COURSE MODIFICATION PROPOSAL

College: [Engineering and Computer Science] **Department: [Manufacturing Systems Engineering & Management]**

1. **Current Catalog Entry Information:**
   Subject Abbreviation and Number: **[MSE 488A]**
   Course Title: **[MSEM Senior Design I]**
   Units: **[2]** units
   General Education Section **[ ] (if applicable)**

2. **Date of Proposed Implementation: (Semester/Year): [Fall] / [2016]** *Comments*

3. **Course Level:**

   [☒]Undergraduate Only   [☐]Graduate Only   [☐]Graduate/Undergraduate

4. **Nature of Request:**

   [☐] Delete Course *(Note: Record of course will remain in inactive course file)*

   [☐] Change unit value from [   ] units to [   ] units

   [☐] Change course type (classification) such as lecture-discussion, laboratory, activity, etc.:
   From: [   ] units @ **[ ] [ ] to [   ]** units @ **[ ] [ ]**
   From: [   ] units @ **[ ] [ ] to [   ]** units @ **[ ] [ ]**
   [☐] Change course title to: **[   ]**

   [☐] Change course abbreviation "Short title" (Maximum of 17 characters and spaces) to
   NEW Short Title: **[• • • • • • • • • • • • • • • • •]**

   [☒] Change current catalog course description *(Attach current and proposed catalog course description)*
   Notes: If grading is NC/CR only, please state in course description. If a course numbered less than 500 is available for graduate credit, please state "Available for graduate credit in the catalog description."
   [☐] Change subject abbreviation number to: *(Example: HSCI 100 to PT 105)* **[   ]**

   [☒] Change requisites *(Prerequisites, Corequisites, Preparatory, Recommended Corequisites)*

   From: [Prerequisite: Satisfactory completion of all major courses in years 1-3 of the 4-year program plan; Permission of the instructor; Passing score on the Upper Division Writing Proficiency Exam.]
   To: [Prerequisites: MSE 402 and MSE 407 for all majors; MSE 409/L and MSE 412/L for MSE majors; Passing score on the Upper Division Writing Profiency Exam.]

   [☐] Change Current Basis of Grading
   From: [☐]Credit/No Credit Only   [☐]Letter Grade Only   [☐]CR/NC or Letter Grade

To: [   ]Credit/No Credit Only   [   ]Letter Grade Only   [   ]CR/NC or Letter Grade

[   ] Add course to GE Section [   ]

[   ] Remove course from GE Section [   ]

[   ] Change course from GE section [   ] to GE section [   ]

[   ] Change course to a Community Service Learning course (CS)

[   ] Allow multiple enrollments within a semester.

[   ] Change number of times this course may be taken:
     May be taken for credit for a total of [1] times, or for a maximum of [1] units
[   ] Multiple enrollments are allowed within a semester
[   ] Crosslist this course with [   ]

[   ] Other: [   ]

5. **Justification and Clarification of Request** *(Attach)*

6. **Estimated Impact on Resources within the Department, for other Departments and the University.***(Attach)*

([See Resource List](#))

7. **Impact on other Departments' programs** *(Attach)*

8. **Indicate which of the Program's Measurable Student Learning Outcomes are addressed in this course.** *(Attach)*

(see [Course Alignment Matrix and the Course Objectives Chart](#))

9. **If this is a General Education course, indicate how the General Education Measurable Student Learning Outcomes (from the appropriate section) are addressed in this course.** *(Attach)*

10. **Methods of Assessment for Measurable Student Learning Outcomes** *(Attach)*
    A. Assessment tools
    B. Describe the procedure dept/program will use to ensure the faculty teaching the course will be involved in the assessment process (refer to the university's policy on assessment.)

11. **Record of Consultation:** *(Normally all consultation should be with a department chair or program coordinator.) If more space is needed attach statement and supporting memoranda.*

Date:		Dept/College:	Department Chair/Program Coordinator		Concur (Y/N)
[2/6/2015]		[CECM/CECS]	[N. Dermendjian]		[Y]
[2/6/2015]		[CS/CECS]	[R. Covington]		[Y]
[2/6/2015]		[ECE/CECS]	[A. Amini]		[Y]

[2/6/2015]	[ME/CECS]	[H. Johari]	[Y]
[2/6/2015]	[MSEM/CECS]	[K. Chang]	[Y]
[ ]	[ ]	[ ]	[N]

Consultation with the Oviatt Library is **recommended** for course modifications to ensure the availability of appropriate resources to support proposed course curriculum.

Collection Development Coordinator, Mary Woodley   **Date**

Please send an email to: collection.development@csun.edu   [   ]

12. Approvals:

Department Chair/Program Coordinator:	Date:	[2/6/2015]
College (Dean or Associate Dean):	Date:	[4/15/2015]
Educational Policies Committee:	Date:	[ ]
Graduate Studies Committee:	Date:	[ ]
Provost:	Date:	[ ]

5. Justification and Clarification of the Request

MSEM Senior Design I (MSE 488A) is the first semester of a two-semester capstone design sequence which simulates professional manufacturing systems engineering practice. Emphasis is on the application of engineering fundamentals to a comprehensive design project utilizing computer-aided design and analysis tools. The old statement of the prerequisite ("**Satisfactory completion of all major courses in years 1-3 of the 4-year program plan**") was difficult to implement and enforce. Therefore the prerequisites for MSE 488A have to be changed to be more clear and specific. Also, while this capstone course is required for both Engineering Management (EM) and Manufacturing Systems Engineering (MSE) students, the prerequisites are defined differently for the two majors. This is consistent with the notion that students from each of the majors play a different role in the team project for the course.

Existing Course Description

MSE 488A. MSEM Senior Design I (2)
Prerequisites: Satisfactory completion of all major courses in years 1-3 of the 4-year program plan; Permission of the instructor; Passing score on the Upper Division Writing Proficiency Exam.
Student teams engage in complex engineering design projects subject to multiple realistic constraints. Economic, environmental, social, political, ethical, health and safety, manufacturability, sustainability and other relevant factors are addressed. Formal design reviews demonstrating written and oral communication skills are required. MSE 488A and MSE 488BCS must be completed during the same academic year. 6 hours of lab per week. Not available for Graduate Degree Program credit. Offered Fall semester.

Proposed Course Description

MSE 488A. MSEM Senior Design I (2)
Prerequisites: MSE 402 and MSE 407 for all majors; MSE 409/L and MSE 412/L for MSE majors; Passing score on the Upper Division Writing Proficiency Exam.
Student teams engage in complex engineering design projects subject to multiple realistic constraints. Economic, environmental, social, political, ethical, health and safety, manufacturability, sustainability and other relevant factors are addressed. Formal design reviews demonstrating written and oral communication skills are required. MSE 488A and MSE 488BCS must be completed during the same

CM – 9/29/05

academic year. 6 hours of lab per week. Not available for Graduate Degree Program credit. Offered Fall semester.

6. **Estimated Impact on Resources within the Department, for other Departments and the University.**

Only the prerequisites will be changed, no additional resources are required. Therefore there will be no impact on resources within the department, for other departments and the university.

7. Impact on other Departments' programs

The change in prerequisites will only affect the timing of when courses are taken by students in the two MSEM majors. Therefore there will be no impact on other departments' programs.