

SYLLABUS

Code/Name	MCE 401 / Mechanical Engineering Design
Type	Required
Credit/ECTS	2/3
Hour per Week	3 (0+3+0)
Level/Year	Undergraduate/4
Semester	Fall
Classroom	TBA
Content	Design methodology in mechanical engineering through an open-ended, in-depth design project. Design, manufacturing, and testing of a complete engineering system or application considering relevant professional standards, safety, cost, and sustainability. Students prepare a report and present their project to a panel of instructors at the end of the semester.
Prerequisites	Consent of the instructor
Reading List	Will be assigned related to the research topics that are given
Objectives	• To organize a research study • Proposing a framework for academic study • To complete and defend a project work
Course Outcomes	In this course you will be able to: C01 Categorize the available information related to your area of interest C02 Investigate the literature C03 Choose relevant references from the literature C04 Reproduce the analytical or computational work in a selected paper C05 Distinguish novelty of a study C06 Prepare a design project or write a paper

Contribution to Program Outcomes*

	P01	P02	P03	P04	P05	P06	P07	P08	P09	P010	P011
C01	5	2	4	3	2	3	3	5	1	5	5
C02	5	2	4	3	5	4	3	4	5	5	5
C03	5	2	4	4	4	5	3	4	4	5	5
C04	5	5	5	4	2	5	4	5	2	5	5
C05	5	5	5	4	5	5	5	5	4	5	5
C06	5	5	5	4	5	5	5	5	3	5	5

* Contribution Level | 0: None | 1: Very Low | 2: Low | 3: Medium | 4: High | 5: Very High

Special Conditions	• Students work in groups.
Cheating & Plagiarism	• Copying or letting someone copy your work on exams, assignments, or reports is cheating. • Cutting and pasting text, figures and tables from web sources or any other electronic source is plagiarism. • The consequence of academic dishonesty is to receive a grade of FF for the course.
Evaluation	Midterm presentation to supervisor 40% <u>Final report to supervisor</u> 60% Total 100%