

Mechanical and Manufacturing Engineering
Senior Design Policy

The Senior Design project represents the practical execution of engineering skills and knowledge gained from all sources during the college career. The Senior Design sequence (MME 480, 481) represents the capstone design experience that requires both teamwork and individual skills. The burden for successful completion of the Senior Design project falls upon the student teams, not the advisor.

- A) The MME department has the following Senior Design guidelines:
1. Only MME majors with a major GPA of at least 2.50 and in good standing are eligible.
 2. Three members per project team unless approved by faculty.
 3. The following courses must be completed prior to enrolling in senior design: MME 303 Fluids and Convection, 333 Mfg Process, 342 Fatigue and Machine Design, and 352 Controls and Sensors.
 4. An MME faculty member must agree to act as team advisor and help define the project.
 5. The Senior Design sequence must be taken in two consecutive semesters ending in either fall or spring (senior design is not offered in the summer).
 6. Project approval by the faculty advisor and the host company must be secured by the end of the fifth (5th) week of the first semester (MME 480).
- B) Senior Design course requirements include:
1. A student selected team works together on an approved project to achieve a common goal.
 2. The senior design team works with MME faculty on a research project.
 3. Students must be enrolled for two consecutive semesters (MME 480 and 481).
 4. Attendance at scheduled Senior Design activities.
 5. An F grade in 480 terminates the sequence. An F grade in 481 results in a grade change of 480 to an F.
 6. Periodic progress reports will be required, some may be written and some by presentation.
 7. Teams are required to present their project at the Student Research Colloquium in April.
 8. Teams will give a final oral presentation to the class and host company (if applicable).
 9. A final written project report must be provided to faculty and host for review two (2) weeks prior to the final presentation.
 10. The faculty advisor and host company must be given bound copies of the final report which includes any host input.
- C) Projects are selected as follows:
1. Identify subspecialty in the MME field of interest and find/define a project in this area.
 2. Find two other students who have compatible project interests.
 3. Contact the appropriate faculty advisor (by topic) for the field or project of interest.
 4. Secure advisor approval.
 5. Secure approval of the host company (if applicable). Having a host company does not assure success and incurs some risk of unplanned project changes. Faculty advisors dictate project change implications to the definition of course success. Hosts may provide grade input.
- D) Deviations from this policy must be approved by the entire department.

Note: Completing the senior design project on time is solely the responsibility of the student team and typically requires a minimum average of nine hours per week for the entire senior year for each team member. Many teams work extended hours including over winter and spring breaks to finish on time. For a variety of reasons, some projects do not finish on time and graduation is delayed. Most faculty advisors require more student independence and autonomy than in typical classes. The faculty advisor can serve as a management and technical resource but is not part of the team.