COURSE MODIFICATION PROPOSAL

College: [Engineering and Computer Science]   **Department: [Mechanical Engineering]**

1. **Current Catalog Entry Information:**
   Subject Abbreviation and Number: **[ME 562]**
   Course Title: **[Internal Combustion Engines]**
   Units: **[3]** units
   General Education Section **[   ] (if applicable)**

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

3. **Course Level:**
   []Undergraduate Only   **[]**Graduate Only   **[X]**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: **[• • • • • • • • • • • • • • • •]**

   [X] 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."

   [X] Change subject abbreviation number to: *(Example: HSCI 100 to PT 105)* **[ME 462]**

   [X] Change requisites *(Prerequisites, Corequisites, Preparatory, Recommended Corequisites)*
   From: [Recommended Corequisite: ME 470]

   To: [Prerequisites: ME 330, ME 370. Recommended corequisite: ME 470]

   [] 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 **[]** times, or for a maximum of **[]** units

[] Multiple enrollments are allowed within a semester

[] Crosslist this course with **[   ]**

[X] Other: **[Change course level from Graduate/Undergraduate to Undergraduate Only]**

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)
[3/5/2015]		**[CECM/ECS]**	**[N. Dermendjian]**		**[Y]**
[3/5/2015]		**[CS/ECS]**	**[R. Covington]**		**[Y]**

[3/5/2015]	[ECE/ECS]	[A. Amini]		[Y]
[3/5/2015]	[ME/ECS]	[H. Johari]		[Y]
[3/5/2015]	[MSEM/ECS]	[K. Chang]		[Y]
[ ]	[ ]	[ ]		[ ]

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

12. Approvals:

Department Chair/Program Coordinator:	Hamid Johari	Date:	**[3/5/2015]**
College (Dean or Associate Dean):	Robert Ryan	Date:	**[4/15/2015]**
Educational Policies Committee:		Date:	**[ ]**
Graduate Studies Committee:		Date:	**[ ]**
Provost:		Date:	**[ ]**

5. Justification and Clarification of the Request

Internal Combustion Engines (ME 562) addresses the characteristics and performance of internal combustion engines with emphasis on Otto and Diesel cycles. Alternative cycles are also considered. Thermodynamics of cycles, combustion, emissions, ignition, fuel metering and injection, friction, supercharging and engine compounding are all included in the course topics. Due to the increased student enrolment and the relatively limited offerings, graduate students take this course and crowd out the undergraduates. This modification requests changing the course level from Graduate/Undergraduate to Undergraduate Only and the course number from 562 to 462 to better reflect the undergraduate nature of this course. In this manner our undergraduate students will be able to take this course without being crowded out by graduate students who may not necessarily have the prerequisite courses.

Current Catalog Course Description

ME 562. Internal Combustion Engines (3)

Recommended corequisite: ME 470. Characteristics and Performance of internal combustion engines, with an emphasis on Otto and Diesel types. Alternative cycles also are considered. Thermodynamics of cycles, combustion, emissions, ignition, fuel metering and injection, friction, supercharging and engine compounding. 3 hours lecture per week.

Proposed Catalog Course Description

ME 462. Internal Combustion Engines (3)

Prerequisites: ME 330; ME 370. Recommended corequisite: ME 470. Characteristics and Performance of internal combustion engines, with an emphasis on Otto and Diesel types. Alternative cycles also are considered. Thermodynamics of cycles, combustion, emissions, ignition, fuel metering and injection, friction, supercharging and engine compounding. 3 hours lecture per week.

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

This change will tend to reduce the overall course enrollment, which will improve access to the course for undergraduates.

7. Impact on other Department's programs

There is none. This course is only taken by mechanical engineering majors.