INTEROFFICE MEMORANDUM

TO: UNDERGRADUATE CURRICULUM COMMITTEE
FROM: MARK ARCHAMBault
THROUGH: HAMID HEFAZI; EDWARD KALAJIAN
SUBJECT: PRE/CO-REQUISITIVE CHANGES ON MAE COURSES
DATE: NOVEMBER 6, 2013

In an effort to streamline the prerequisite and co-requisite restriction on MAE courses, it is proposed to make the following changes to the listed Mechanical and Aerospace Engineering courses for the reasons provided:

• MAE 2024: Remove MAE 1024 and MAE 1202 as prerequisites.
  The faculty have determined that the introductory sequences are not required for this course. Due to the course's popularity, most sections of this course are major restricted to Mechanical Engineering during the registration process each semester. The restriction is lifted on any remaining seats at the beginning of the semester.

• MAE 3024: Remove CHE 3260, MTH 3201, and MTH 3210 as prerequisites.
  The faculty have determined that the material in CHE 3260 and MTH 3210 is no longer required for this course. MTH 3201 is the predecessor to MTH 3210 and is no longer offered.

• MAE 3090: Remove CHE 3260 and CHE 3265 as prerequisites. Add MAE 2024 as a prerequisite.
  The faculty have determined that the material in CHE 3260 and CHE 3265 is no longer required for this course. However, because students do design parts in this course, some experience in solids modeling is desired, and thus the faculty have decided to add MAE 2024 as a prerequisite.

• MAE 4014: Remove ECE 4991 as a prerequisite.
  For aerospace engineering, the course emphasizes mechanical controls instead of electronic controls. For mechanical engineering, the faculty reteach needed concepts learned in ECE 4991 to emphasize certain aspects germane to mechanical engineering. As such, the faculty have decided that ECE 4991 is no longer required as a prerequisite.

• MAE 4024: Remove MTH 3201 and MTH 3210 as prerequisites. Add MTH 2201 as a prerequisite.
  The faculty have decided that knowledge of partial differential equations is not necessary to the understanding of mechanical vibrations at the undergraduate level, however there is a need for ordinary differential equations. Hence the replacement of MTH 3210 with MTH 2201. MTH 3201 is the predecessor to MTH 3210 and is no longer offered.

• MAE 4171: Remove MTH 3201 and MAE 3061 as prerequisites. Add MAE 3191 as a prerequisite.
  MTH 3201 is the predecessor to MTH 3210 and is no longer offered. MAE 3061 is the predecessor to MAE 3161 and is no longer offered. In August 2013, the UGCC approved the removal of MAE 3191 as a prerequisite to MAE 3161, however the material in MAE 3191 is critical to understanding the material in MAE 4171, thus the faculty have decided to add it as a prerequisite.

• MAE 4175: Remove MAE 3192 as a prerequisite.
  The faculty have decided that the material contained in MAE 4171 is sufficient for the understanding of the material in MAE 4175. The faculty have decided that the material in MAE 3192 is no longer required for this course.

• MAE 4190: Remove COM 2223 as a prerequisite.
  The faculty have decided that it is not necessary for students to take COM 2223 prior to MAE 4190. This is consistent with the equivalent course for the aerospace engineering program, MAE 3291.
The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

**COLLEGE:** Engineering  
**DEPARTMENT:** Mechanical & Aerospace Engineering

**REQUEST FOR CHANGE IN COURSE:**  
Prefix: MAE  
Number: 2024  
Course Title: Solids Modeling and 3-D Mechanical Design Principles

**TO BE INCLUDED IN 2015/2016 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR:** Summer 2014  
**TERM:**

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

**IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?**  
☐ Yes  ☑ No

If yes, current credits ____________________ requested credits ____________

**IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?**  
☑ Yes  ☐ No

If yes, please check all that apply:

☐ Add  ☐ Remove  ☐ Prerequisite  () Corequisite

Prefix: MAE  
Number: 1024  
and  ☐ or

Prefix: MAE  
Number: 1202  
and  ☐ or

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite

Prefix: MAE  
Number:  
and  ☐ or

☐ Add  ☐ Remove  ☐ Other Restrictions*  ☐ Yes  ☐ No

If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

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**APPROVALS:** Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1)  
Originator  
Date: 11/4/13

2)  
Department Head/Program Chair  
Date: 11/7/13

3)  
Dean, Associate Dean  
Date: 11/13/13

4)  
Chair, Graduate Council  
Date

OR

Chair, Undergraduate Curriculum Committee  
Date

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RGR-11721
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**COLLEGE** Engineering

**DEPARTMENT** Mechanical & Aerospace Engineering

**REQUEST IS FOR CHANGE IN COURSE** MADE NUMBER

Computer-Aided Engineering

**TO BE INCLUDED IN 2015/2016 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR** Summer 2014 TERM

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IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?  
☐ Yes  ☒ No  
If yes, current credits _______ requested credits _______

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?  
☒ Yes  ☐ No  
If yes, please check all that apply:

☐ Add  ☒ Remove  ☒ Prerequisite  ☐ Corequisite  Prefix  Number

☐ Add  ☒ Remove  ☒ Prerequisite  ☐ Corequisite  Prefix  Number

☐ Add  ☒ Remove  ☒ Prerequisite  ☐ Corequisite  Prefix  Number

☐ Add  ☒ Remove  ☐ Other Restrictions*  ☐ Yes  ☒ No  
If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A/F, CEU), majors or class levels restricted from registration, or other restrictions.

**APPROVALS:** Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair/Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1)  

Originator  

Date

11/9/13

2)  

Department Head/Program Chair  

Date

11/17/13

3)  

Dean of Associate Deans  

Date

11-13-13

4)  

Chair, Graduate Council  

Date

OR

Chair, Undergraduate Curriculum Committee  

Date

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COLLEGE  Engineering  DEPARTMENT  Mechanical & Aerospace Engineering

REQUEST IS FOR CHANGE IN COURSE  M A E  3 0 9 0  Design of Machine Elements  Course Title

TO BE INCLUDED IN 20  _ 1 5  /20  _ 1 6 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR  Summer 2014  TERM

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?  No  If yes, current credits  requested credits

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?  Yes  No  If yes, please check all that apply:

☐ Add  ☑ Remove  ☐ Prerequisite  ☐ Corequisite  C H E  3 2 6 0  and  or

☐ Add  ☐ Remove  ☐ Prerequisite  ☐ Corequisite  C H E  3 2 6 5  and  or

☐ Add  ☑ Remove  ☐ Prerequisite  ☐ Corequisite  M A E  2 0 2 4  and  or

☐ Add  ☐ Remove  ☐ Other Restrictions*  ☐ Yes  ☐ No  If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

__________________________________________

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1)  [Signature]  11/4/13
   Originator  Date

2)  [Signature]  11/7/13
   Department Head/Program Chair  Date

3)  [Signature]  11-13-13
   Dean of Academic Dean  Date

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RG1-17-731
The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering  DEPARTMENT: Mechanical & Aerospace Engineering

REQUEST IS FOR CHANGE IN COURSE _MAE 4014_ Control Systems

TO BE INCLUDED IN 20_15_/20_16_ CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Summer 2014 TERM

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? [X] Yes  [ ] No  If yes, current credits _______, requested credits _________

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? [X] Yes  [ ] No  If yes, please check all that apply:

[ ] Add  [ ] Remove  [X] Prerequisite  [ ] Corequisite _EC 4991_ and/or

[ ] Add  [ ] Remove  [ ] Prerequisite  [ ] Corequisite _EC 4991_ and/or

[ ] Add  [ ] Remove  [ ] Prerequisite  [ ] Corequisite _EC 4991_ and/or

[ ] Add  [ ] Remove  [ ] Other Restrictions*  [ ] Yes  [ ] No  If yes, please list below:

*Other restrictions may include changing the grade applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1) Original Date 2) 3) Date

Chair, Graduate Council Date

OR

Chair, Undergraduate Curriculum Committee Date

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R03-117211
The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering  DEPARTMENT: Mechanical & Aerospace Engineering

REQUEST IS FOR CHANGE IN COURSE  M A E 4 0 2 4  Mechanical Vibrations  Prefix Number  Course Title

TO BE INCLUDED IN 20 1 5 /20 1 6 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR  Summer 2014  TERM
Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE?  □ Yes  ❌ No  If yes, current credits ______ requested credits ______

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE?  ❌ Yes  □ No  If yes, please check all that apply:

□ Add  ❌ Remove  ❌ Prerequisite  □ Corequisite  M T H 3 2 0 1  Prefix Number  and  or

□ Add  ❌ Remove  ❌ Prerequisite  □ Corequisite  M T H 3 2 1 0  Prefix Number  and  or

□ Add  ❌ Remove  ❌ Prerequisite  □ Corequisite  M T H 2 2 0 1  Prefix Number  and  or

□ Add  ❌ Remove  □ Other Restrictions*  □ Yes  □ No  If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A/F, CEU), majors or class level restricted from registration, or other restrictions.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1)  
Originator:  
Date: 11/4/13

Chair, Graduate Council:  
Date: 

2)  
Department Head/Program Chair:  
Date: 11/7/13

Chair, Undergraduate Curriculum Committee:  
Date: 11-13-13

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The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

College: Engineering  Department: Mechanical & Aerospace Engineering

Request is for change in course: M A E 4 1 7 1  Principles of Heat Transfer

Prefix  Number

Course Title

To be included in 20_15/20_16 Catalog and effective in the Banner System for Summer 2014 Term.

Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

Is request for a change in credits for course listed above? Yes □ No □ If yes, current credits requested credits

Is request to change restrictions for course listed above? Yes □ No □ If yes, please check all that apply:

□ Add  □ Remove  □ Prerequisite  □ Corequisite  M T H 3 2 0 1

Prefix  Number

□ Add  □ Remove  □ Prerequisite  □ Corequisite  M A E 3 0 6 1

Prefix  Number

□ Add  □ Remove  □ Other restrictions* Yes □ No □ If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

Approvals: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1) [Signature] 11/3/13

Originator Date Chair, Graduate Council

2) [Signature] 11/7/13

Department/Head/Program Chair Date OR

3) [Signature] 11/13/13

Dean or Associate Dean Date Chair, Undergraduate Curriculum Committee

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CHANGING RESTRICTIONS OR CREDITS IN A COURSE

The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering
DEPARTMENT: Mechanical & Aerospace Engineering

REQUEST IS FOR CHANGE IN COURSE: M A E 4 1 7 5
Prefix Number
Heating, Ventilation, and Air Conditioning Course Title

TO BE INCLUDED IN 20 1 5 / 20 1 6 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Summer 2014 TERM
Effective term must be a future term for which registration has not begun. Catalog year will be the next printed edition. Earlier terms/years will not be processed.

IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? □ Yes □ No If yes, current credits requested credits

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? □ Yes □ No If yes, please check all that apply:
□ Add □ Remove □ Prerequisite □ Corequisite M A E 3 1 9 2 □ and □ or
Prefix Number
□ Add □ Remove □ Prerequisite □ Corequisite □ and □ or
Prefix Number
□ Add □ Remove □ Prerequisite □ Corequisite □ and □ or
Prefix Number

□ Add □ Remove □ Other Restrictions* □ Yes □ No If yes, please list below:
*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

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1) Originator

Date

Chair, Graduate Council

Date

OR

2) Department Head/Program Chair

Date

Chair, Undergraduate Curriculum Committee

Date

3) Dean of Graduate/T Bosnia

Date

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CHANGING RESTRICTIONS OR CREDITS IN A COURSE

The addition or removal of any restriction or change in credit hours in a course requires that this form, accompanied by any supporting documentation, be completed and approved as indicated below.

COLLEGE: Engineering

DEPARTMENT: Mechanical & Aerospace Engineering

REQUEST IS FOR CHANGE IN COURSE: M A E 4 1 9 0

Design Methodologies and Practice

Prefix Number Course Title

TO BE INCLUDED IN 20_1 5 /20_1 6 CATALOG AND EFFECTIVE IN THE BANNER SYSTEM FOR Summer 2014 TERM

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IS REQUEST FOR A CHANGE IN CREDITS FOR COURSE LISTED ABOVE? ☐ Yes ☒ No If yes, current credits __________ requested credits __________

IS REQUEST TO CHANGE RESTRICTIONS FOR COURSE LISTED ABOVE? ☒ Yes ☐ No If yes, please check all that apply:

☐ Add ☐ Remove ☐ Prerequisite ☐ Corequisite C O M 2 2 2 3

☐ Add ☐ Remove ☐ Prerequisite ☐ Corequisite

☐ Add ☐ Remove ☐ Prerequisite ☐ Corequisite

☐ Add ☐ Remove ☐ Other Restrictions* ☐ Yes ☐ No If yes, please list below:

*Other restrictions may include changing the grades applied to the course (P/F, S/U, A-F, CEU), majors or class levels restricted from registration, or other restrictions.

APPROVALS: Once appropriate department approvals are completed, submit form to Chair, Graduate Council, or Chair, Undergraduate Curriculum Committee for signatures below and forward to Catalog Director.

1) ___________________________ Date 11/14/13

Original Signature

2) ___________________________ Date 11/13/13

Department Head/Program Chair

3) ___________________________ Date 11-13-13

Dean or Associate Dean

4) ___________________________ Date

Chair, Graduate Council

OR

Chair, Undergraduate Curriculum Committee

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