

Mechanical Engineering Department

Course: Graduate Project	Class Code #
ME 295A Mechanical Engineering Project I-	21644
ME 295B Mechanical Engineering Project II,	21511
ME 299 ME Master's Thesis, I and II	20392

Semester: Spring 2017

Prerequisites: Admission to Candidacy for Master's Degree and written proposal approved by the department.

Reference: Check the ME Department Website for MSME Program.

Class Hours: TBA

Instructor/Course Coordinator: Dr. Raghu Agarwal, 408-924-3850, raghu.agarwal@sjsu.edu

Office Hours: Tuesdays and Thursdays 4:30pm – 6:15pm

Course Description: Advanced individual work in Mechanical Engineering including but not limited to research, design, development, and simulation studies.

Grading: CR or NC only. CR will be issued subject to completion of all course requirements including an approved proposal, documented records of visits with Study Committee Chair and Members, timely submission of written draft and final semester reports, and oral presentations.

Expectations: All ME 295A/ME 299 (first semester)

All students are required 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 course coordinator prior to the 'grades due date':

- a copy of 'report' approved by the Committee Chair,
- a copy of the approved 'Oral Presentation and Grade Form' by the Committee members and turned in by the Committee Chair to the Course Instructor.
- Committee Consultation and Meeting Record Form

All students are expected to work with their committee members in order to stay on track using the 'Consultation' form.

All students are expected to:

- Turn in a 'draft report' for initial evaluation to their committee members and the course instructor two weeks before the last day of instruction.
- Turn in the approved final report by the last day of finals.

In ME 295B, the Final Report requires the approval signature of all committee members.

NOTE TO ME 299 Second Semester Students: Check the university deadline for submitting the final report.

After the Oral Presentation, you must submit the following to Dr. Agarwal. Failure to do so will result in delay of your graduation:

- Oral Presentation and Grade Form
- An approved (signed) copy of the Final Thesis or Project Report
- Committee Consultation Form

Required Paperwork for Graduation (if ME 295B or ME 299, second semester, is your last course towards your completing your MSME degree):

- Culminating Experience Form will be issued by Dr. Raghu Agarwal following the receipt of a printed copy of the Final Report.

ME 295A/ME 295B/ME 299 Course Goals

In ME 295AB/299 the students will learn how to:

1. Conduct engineering research
2. Apply mathematics appropriate for graduate level engineering research
Apply scientific principles and practices appropriate for graduate level engineering research
3. Apply engineering fundamentals appropriate for graduate level engineering research
4. Apply modern design, analysis, and experimental tools to the chosen research problem
Communicate the results of engineering research effectively in written form (final report) and in oral presentations

Student Learning Objectives

At the end of the course, the student who has mastered the course material 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

University Policies and Academic Calendar

Students are responsible for understanding the policies and procedures about add/drop, grade forgiveness, etc. Refer to the current semester's [Catalog Policies](#) section at

<http://info.sjsu.edu/static/catalog/policies.html>. Add/drop deadlines can be found on the [current academic calendar](#) web page located at http://www.sjsu.edu/academic_programs/calendars/academic_calendar/. The [Late Drop Policy](#) is available at <http://www.sjsu.edu/aars/policies/latedrops/policy/>. Students should be aware of the current deadlines and penalties for dropping classes.

University Policies

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities requesting accommodations must register with the [Disability Resource Center](#) (DRC) at <http://www.drc.sjsu.edu/> to establish a record of their disability.

Academic Integrity

Students in this course are expected to maintain high ethical standards in all matters pertaining to the course, including, but not limited to, course assignments, presentations, writing, laboratory work, treatment of class members, and behavior in class. Cheating and plagiarism are violations of the SJSU Policy on Academic Integrity (S04-12) and will not be tolerated in the class.

Students are expected to have read the Policy, which is available at:

<http://www2.sjsu.edu/senate/S04-12.pdf>

Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The [Student Conduct and Ethical Development website](#) is available at http://www.sa.sjsu.edu/judicial_affairs/index.html.

Plagiarism is defined as: ¹

the use of another person's original (not common-knowledge) work without acknowledging its source.

Thus plagiarism includes, but is not limited to :

Copying in whole or in part, a picture, diagram, graph, figure, etc. and using it in you work without citing its source

Using exact words or unique phrases from somewhere without acknowledgement Putting your name on a report, homework, or other assignment that was done by someone else

In this class, particularly in writing you project/thesis report, you must be especially vigilant to avoid plagiarizing the work of others. You must properly and completely cite any and all information that you include in your report/thesis that is not common knowledge or does not originate from you. Many students are unaware that copying an image or a block of text from the Internet or other electronic resources, for example, and inserting it into their work without citation constitutes plagiarism.

Students are expected to familiarize themselves with how to avoid plagiarism. Several helpful resources can be found at:

<http://www.stanford.edu/dept/vpsa/judicialaffairs/students/plagiarism.sources.htm>

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Definition adapted from "Defining and Avoiding Plagiarism: The WPA Statement on Best Practices," <http://www.ilstu.edu/~ddhesse/wpa/positions/WPAplagiarism.pdf>

; and “What is Plagiarism?”

<http://www.stanford.edu/dept/vpsa/judicialaffairs/students/plagiarism.sources.htm> .

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Adapted from, “Avoiding Plagiarism,” http://owl.english.purdue.edu/handouts/research/r_plagiar.html.