

San José State University
Department of Mechanical Engineering
ME 299 Master's Thesis, Spring 2018

Course and Contact Information

Coordinator:	Dr. Raghu Agarwal
Office Location:	Engineering Building, Room 310D
Telephone:	408-924-3850
Email:	raghu.agarwal@sjsu.edu
Office Hours:	Tuesdays and Thursdays 4:30 PM – 6:30 PM
Registration Code;	20349, 3 units
Class Days/Time:	Fridays 5:00 PM to 7:30 PM (or by arrangement with thesis committee)
Classroom:	TBA
Prerequisites:	Admission to Candidacy for Master's Degree and written proposal approved by the thesis committee and department.
Grading:	Mandatory CR/NC/RP
Reference:	MSME program information is available on the ME Department website http://www.sjsu.edu/me/programs/msme/

Course Description <http://info.sjsu.edu/web-dbgen/catalog/courses/ME299.html>

Advanced individual work in mechanical engineering for Plan A.

Course Format

ME 299 is a 3-unit class and the thesis option for the MSME program requires 6 units of thesis work (i.e., two semesters of ME 299). The course is directed by the thesis committee, composed according to Academic Senate Policy S14-10 <http://www.sjsu.edu/senate/docs/S14-10.pdf>. The ME 299 coordinator may call for a few meetings each semester to coordinate efforts and clarify expectation along with the MSME project courses ME 295A and ME 295B, but otherwise all work is guided and evaluated by the thesis committee.

Course Learning Outcomes (CLO)

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

1. Conduct a thorough review of scholarly literature as it pertains to the research investigation.
2. Formulate a research hypothesis, and interrogate it with scientific or engineering evidence.
3. Defend methodology, assumptions, findings, and conclusions via oral presentation and written format.
4. Write a formal thesis, published according to university guidelines.

Required Texts/Readings

As needed from published scholarly literature in the field of study.

Course Requirements and Assignments

Eligibility for a grade of CR in the **first semester** of ME 299 requires all of the following, with three required documents submitted to your thesis committee chair before the last day of final exams. Inability to complete all of the following in the first semester results in a grade of NC (i.e., no credit). For the first semester, students should allow at least one full week for committee review of the thesis document in progress, plus at least one full week for incorporating edits. This means that the full draft must be ready well before the last day of instruction.

1. Deliver an end-of-semester oral presentation, with acceptability evidenced in the oral presentation grade form signed by all thesis committee members.
2. Submit a full draft of the thesis document in progress, with evidence (e.g., by signature) of approval by the thesis committee chair.
3. Submit the committee consultation form with all affirmation signatures.

Eligibility for a grade of CR in the **second semester** of ME 299 requires all of the following, with three required documents submitted to your thesis committee chair. Inability to complete all of the following in the second semester results in a grade of NC, unless the thesis committee deems that the student qualifies for "report-in-progress" (RP) status, according to Academic Senate Policy S17-5 <http://www.sjsu.edu/senate/docs/S17-5.pdf>.

1. Deliver a final oral thesis defense, with acceptability evidenced in the oral presentation grade form signed by all thesis committee members.
2. Submit a completed thesis that is fully compliant with university requirements, according to format and deadlines set by the Office of Graduate Studies at <http://www.sjsu.edu/gup/gradstudies/thesis/>.
3. Submit the committee consultation form with all affirmation signatures.

Students are strongly advised that thesis deadlines are firm and inflexible. University deadlines are posted by the Office of Graduate Studies at http://www.sjsu.edu/gup/gradstudies/thesis/thesis_deadlines/. It is vitally important for each student to work closely with his or her thesis committee to ensure adequate time for manuscript review and refinement before university deadlines. Students should allow approximately two weeks for committee review and at least two weeks for incorporating edits *before* university deadlines. University deadlines are typically in early April for spring semester graduation and in early November for fall semester graduation. Accordingly, a full manuscript would be due to the thesis committee in early March for spring semester graduation and in early October for fall semester graduation.

The "Verification of Culminating Experience" required by the Graduate Admissions & Program Evaluations will be issued by the ME Graduate Program Coordinator only after proof of thesis completion and university-level approval by the Office of Graduate Studies.

Grading Information

The thesis committee will use the following for evaluation, with each criterion given a score on a 0.0 and 4.0 scale (as in grade point averages), with 4.0 indicating "A", 3.0 indicating "B", and so on. Academic Senate Policy S73-24 <http://www.sjsu.edu/senate/docs/S73-24.pdf> states that "when the CR grade is given for a 200-level course, the CR will mean A or B." Accordingly, a 3.0 average score represents passing-level performance.

	Criterion	Score
1	Motivation for the work was convincing and clear objectives were defined.	
2	A thorough literature search was performed with proper citations, and an understanding of the cited literature was clearly evident.	
3	A methodical, in-depth analysis and/or design of a mechanical engineering system was performed, using appropriate assumptions as needed.	
4	Mathematical representations and computations were applied appropriately for graduate level work.	
5	Science and engineering fundamentals were applied appropriately for graduate level work.	
6	Modern tools (computational or experimental) were used effectively as needed.	
7	Results of the work were presented effectively, using graphs and tables appropriately as needed.	
8	The report was well written, with correct language and terminology used throughout.	
9	Key points of the work were summarized effectively and meaningful conclusions were drawn.	
10	Progress throughout the work was consistent with timely deliverables, while proactively soliciting input from the committee and incorporating accordingly.	
	AVERAGE:	

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 Syllabus Information page maintained by the Office of Graduate and Undergraduate Programs at <http://www.sjsu.edu/gup/syllabusinfo/>.