



“Techno – Social Excellence”
MarathwadaMitraMandal’s
INSTITUTE OF TECHNOLOGY (MMIT)
Lohgaon, Pune-411047.

“Mechanized Design Application”
Department of Mechanical Engineering

Course Name: Refrigeration & Air Conditioning **Class: TE Mechanical Engineering**
Course Code: 302049 **(2015Pattern)**

Course Objectives:

1. Learning the fundamental principles and different methods of refrigeration and air conditioning.
2. Study of various refrigeration cycles and evaluate performance using Mollier charts and/ or refrigerant property tables.
3. Comparative study of different refrigerants with respect to properties, applications and environmental issues.
4. Understand the basic air conditioning processes on psychometric charts, calculate cooling load for its applications in comfort and industrial air conditioning.
5. Study of the various equipment-operating principles, operating and safety controls employed in refrigeration air conditioning systems

Course Outcomes:

- CO1 - Illustrate the fundamental principles and applications of refrigeration and air conditioning system
- CO2 - Obtain cooling capacity and coefficient of performance by conducting test on vapour compression refrigeration systems
- CO3 - Present the properties, applications and environmental issues of different refrigerants
- CO4 - Calculate cooling load for air conditioning systems used for various
- CO5 - Operate and analyze the refrigeration and air conditioning systems.