CEAS-17-16-MAE

REQUEST TO COLLEGE CURRICULUM COMMITTEE FOR CURRICULAR IMPROVEMENTS

DEPARTMENT: MAE **PROPOSED EFFECTIVE SEMESTER: Spring 2018** **COLLEGE: CEAS**

PROPOSED IMPROVEMENTS

Academic Program
- ☐ New degree*
- ☐ New major*
- ☐ New curriculum*
- ☐ New concentration*
- ☐ New certificate
- ☐ New minor
- ☐ Revised major
- ☐ Revised minor
- ☐ Admission requirements
- ☐ Graduation requirements
- ☐ Deletion ☐ Transfer
- X Other (explain**)

Substantive Course Changes
- ☐ New course
- ☐ Pre or Co-requisites
- ☐ Deletion (required by others)
- ☐ Course #, different level
- ☐ Credit hours
- ☐ Enrollment restriction
- ☐ Course-level restriction
- ☐ Prefix ☐ Title and description (attach current & proposed)
- ☐ General education (select one) Not Applicable
- ☐ Other (explain**)

Misc. Course Changes
- ☐ Title
- ☐ Description (attach current & proposed)
- ☐ Deletion (not required by others)
- ☐ Course #, same level
- ☐ Variable credit
- ☐ Credit/no credit
- ☐ Cross-listing
- ☐ COGE reapproval
- ☐ Other (explain**)

**** Other: Remove the requirement of 'C' as a prerequisite for courses in the professional aerospace engineering program**

Title of degree, curriculum, major, minor, concentration, or certificate: BS in Aerospace engineering

Existing course prefix and #: **Proposed course prefix and #:** **Credit hours:**

Existing course title:

Proposed course title:

Existing course prerequisite & co-requisite(s):
Proposed course prerequisite(s)
Proposed course co-requisite(s)
Proposed course prerequisite(s) that can also be taken concurrently:
Is there a minimum grade for the prerequisites or corequisites?
The default grades are D for undergraduates and C for graduates.
Major/minor or classification restrictions:
List the Banner 4 character codes and whether they should be included or excluded.
For 5000 level prerequisites & corequisites: Do these apply to: (circle one) (undergraduates) graduates both

Specifications for University Schedule of Classes:
a. Course title (maximum of 30 spaces):
b. Multi-topic course: ☐No ☐Yes
c. Repeatable for credit: ☐ No ☐ Yes
d. Mandatory credit/no credit: ☐ No ☐Yes
e. Type of class and contact hours per week (check type and indicate hours as appropriate)
1. ☐ Lecture
2. ☐ Lab or discussion
3. ☐ Lecture/lab/discussion
4. ☐ Seminar or ☐ studio
5. ☐ Independent study
6. ☐ Supervision or practicum

CIP Code (Registrar's use only):

Chair/Director K. Naglieri Date 2/7/17

Chair, College Curriculum Committee Date

Dean Date: Graduate Dean: Date

Curriculum Manager: Return to dean ☐ Date Forward to: Date

Chair, COGE/ PEB / FS President Date

FOR PROPOSALS REQUIRING GSC/USC REVIEW:

* ☐ Approve ☐ Disapprove | Chair, GSC/USC Date

* ☐ Approve ☐ Disapprove | Provost Date

Revised May 2007. All previous forms are obsolete and should not be used.

1. Explain briefly and clearly the proposed improvement.

   Remove the requirement that " A student is required to earn a grade of "C" or better in all departmental pre-requisite courses before enrollment is permitted in the next sequence course."

2. Rationale. Give your reason(s) for the proposed improvement. (If your proposal includes prerequisites, justify those, too.)

   Several years ago we proposed to require a minimum 'C' as a pre-requisite for a subsequent course. The thought was that it would improve the success rate in the subsequent course. This turned out not to be the case. It also created additional constraints for progress in the program, creating enrollment bottlenecks, affecting time to graduation, and increasing the numbers of needed advising exceptions to students. The latter effect is problematic also in accreditation. We propose to return to the way it was before that change. Students who get a passing grade of 'DC' or 'D' in a course will decide for themselves if and when to retake a course in order to improve their grade for graduation.

3. Effect on other colleges, departments or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.

   N/A

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.

   N/A

5. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time. If a required course will be offered during summer only, provide a rationale.

   The proposed change will give students more flexibility in enrollment to courses and will help in improving time to graduation.

6. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?
   N/A

7. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? How often will course(s) be offered? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)
   N/A

8. General education criteria. For a general education course, indicate how this course will meet the criteria for the area or proficiency. (See the General Education Policy for descriptions of each area and proficiency and the criteria. Attach additional pages as necessary. Attach a syllabus if (a) proposing a new course, (b) requesting certification for baccalaureate-level writing, or (c) requesting reapproval of an existing course.) **N/A**

9. List the learning outcomes for the proposed course or the revised or proposed major, minor, or concentration. These are the outcomes that the department will use for future assessments of the course or program. **N/A**

10. Describe how this curriculum change is a response to assessment outcomes that are part of a departmental or college assessment plan or informal assessment activities. **This is a result of informal assessment**

11. (Undergraduate proposals only) Describe, in detail, how this curriculum change affects transfer articulation for Michigan community colleges. For course changes, include detail on necessary changes to transfer articulation from Michigan community college courses. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section. **N/A**

The following catalog changes encompass the two proposed changes in the aerospace engineering curriculum (changing the pre-engineering GPA from 2.0 to 2.5 and removing the "C" grade pre-requisite for courses in the professional engineering program).

The current language is:

Admission

1. To be admitted to this engineering curriculum, a student must complete all pre-engineering requirements with grades of "C" or better. These requirements may be found in the beginning of the College of Engineering and Applied Sciences section.
2. Students seeking admission to this curriculum must submit an application following procedures established by the College of Engineering and Applied Sciences. Upper level transfer students may complete an application prior to their first semester of enrollment. Only students in good academic standing as defined by the University will be admitted to this curriculum.

Requirements

Candidates for the Bachelor of Science in Engineering (Aerospace) degree must satisfy the following requirements in addition to those required by Western Michigan University:

1. A grade point average of 2.0 or better must be earned in courses presented for graduation with AE, ECE, IEE, EDMM, and ME prefixes.
2. A student is required to earn a grade of "C" or better in all departmental pre-requisite courses before enrollment is permitted in the next sequence course.
3. No more than two grades of "D" or "DC" in courses presented for graduation may be counted for graduation.
4. Complete the following program of 129-130 semester credit hours. The schedule below is an example of one leading to graduation in eight semesters, beginning in the fall.
5. The Aerospace Engineering curriculum requires students to complete a course in General Education Area I, Area II, Area III, Area IV, Area V, and Area VIII. At least two of the General Education Area courses must be at the 3000/4000-level, and no more than two courses from any one department may be used to satisfy the Area requirements.

The proposed catalog language is:

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1. To be admitted to this engineering curriculum, a student must complete all pre-engineering requirements with requirements with grades of "C" or better and a pre-engineering grade point average of 2.5 or better. These requirements may be found in the beginning of the College of Engineering and Applied Sciences section.
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