregation, Sorting, Composting, Vermi-composting, Home composting, Recycling and Reuse. Incineration method, Scientific Land filling, Management of urban waste service.

References:

1. Water Sensitive Urban Design: Principles and Inspirations for Sustainable Storm water Management in the City of the Future, Author: Jacqueline Hoyer, Wolfgang Dickhaut, Lukas Kronawitter, Björn Weber, ISBN 978-3-86859-106-4
2. Design for Water | Rainwater Harvesting, Storm water Catchment, and Alternate Water Reuse, Author: Heather Kinkade-Levario, Date of publication: June 2007, Publisher: New Society Publishers; 1 edition, ISBN 978-0865715806
3. Water and Urban Development Paradigms, Towards an Integration of Engineering, Design and management Approaches, Author & Editors: Jan Feyen, Kelly
4. Water Centric Sustainable Communities | Planning, Retrofitting and Building the Next Urban Environment, Author: Vladimir Novotny, Jack Ahern, Paul Brown Publisher: Wiley, Date of publication: October, 2010. ISBN 978-0470476086
5. Municipal Water and Waste Water Treatment – by Rakesh Kumar and R N Singh, edited by T.V. Ramchandra
6. Sustainable Building Design Manual-Volume I and II –TERI Publication