CEAS -17-14 MAG

REQUEST TO CO	LLEGE CURRICU	LUM COMMITTEE	FOR CUI	RRICULAR IMPR	REQUEST TO COLLEGE CURRICULUM COMMITTEE FOR CURRICULAR IMPROVEMENTS					
	PROPOSED EFFEC	TIVE SEMESTER:	Fall 2018	COLLEGE: CE	AS					
PROPOSED IMPROVEMEN Academic Program		tive Course Change	c	Misc. Course Char	2000					
☐ New degree*		course	3	Title	1983					
☐ New major*		r Co-requisites			ch current & proposed)					
☐ New curriculum*					quired by others)					
				Course #, same						
New certificate				☐ Variable credit						
☐ New minor	☐ Enrollment restriction			Credit/no credit						
Revised major	Course-level restriction			☐ Cross-listing						
Revised minor	☐ Prefix	Prefix Title and description			val					
Admission requirements	(attach current & proposed) Other (ex				*)					
Graduation requirements	General education (select one)									
☐ Deletion ☐ Transfer	Not Applicable									
Other (explain**)	☐ Othe	r (explain**)								
** Other: Program pre-requisite changes: change the GPA required to be admitted to aerospace engineering										
Title of degree, curriculum, major, minor, concentration, or certificate: BS in Aerospace engineering										
Existing course prefix and #:	Proposed cour	se prefix and #:	Credit hou	rs:						
Existing course title: N/A										
Proposed course title: N/A										
Proposed course prerequisite(s) N/A Proposed course co-requisite(s) N/A Proposed course prerequisite(s) that can also be taken concurrently: N/A Is there a minimum grade for the prerequisites or corequisites? N/A Major/minor or classification restrictions: For 5000 level prerequisites & corequisites:										
	Do these	apply to: (circle one)	undergrad	duates graduates	both					
Specifications for University Schedule of Classes:										
a. Course title (maximum of 30 spaces): b. Multi-topic course: □No □Yes										
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 		cture/lab/discussion		dependent study	2					
Z. Lab of discussion	1 4. ∐ Ser	minar or 🗌 studio	6. LJ Su	pervision or practicum	n					
CIP Code (Registrar's use onl	y):									
Chair/Director	glishi	2			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					

1. Explain briefly and clearly the proposed improvement.

To be admitted to the professional aerospace engineering curriculum (AEGJ), a student must complete all preengineering requirements with a GPA of 2.5 or better.

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

The proposed change will ensure that students in the engineering curriculum have mastered pre-engineering material, so classes in the professional program can focus on the appropriate topics of their own nature, rather than substantial review of pre-requisite material.

This change will bring the aerospace engineering program in line with requirements at peer institutions. For example, Oklahoma State University (a WMU peer institution with BSME and BSAE programs in the same department), requires a GPA of 3.0 for admission to the professional aerospace engineering program. Michigan State University requires a pre-engineering GPA of 3.1 and Grand Valley State University requires a pre-engineering GPA of 2.7 for admission to the mechanical engineering major (these universities do not have aerospace engineering programs).

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.

Some students who do not meet the 2.5 GPA requirement may choose to declare majors in other departments and colleges at WMU.

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

No anticipated effect on programs. The same GPA requirement change is proposed concurrently in the mechanical engineering program.

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.

None. The proposed GPA requirement will apply to students who enter the pre-engineering program in Fall 2017 or later.

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?

Students will benefit from courses in the professional engineering program that focus on advanced material, without the need to repeatedly review pre-engineering material.

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.)

None

- 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.) No change
- 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. No change

- 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 proposal is a result of informal assessment and input from instructors who teach professional engineering courses in the aerospace engineering program.
- 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. No change

The current catalog states:

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.
- 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.

The proposed catalog 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 and must have a grade point average of 2.5 or better in all pre-engineering requirements. These requirements may be found in the beginning of the College of Engineering and Applied Sciences section.
- 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.