

San José State University
Charles W. Davidson College of Engineering
Department of Mechanical Engineering
ME 295B, Mechanical Engineering Project II, Spring 2023

Course and Contact Information

Coordinator:	Dr. Raghu Agarwal
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Office Hours:	By appointment
Class Days/Time:	TBA
Classroom:	TBA
Sections	1-10
Prerequisites:	ME 295A <i>Mechanical Engineering Project I</i>

Reference: Check the ME Department Website for MSME Program at <https://www.sjsu.edu/me/programs/ms-in-mechanical-engineering/index.php>

Course Description

Continuation of ME 295A. Students complete the in-depth project, write a detailed engineering report, and make a comprehensive presentation.

Course Learning Outcomes (CLO)

Upon successful completion of this course, students will be able to:

1. Conduct a literature review on a topic of engineering research using a full range of information sources
2. Summarize findings and draw valid conclusions from engineering research
3. Present the results of research work in front of peers following accepted presentation methods
4. Document the results of research work in a detailed engineering report following accepted format and style guidelines

Required Texts/Readings

None

Course Requirements and Assignments

All the students are expected to:

- Make an end-of-the-semester presentation.
- Provide an end-of-the-semester report.

Course grades will be issued when the following items are received by the student's committee chair prior to the 'grades due date':

- A copy of the final report approved by the committee chair and signed by all committee members
- A copy of the approved 'Oral Presentation and Grade Form' by the committee members.
- Proof of the regular consulting with the advisory committee.

Important Dates:

- **Mar. 31:** Turn in a 2-page progress update report to the committee.
- **May 5:** Turn in the draft report for initial evaluation to the committee.
- **May 15-19:** Present the project to the committee.
- **May 26:** Turn in the approved semester report.

Final Report:

The final report must be prepared and submitted to the committee chair and the committee members. The final report must follow a professional report writing format, with proper grammar and composition. It must include sufficient review of the state-of-the-art literature, the application of modern tools, and the presentation of experimental or numerical results.

Except for replacing the words "thesis committee" with "project committee" and "thesis" with "project report", respectively, ME 295B report is expected to follow the same formatting guidelines as the SJSU M.S. thesis, as defined by the College of Graduate Studies at:

<https://www.sjsu.edu/cgs/current-students/thesis-and-dissertation-information/>

For examples of these minor differences between theses and ME 295 reports, please ask your committee chair for past reports that you can mimic.

Required paperwork for graduation (if ME 295B is your last course towards completing your MSME degree):

- Culminating Experience Memo will be sent by the Graduate Program Advisor directly to Graduate Admissions and Program Evaluations following the receipt of an approved Final Report.

A complete, high-quality manuscript for a scholarly journal article or conference proceedings paper is acceptable as the culminating report for final report in ME 295B, according to the following stipulations:

1. The student must be the first author of the paper (or has shared first authorship), and at least one committee member must be the corresponding author.
2. For cases in which co-authors other than the student write substantial fractions of the manuscript, the committee chair will determine if the lead contribution of the student is sufficient for earning credit under this policy.
3. Using a scholarly manuscript instead of the default ME 295 end of semester report is entirely optional and requires committee chair consent. A final report that mimics SJSU thesis format is the default report for ME 295 if not a submitted manuscript.
4. Unless approved by special exception by the student's committee, the manuscript must be acknowledged as received by the publishing entity by the last day of instruction for the given semester. ME 295 does not require that the manuscript be published for it to qualify as an acceptable final deliverable.
5. Journals with a Journal Citation Reports (JCR) impact factor above 1.0 or a Scimago Journal Rank (SJR) of Q2 or above are automatically qualified. Acceptability of conference papers or journals with

lower impact factors is determined by the student's project committee.

6. Unless otherwise restricted by the publishing entity, the minimum length of the body text for the manuscript must be 3000 words, not counting headings, captions, tables, references, or appendices.
7. Any project committee member may veto acceptability of this option. This protection is established in particular for projects that may contain confidential information (e.g., as in some industry-sponsored work) that must not be released as a publication.

Grading Information

Evaluation criteria for grading are posted at <https://www.sjsu.edu/me/student-resources/forms/graduate.php> under "Thesis/Project Assessment Form B". Each criterion is evaluated by the project committee on a 0.0 to 4.0 scale (as in grade point averages), with 4.0 indicating "A", 3.0 indicating "B", and so on. At the committee's discretion, determination of scores may be conducted by committee consensus or by averaging of the ratings from each individual committee member.

Extra Credit

The students are eligible to receive up to 10% extra credit if a manuscript for a technical paper is developed and submitted to the committee, in addition to the full project report by the due date for the approved semester report. The paper must be prepared in coordination with the committee chair, and in the format of a standard conference or a journal paper such as those administered by the ASME, IEEE, or other credible publishers. The committee chair must approve the paper development plan 4 weeks before the tentative final presentation schedule, based on the project's progress, the novelty of the methods, and the significance of the results. No extra credit will be given if the committee chair does not pre-approve the paper. The extra credit will also depend on the overall quality of the developed paper.

University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, such as academic integrity, accommodations, etc. will be available on Office of Graduate and Undergraduate Programs' [Syllabus Information web page](https://www.sjsu.edu/curriculum/courses/syllabus-info.php) at <https://www.sjsu.edu/curriculum/courses/syllabus-info.php>