

**Project Charter**  
ME 481/482 – Mechanical Engineering Project

The purpose of the ME481/482 Project Charter is to document that all stake holders for the project are in agreement with respect to the project’s objectives, scope, and deliverables. Students are responsible for meeting with their technical advisor(s) and completing this document by the date specified in the course syllabus.

**Section A – Preliminary Definition**

Title of project: \_\_\_\_\_

Team name: \_\_\_\_\_

Team members: \_\_\_\_\_

Brief description of the project’s purpose or objectives (30 words or less):

Will hardware be built in either semester? Yes No

\_\_\_\_\_ has agreed to be the technical advisor(s).  
*Technical advisors (TA) are ME faculty, but not the course instructor. Each project must have at least one technical advisor. They help define the Project Charter, provide technical input to the team and provide feedback to the course instructor regarding technical quality of the project. Students must not assume a specific faculty member will be a TA, they must ask first.*

Industrial Representative (maybe determined at a later date):

Name \_\_\_\_\_ Company \_\_\_\_\_

email \_\_\_\_\_ phone \_\_\_\_\_

*Each project must have an Industrial Representative. This person must be a practicing engineer. They may be selected by the team or by ME faculty. Their role is to provide perspective as a practicing engineer. They may provide technical knowledge and support. They are to provide feedback to the course instructor regarding progress and quality of work.*

Course Instructor: \_\_\_\_\_

*The course instructor keeps track of student progress and makes sure they stay on task, provides clear guidance regarding course requirements, helps students find an*

*Industrial Representative, and assigns course grades (partially based on input from Technical Advisors and Industrial Representatives).*

### **Section B – Scope and Limitations**

Students must be aware that “building” itself is not engineering. Engineering content associated with fabrication may include testing (must have a test plan), design revisions (resulting from lessons learned), using engineering analysis to select components for purchase or manufacture, et cetera. Students also must understand that if the project depends upon “building” that they must allow sufficient time in their schedules for things to go wrong. It is very common for engineers/students to place an order for materials, supplies, etc., only to find out it is out of stock or they receive the wrong thing, and so forth. In order to improve the chance of success, materials and supplies ***must be ordered prior to the second semester*** of the course. Students understand the above.

(Please initial) \_\_\_\_\_

Briefly describe additional resources that may be required (shop support, financial support, support from industry, special software, etc.).

How will these resources be acquired by the team?

The team is aware that before approaching local companies or organizations for support, they need to discuss this with the course instructor. Support from corporations or foundations should never be pursued without permission from the University’s Development Office (please initial)\_\_\_\_\_

If travel is required for this project, students are aware that they must abide by the University’s travel policies. A copy of the policy can be obtained from the course instructor or Public Safety (please initial).\_\_\_\_\_

Briefly describe any issues or uncertainties that may jeopardize the success of the project (this may include travel, relying on other people or organizations, etc.).



## Section C – Statement of Work

Provide a concise Statement of Work (SOW) for *each and every* team member. The SOW should describe what work each engineering student will specifically perform for the project. The engineering content should be clearly described. Attach as separate sheet if there is insufficient room here.

Example of a SOW:

*Chris Smith: (front suspension) **ME481**: determine overall design concept, determine specific geometry (dimensions and tolerances) of linkages and mounting hardware to optimize ride performance, determine spring stiffness and shock specification. Based on loading criteria, impact analysis will be used to determine necessary suspension travel. **ME482**: stress analysis (FEA-static yield failure and fatigue failure) will be used to select material and to determine size requirements of linkages and mounting details. Produce engineering drawings for the front suspension. Responsible for front suspension fabrication.*

**Section D – Comments and Signatures**

Technical Advisor: please comment on the technical aspects of this project. Does there appear to be sufficient engineering content based on the number of team members and the course credit? Is each student’s SOW appropriate? Have students given the project sufficient thought to have a high chance of success? What are your concerns, if any?

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Additional comments by any stake holder:

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A significant portion of the course grade will depend upon the course instructor’s evaluation of how well engineering skills were applied to this project; therefore, completion of the project in and of itself does not guarantee a “good” grade in the course. The Charter is merely a tool to help all stake holders understand the goals and objectives of the project and to describe individual responsibility. The following stake holders have read and believe this Charter is appropriate for ME 481 and ME 482. Please sign and date:

Course instructor \_\_\_\_\_ date \_\_\_\_\_

ME Technical Advisor(s) \_\_\_\_\_ date \_\_\_\_\_

\_\_\_\_\_ date \_\_\_\_\_

Industrial Representative (signature is optional) \_\_\_\_\_ date \_\_\_\_\_

Student(s) sign and date: \_\_\_\_\_

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