Design of Space Vehicles and Systems I

AEROENG 4517

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

Max Credit Hours:
3.00

Representative Textbooks and Other Course Materials:

<table>
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<tr>
<th>Title</th>
<th>Author</th>
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<td>Space Mission Analysis and Design (SMAD), and SMAD Workbook III,</td>
<td>Larson and Wertz (editors)</td>
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<td>Microcosm, Inc., Torrance, CA and Kluwer Academic Publishers, Boston,</td>
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Course Description:
Feasibility study of a space mission, elements of mission design and design methodologies of spacecraft subsystems, and preliminary sizing.

Prerequisites and Co-requisites:
Prereq: 3521 and 3543 and 3570 and 3580, and Sr standing, and enrollment as AeroEng-BS student (No pre-majors can enroll in this course). Prereq or concur: 4550.

Designation:
Required

Course Goals / Objectives:
Provide students with conceptual and preliminary spacecraft design experience
Foster multidisciplinary thought processes and collaborations
Train students in effective teamwork
Refine students' technical communication skills through written reports and presentations