

**ME 498: Topics in Mechanical Engineering**  
**Fall or Spring Semester Elective**

**Type (check one):** Required: \_\_\_\_\_ Elective: ✓\_\_\_\_\_

**2005-2006 Catalog Data:** ME 498. Topics in Mechanical Engineering. Lectures, readings, discussions and research on special areas and advancements in mechanical engineering. Problems or projects of an interdisciplinary nature are encouraged. A written report may be required. Prerequisites: Senior standing and approval of department. *One semester; one to three credits*

**Prerequisites:** Senior Standing and Permission of Department

**Co-Requisites:** As needed

**Textbook:** As needed

**Other Required Materials:** As needed

**Other References:** As needed

**Instructor:** Dr. Bernard B. Beard, Associate Professor of Mechanical Engineering

**Course Objectives:** 1. Varies with yearly course content

**Prerequisites by Topics:** 1. Varies with yearly course content

**Topics:** 1. Varies with yearly course content

**Class Schedule:** Schedule varies

**Prepared by:** Dr. Bernard B. Beard

**Date:** 15 Nov 2005

**Professional Component:**

Category (check one)	<input type="checkbox"/> Math/Basic Science <input checked="" type="checkbox"/> Engineering <input type="checkbox"/> General Education <input type="checkbox"/> Other
Design (check one)	<input type="checkbox"/> Significant <input type="checkbox"/> Some <input type="checkbox"/> None
Realistic Constraints (check all that apply)	<input type="checkbox"/> Economic <input type="checkbox"/> Environmental <input type="checkbox"/> Sustainability <input type="checkbox"/> Manufacturability <input type="checkbox"/> Ethical <input type="checkbox"/> Health & Safety <input type="checkbox"/> Social <input type="checkbox"/> Political

**Relationship to Program Outcomes:**

Check all that apply:

- (a) an ability to apply knowledge of mathematics, science, and engineering
- (b) an ability to design and conduct experiments, as well as to analyze and interpret data
- (c) an ability to design a system, component, or process to meet desired needs
- (d) an ability to function on multi-disciplinary teams
- (e) an ability to identify, formulate, and solve engineering problems
- (f) an understanding of professional and ethical responsibility
- (g) an ability to communicate effectively
- (h) the broad education necessary to understand the impact of engineering solutions in a global and societal context
- (i) a recognition of the need for and an ability to engage in life-long learning
- (j) a knowledge of contemporary issues
- (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice