

- Course Number and Title: A E 428. Aerospace Capstone Design
- Catalog Description: Team Project-analysis, design, hands-on build test, evaluate
- Credit Hours: 3 Credits (3+2P)
- Prerequisite(s) / Corequisite(s): Prerequisites: A E 363 and A E 424  
Pre/Corequisites: A E 447
- Required: Required for BSAE Degree
- Course Availability: Fall and Spring Semesters
- Instructor (Usual): Dr. Young Ho Park / Luke Nogales (See <https://mae.nmsu.edu/people/faculty.html> and <https://et.nmsu.edu/people/people-directory.html>)
- Textbook: None
- Course Learning Objectives: After completing this course, a student should be able to:
  - 1) Have experience functioning as mechanical engineer within an engineering design and development group.
  - 2) Complete a real-life design task-transform a client's needs into a tangible, tractable project definition, and see the project through to completion Strengthen of interview skills.
  - 3) Understand and use a formal engineering design method, with emphasis on building concurrent engineering procedures into the basic design method.
  - 4) Become proficient in collaboratively preparing and reviewing formal technical design package related to an engineering design including final design binder and report.
- Topics Covered:
  - Application of problem-solving skills to Mechanical Engineering related industries, research labs, academia, and related fields.
  - Application of modern engineering tools (experimental, analytical, and computational) in work.
  - A path to increased professional duties, responsibilities, and leadership.