



Advanced Air-Breathing Propulsion

AEROENG 5751

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate (5000-8000 level)

Course Components:

Lecture

Course Description:

Fundamental and advanced concepts of gas turbine operation.

Prerequisites and Co-requisites:

Prereq: 4550 (550).

Course Goals / Objectives:

- Give senior level and graduate students a basic understanding of the gas turbine engines
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Course Topics:

- Review of cycle analysis
 - Non-ideal cycle analysis
 - Diffusers, Nozzles, Ducts, Mixers
 - Compressors
 - Turbines
 - Combustors
 - Off-design, matching
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Designation:

Elective