Course Title: Heat Transfer	**Number of Units: 1**
SSD : ING-IND11	**CFU:** 6
Course aims: The course introduces basic concepts and principles of heat transfer. It covers analytical, empirical and numerical techniques for the solution of heat transfer problems. The aim of the course is to understand the fundamentals of heat transfer mechanisms and their applications in various heat transfer equipment.	
Course Description : Conduction**:** The governing equation. Steady one-dimensional heat conduction. Steady two-dimensional heat conduction. Transient conduction. Convection**:** The governing equations for: mass, momentum and energy transport. Forced and natural convection: boundary layer; boundary layer equations; dimensional parameters; external and internal flow; correlations.Radiation**:** Introduction. Processes and characteristics. Characteristics of real surfaces. Diffuse gray surface radiation exchange. Combined heat transfer mechanisms	
Assumed Background: Basic knowledge of Thermodynamics and numerical methods.	
Assessment methods: written exercises, oral test, and facultative homework project.	