



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Design and Professional Practice II

MATSCEN 4382.01

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

An in-depth design project to foster independent thinking and to develop problem-solving skills. Design of experiments, applied statistics, presentation and communication skills will be discussed.

Prerequisites and Co-requisites:

Prereq: 4381.01, and enrollment as MatScEn-BS major; or permission of instructor.

Course Goals / Objectives:

- Learn how to execute design projects, work in teams and effectively disseminate their findings
- Learn materials processing methods, testing techniques and how to interpret experimental datasets
- Learn methods for material inspection, how to identify modes of failure and to troubleshoot design problems

Course Topics:

- Project management (Gantt charts, budgets, tollgates)
- Senior project (project execution)
- Senior project (data analysis and functional testing)
- Manuscript writing and critiquing
- Presentation/Oral communication skills
- Project Presentations

Designation:

Required