

ME 307 : Thermal Fluids Engineering II

The course teaches applications of thermodynamics, heat transfer and fluid mechanics to the design and analysis of energy systems. Topics include energy analysis, power and refrigeration cycles, studies of laminar and turbulent flow including heat transfer in free and forced convection, in channels, and over surfaces, heat transfer, including fins, forced and free convection, boiling and condensation, radiation heat transfer, heat exchangers, multi-mode heat transfer, compressible flows in pipes, ducts, divergent and convergent flows, sonic and supersonic flows.

Credits 3

Lab Hours 0

Lecture Hours 3

Tutoring Hours 0

Prerequisite Courses

ME 206

Corequisites

none