Flight Vehicle Structures II

AEROENG 3543

Credit Hours (Minimum if “Range” selected):
3.00

Max Credit Hours:
3.00

Representative Textbooks and Other Course Materials:

<table>
<thead>
<tr>
<th>Title</th>
<th>Author</th>
<th>Year</th>
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<tr>
<td>Aircraft Structures for Engineering Students, Fourth Edition</td>
<td>Megson</td>
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Course Description:
Energy Based Analysis: Principles of virtual work and minimum potential energy; rayleigh-ritz and finite element methods; structural stability; thermo-elasticity; structural dynamics; laboratory demonstrations.

Prerequisites and Co-requisites:
Prereq: 3542 (342), and enrollment as AeroEng-BS student (No pre-majors can enroll in this class).

Designation:
Required

Course Goals / Objectives:
Introduce undergraduate aerospace engineering students to fundamental concept of energy based approaches with applications to approximate methods (e.g., Rayleigh-Ritz and the Finite Element Method), structural stability, and structural dynamics.