

## MECH4900 Final Year Design Project

<b>Course Code:</b> MECH 4900	<b>Course Title:</b> Final Year Design Project
<b>Required Course Or Elective Course:</b> required	<b>Terms Offered (Credits):</b> Fall & Spring (6 credits)
<b>Faculty In Charge:</b> All MAE Faculty members	<b>Pre/Co-Requisites:</b> NA
<b>Course Structure:</b> 8 hours per week for two consecutive semesters.	
<b>Textbook/Required Material:</b> NA	
<b>Course Description:</b> A one-year project course that offers practice of engineering design through a group design project chosen to integrate materials covered in the curriculum. Each student will be assigned a component of a large project which may be sponsored by industry. Credit load will be spread over the year.	
<b>Course Topics:</b> A one-year group design project of which the topic is given by individual faculty member.	
<b>Course Objectives:</b>	<ol style="list-style-type: none"> <li>1. A group of students designs a product</li> <li>2. A group of students manufactures the designed product Individual student in the group must have their own design task and independent mission in the project.</li> </ol>
<b>Course Outcomes:</b>	<p>On successful completion of this course, students are expected to be able to:</p> <ol style="list-style-type: none"> <li>A. Evaluate key design techniques, select an appropriate technique to solve a given problem and apply the selected technique to execute a product design.</li> <li>B. Assess a range of manufacturing methods, select an appropriate method and apply it to manufacture the chosen product.</li> <li>C. Analyze the design and manufacturing processes for the chosen product and communicate the analysis and outcomes in a written report, using appropriate technical terminology.</li> </ol>
<b>Assessment Tools:</b>	<p>Bi-weekly progress reports Half year progress reports and oral presentations End-year final reports and oral presentations</p>