

Alanya Alaaddin Keykubat University | Rafet Kayış Faculty of Engineering  
**Mechanical Engineering Department**  
 2022-2023 Fall Semester

**Syllabus**

<b>Code/Name</b>	MEC 401 / Mechanical Engineering Design
<b>Type</b>	Required
<b>Credit/ECTS</b>	6/6
<b>Hour per Week</b>	3 (0+3+0)
<b>Level/Year</b>	Undergraduate/4
<b>Semester</b>	Fall
<b>Classroom</b>	TBA   TBA
<b>Content</b>	Design methodology in mechanical engineering through an open-ended, in-depth design project. Design, manufacturing, and testing of a complete system or application considering relevant professional standards, safety, and sustainability. Modeling, simulation, and manufacturing (CAM). Cost evaluation. A design project is assigned to an individual student or a group of students. Students prepare a report and present their design project to a panel of instructors at the end of the semester.
<b>Prerequisites</b>	Consent of the instructor
<b>Reading List</b>	Will be assigned related to the research topics that are given
<b>Objectives</b>	<ul style="list-style-type: none"> <li>• To organize a research study</li> <li>• To propose a framework for an academic study</li> <li>• To complete and defend a project work</li> </ul>
<b>Course Outcomes</b>	In this course you will be able to: CO1 Categorize the available information related to your area of interest CO2 Investigate the literature CO3 Choose relevant references from the literature CO4 Reproduce the analytical or computational work in a selected paper CO5 Distinguish novelty of a study CO6 Prepare a design project or to write a paper

**Contribution to Program Outcomes\***

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11
CO1	5	2	4	3	2	3	3	5	1	5	5
CO2	5	2	4	3	5	4	3	4	5	5	5
CO3	5	2	4	4	4	5	3	4	4	5	5
CO4	5	5	5	4	2	5	4	5	2	5	5
CO5	5	5	5	4	5	5	5	5	4	5	5
CO6	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

<b>Special Conditions</b>	<ul style="list-style-type: none"> <li>• Students work in groups.</li> </ul>
<b>Cheating &amp; Plagiarism</b>	<ul style="list-style-type: none"> <li>• Copying or letting someone to copy your work on exams, assignments, or reports is cheating.</li> <li>• Cutting and pasting text, figures and tables from the web sources or any other electronic source is plagiarism.</li> <li>• The consequence of academic dishonesty is to receive a grade of <b>FF</b> for the course.</li> </ul>
<b>Evaluation</b>	Midterm presentation to supervisor 40% Final report to supervisor 30% Final presentation to examining committee 30% Total 100%