

UNIVERSITY OF CALIFORNIA, MERCED
SYLLABUS
INDEPENDENT RESEARCH COURSE
(ME 195)

- **COURSE NAME & NUMBER** : independent research , ME 195
- **SEMESTER AND YEAR**: Spring 2017
- **INSTRUCTOR**: Ala Qattawi
- **STUDENT(S)**: Furkan Ozedirne
- **NUMBER OF UNITS TO BE EARNED**¹ : 4
- **MEETING SCHEDULE** : Weekly
- **TIME INVESTMENT PER UNITS EARNED**: 2-3 hours per unit per week
- **PROVIDE HERE A BRIEF SUMMARY OF THE MEETING SCHEDULE FOR THE INSTRUCTOR AND STUDENT**: meeting weekly to discuss research study outcomes and set next week directions.
- **THE WAY(S) A STUDENT(S) WILL SPEND HIS/HER TIME OUTSIDE OF MEETINGS WITH INSTRUCTOR**: assisting in lab experiment, paper wirings, literature review, and data analysis.
- **THE AVERAGE NUMBER OF HOURS OF WORK PER WEEK NEEDED TO EARN THE NUMBER OF UNITS INDICATED ABOVE AND ACHIEVE THE LEARNING OUTCOMES OUTLINED BELOW.**² : 7-12 hours per week
- **COURSE GOAL(S)**:

Introduce numerical and experimental research methods for manufacturing applications. Provide an introduction about scientific papers writing, literature review and how to establish scientific studies

- **COURSE LEARNING OUTCOMES**:
 1. Generate an experiment design plan
 2. Report the advancement found in literature in a certain research topic.
 3. Review and validate available publications in the scientific community.
 4. Perform mechanical analysis of components based on strength/material type/loading
- **GRADING**: Grading is as follows
 1. Weekly meeting/lab attendance: 20%
 2. Specimens' fabrication: 30%
 3. Report/paper writing: 50%

¹ One unit is equal to 45 hours of work per semester as per the [UC Merced Credit Hour Policy](#). The outcomes outlined below should be consistent with the credits earned.

²This is important as it serves as a record for our accreditor that we are adhering to our Credit Hour Policy when awarding units toward the degree. *Laura E. Martin, PhD, ALO, December 2016*