

ABET Course Syllabus**ENAE 484 Space Systems Design**

Credits & Contact Hours: 3 credits (3 hours lecture and six hours discussion/recitation)

Course Status: Required

Schedule: Offered every Fall semester

Course Description: Senior capstone design course in the space track. Group preliminary design of a space system, including system and subsystem design, configuration control, costing, risk analysis, and programmatic development. Course also emphasizes written and oral engineering communications.

Pre-Requisites: ENAE 423, ENAE 441, ENAE 457, ENAE 483

Co-Requisites: None

Textbooks:

Other Required Material: Course lecture notes and handouts

Course Oversight: Design/Lab committee

Syllabus Prepared By/Date:

Course Objectives/Student Learning Outcomes:

1. Learn the basic tools and techniques of systems analysis and space vehicle design
2. Understand the open-ended and iterative nature of the design process
3. Simulate the cooperative group engineering environment of the aerospace profession
4. Develop experience and skill sets for working in teams
5. Perform and document professional-quality systems design of focused space mission concepts

Topics Covered:

Relationship of Course Objectives to Program Outcomes

This course addresses program outcomes: 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16