

PROGRAM MODIFICATION PROPOSAL

College: [Engineering and Computer Science] Department: [Electrical Engineering]

1. **Program:** (e.g. B.S. in, Option in) [BS Electrical Engineering]
2. **Nature of Request:** (Check all that apply)
 - Delete Program
 - Change Program Requirements with No Change in Total Units in Program
 - Increase Total Units in Program (**From:** [] **To:** [])
 - Decrease Total Units in Program (**From:** [] **To:** [])
 - Change Total Units to Degree (**From:** [] **To:** [])
 - Change in GE Requirements (Describe Below)
[]
 - Other: (Describe below)
[]
3. **Date of Proposed Implementation: (Semester/Year):** [Fall] / [2016] *Comments*
4. **Brief Summary of the Proposed Program Modification:** (Insert below)
[Change “Electrical Engineering Junior Year Elective Requirement (3 units)” from ME 370 or ME 375 to ME 370 or ME 376.]
5. **Catalog Entry:** (Attach current and proposed catalog copy) SEE ATTACHMENT
6. **Justification for Request:** (Attach)
7. **Estimate of Impact of Resources within Department, for other Departments and the University:** (Attach)

(See Resource List)

8. **Goals and Measurable Student Learning Outcomes for Program:** (Attach)
9. **Methods of Assessment for Measurable Student Learning Outcomes:** (Attach)
 - A. Assessment Tools
 - B. Describe the procedure the dept/program will use to ensure the faculty will be involved in the assessment process. (Refer to the University’s policy on assessment.)
10. **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)
[4/15/2015]	[CECM/ECS]	[N. Dermendjian]	[Y]
[4/15/2015]	[CS/ECS]	[R. Covington]	[Y]
[3/26/2015]	[ECE/ECS]	[Dept. Vote: A. Amini]	[Y]
[4/15/2015]	[ME/ECS]	[H. Johari]	[Y]
[4/15/2015]	[MSEM/ECS]	[K. Chang]	[Y]

11. Approvals:

Department Chair/Program Coordinator:	Ali Amini	Date:	[3/26/2015]
College (Dean or Associate Dean):	Robert Ryan	Date:	[4/15/2015]
Educational Policies Committee:		Date:	[]
Graduate Studies Committee:		Date:	[]
Provost:		Date:	[]

ATTACHMENT

5. Catalog Entry:

CURRENT

2. Upper Division Required Courses (37 units)

Note: All students must complete the Lower Division writing requirement before enrolling in any 300-level engineering courses, and they must attempt the Upper Division Writing Proficiency Exam before the completion of 75 units or enrolling in any 400-level engineering courses. If students fail to do so, a hold is placed on their subsequent class registration and this may delay their graduation.

Junior Year

ECE 309 Numerical Methods in Electrical Engineering (2)
ECE 320/L Theory of Digital Systems and Lab (3/1)
ECE 340/L Electronics I and Lab (3/1)
ECE 350 Linear Systems I (3)
ECE 351 Linear Systems II (3)
MSE 304 Engineering Economy (3)
ECE 455 Mathematical Models in EE (3)

Select 1 of the following 3 unit courses

ME 370 Thermodynamics (3)
ME 375 Heat-Transfer I (3)

PROPOSED

2. Upper Division Required Courses (37 units)

Note: All students must complete the Lower Division writing requirement before enrolling in any 300-level engineering courses, and they must attempt the Upper Division Writing Proficiency Exam before the completion of 75 units or enrolling in any 400-level engineering courses. If students fail to do so, a hold is placed on their subsequent class registration and this may delay their graduation.

Junior Year

ECE 309 Numerical Methods in Electrical Engineering (2)
ECE 320/L Theory of Digital Systems and Lab (3/1)
ECE 340/L Electronics I and Lab (3/1)
ECE 350 Linear Systems I (3)
ECE 351 Linear Systems II (3)
MSE 304 Engineering Economy (3)
ECE 455 Mathematical Models in EE (3)

Select 1 of the following 3 unit courses

ME 370 Thermodynamics (3)
ME 376 Heat Transfer in Electrical and Electronic Systems (3)

6. Justification for Request

Mechanical Engineering department is proposing to make ME 370 as prerequisite of ME 375. With this modification Electrical Engineering (EE) students would not have a choice presently available to them. However Mechanical Engineering department is proposing ME 376 (Heat Transfer in Electrical and Electronic Systems) designed specifically for students majoring in Electrical Engineering. Currently, EE students take either ME 370 Thermodynamics or ME 375 Heat Transfer. ME 375 is geared toward mechanical engineering applications. However, Electrical Engineering students encounter different applications. ME 376 satisfies the needs of EE students in the area of heat transfer as applied to electrical and electronic systems. This program modification enables the EE students to take ME 370 or ME 376 which are most suited for EE program.

7. Estimate of Impact of Resources within Department, for other Departments and the University:

None for Electrical & Computer Engineering department.

Minimal impact for Mechanical Engineering department because the faculty member who is assigned to teach one section of ME 375 will teach ME 376 instead. No new instructor will be required. The total number of students enrolled in ME 370, 375, and the proposed ME 376 will remain the same.

8. Goals and Measurable Student Learning Outcomes for Program:

No change for the Electrical Engineering program.

9. Methods of Assessment for Measurable Student Learning Outcomes:

ME 376: Homework, Project, Examinations

For Reference, Please See ME 376 Course Proposal