

GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for M. Arch - 2019

SECOND SEMESTER

Subject: Sustainable Materials and Technologies II

(Renewable Technologies)

Course Code: X26103

Credits: 2

Course Objective Working knowledge and design of renewable technologies such as Solar PV, Solar thermal, wind harvesting systems and other non-conventional energy sources.

Course Contents:

Sustainable technologies scenario in India, Solar energy, its potential, technology and integration with building Design .Wind Energy, its potential, technology and integration with building Design Bio Mass, its potential, technology and integration with building Design, Nuclear Energy CNG and LPG and other renewable energy sources and their potentials.

References:

1. Moss J. Keith, "Energy Management and Operating Costs in Buildings", E & FN Spon, London, 1996.
2. O'Callaghan, Paul, W – "Buildings for Energy Conservation", Pergamon Press, London, 1980
3. Levermore Geoff, "Building Energy Management Systems", E&FN Spon, London, 2000.
4. Handbook of Energy Efficiency and Renewable Energy. Editors: Frank Kreith, D. Goswami, 2007
5. Renewable Energy Technologies: Their Applications In Developing Countries. Lars A. Kristoferson