



Instructor : Assoc. Prof. Dr. Tolga PIRASACI

Course Outcomes :

1. Learning the methods used to calculating states and performance parameters for power and refrigeration cycles.
2. Gaining the ability to determine the relations among thermodynamic properties, to use equations, tables and charts to fix states of gas mixtures, and to solve engineering problems involving air-conditioning processes.
3. Learning the methods to analyze systems involving combustion processes and to determine equilibrium states for chemically reacting and multiphase systems

Credit Structure : (3-0) 3

Prerequisite : ME203

Textbook : Thermodynamics: An Engineering Approach, Y.A. Çengel and M.A. Boles.

Evaluation Criteria		
Criteria	Unit	Percentage
Midterm	2	60
Final	1	40

Course Outline	
Weeks	Subjects
1-3	Gas Power Cycles
4-5	Vapor Power Cycles
6-7	Refrigeration Cycles
8-9	Thermodynamic Property Relations
10-11	Gas-Vapor Mixtures And Air Conditioning
12-13	Chemical Reactions
14-15	Chemical And Phase Equilibrium

Attendance **must not** be less than **70 percent**.