

ME 316 : Engineering Thermodynamics

The Engineering Thermodynamics course addresses the basic principles of thermodynamics including practical examples of the thermally driven devices and systems. Moreover, the course introduces different solving techniques for thermal-fluids industrial related applications. The course teaches introduction and basic concepts, energy, energy transfer, general energy analysis, properties of pure substances, energy analysis of closed systems, mass and energy analysis of control volumes, the second law of thermodynamics, entropy analysis, exergy analysis, gas power cycles, vapor and combined power cycles, refrigeration cycles, thermodynamic property relations, gas mixtures.

Credits 3

Lab Hours 0

Lecture Hours 3

Tutoring Hours 0

Prerequisite Courses

ME 216

Corequisites

None