Techno-Social Excellence
Marathwada Mitra Mandal's
INSTITUTE OF TECHNOLOGY (MMIT)
Lohgaon, Pune-411047.

"Mechanized Design Application"

Department of Mechanical Engineering

Course Name: Engineering Thermodynamics
Class: SE Mechanical Engineering
Course Code: 202043 (2019 Pattern)

Course Objectives:

1. To introduce the fundamentals of thermodynamics.
2. To understand the concepts of laws of thermodynamics.
3. To apply the concepts of thermodynamics towards open and closed systems.
4. To be acquainted with Entropy generation and Exergy Analysis.
5. To understand the behaviour of a Pure substance and to analyze Vapour power cycles.
6. To undertake the performance analysis of a steam generator.

Course Outcomes:

On completion of the course, learner will be able to
CO1. DESCRIBE the basics of thermodynamics with heat and work interactions.
CO2. APPLY laws of thermodynamics to steady flow and non-flow processes.
CO3. APPLY entropy, available and non available energy for an Open and Closed System,
CO4. DETERMINE the properties of steam and their effect on performance of vapour power cycle.
CO5. ANALYSE the fuel combustion process and products of combustion.
CO6. SELECT various instrumentations required for safe and efficient operation of steam generator.