



## **Department of Mechatronics Engineering**

**Course Name: Heat and Mass Transfer**

**Class: SE Mechatronics Engineering**

**Course Code: 217542 (2019 Course)**

### **Course Objectives:**

1. Study of basic concepts and laws of thermodynamics.
2. Study of modes of heat transfer and governing laws.
3. Study and analysis of Boilers, turbines and heat exchangers

### **Course Outcomes:**

On completion of the course, learner will be able to

CO1.Demonstrate understanding of basic concepts of thermodynamics

CO2. Analyze performance of Boilers and steam turbine.

CO3. Analyze the various power cycles CO4. Identify & explain the three modes of heat transfer (conduction, convection and radiation).

CO5.Interprint heat transfer by convection and radiation between simple geometry for black and gray surface

CO6.Design and analyze different heat exchangers