

1. Explain briefly and clearly the proposed improvement.

This proposal will change the admission requirements to the College of Engineering and Applied Sciences (CEAS) for students interested in Engineering, Engineering Technology, or Computer Science and does not impact students interested in Graphics and Printing Science. The change to CEAS admission is aligned with SAT replacing ACT in Michigan beginning in 2017. The change will consist of three parts:

- a. Admission to Pre-xxxxEngineering/Pre-Engineering Technology/Pre-Computer Science: To be eligible for admission to Pre-xxxxEngineering or Pre-xxxxEngineering Technology or Pre-Computer Science, a student must have the following SAT scores (or the ACT equivalent) –
MATH – 580 or higher (ACT 25 or higher)
- b. Admission to CEAS Exploratory: To be eligible for admission to CEAS Exploratory, a student must have the following SAT scores (or the ACT equivalent)
MATH – 490 to 579 (ACT 20-24)

Students in CEAS Exploratory who have accumulated 12-16 (or more) credit hours and with a grade point average (GPA) of 3.00 or higher in MATH 1110 in no more than two attempts, may apply and be admitted into the Pre-xxxxEngineering/Pre-xxxxEngineering Technology/Pre-Computer Science. If unsuccessful at the first attempt in MATH 1110, students must have a GPA of 2.00 or higher in MATH 1110 to be given a second attempt to achieve a GPA of 3.00 or higher in MATH 1110.

- c. Students with MATH SAT less than 490 (or ACT less than 20) will be admitted to the Exploratory Advising program of Western Michigan University (WMU). A student may apply for admission to Pre-xxxxEngineering/Pre-xxxxEngineering Technology/Pre-Computer Science if the student has a grade point average (GPA) of 3.0 or higher in MATH 1100 and MATH 1110. Students have two (2) chances to achieve a GPA of 3.00 or higher in MATH 1100 and MATH 1110.

See Appendix I, which describes the guiding principles for the revision to CEAS admission requirements and the pathways for the above three categories.

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

In 2017, SAT will replace ACT in Michigan. The rationale for the current change -- to be effective Spring 2016 -- is in response to the Mathematics Department revising the SAT cut offs for mathematics placement, which is also to be effective Spring 2016.

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.

The proposed change in the admission requirement will have no effect since it is to align with changes of SAT replacing ACT in Michigan in 2017.

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

The proposed is in response to the Mathematics Department revising the SAT cut offs for mathematics placement.

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 in the admission requirement to CEAS will have no effect on students with adequate high-school preparation in mathematics, reading, and composition in meeting the graduation requirements.

Students with inadequate high-school preparation in mathematics have always had to meet the prerequisite requirements for Calculus/Pre-Calculus, and science and engineering courses that have prerequisites based on Calculus/Pre-Calculus. Students with inadequate high-school preparation in reading and composition have additional

requirements to meet before they can enroll in IME 1020, Technical Communication. As a result, this population of students has always had additional requirements that would require a longer time to graduate.

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?

By revising the admission requirement, CEAS will communicate to prospective students and parents the requirement for success in engineering and applied sciences. CEAS intends to continue to use the published SAT scores of admitted students to strategically target students with adequate preparation in mathematics to improve the overall quality and success rate of our first-time first-year student population.

CEAS has a joint admission program with Kellogg Community College and Muskegon Community College. Several community colleges in southwest Michigan have made inquiries to establish such joint admission agreement with CEAS. CEAS intends to publish clear pathways for high-school students with various levels of mathematics preparation and who are interested in pursuing studies in engineering and applied sciences at WMU. This would allow CEAS and the community college partners that have joint admissions program to recruit at high schools together by describing the various pathways toward a baccalaureate degree in engineering and applied sciences, either directly at WMU or through a pathway involving a community college partner.

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.)

The proposed change in the admission requirements will also allow the CEAS advising staff to better serve students in Pre-xxxxEngineering/Pre-xxxxEngineering Technology/Pre-Computer Science and CEAS Exploratory.

The proposed change may result in an increase in the number of students in the Exploratory Advising program.

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.)

Not applicable.

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.

Not applicable.

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.

The curriculum change is in response to SAT replacing ACT in Michigan in 2017.

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.

Transfer students who have taken mathematics course(s) at a community college, their admission to CEAS will follow the same criteria described above, and it will be based on the last, highest-level mathematics course completed. The Office of Admissions will determine the initial status of the transfer students when they apply to WMU (Pre-xxxEngineering or Pre-xxxEngineering Technology or Pre-Computer Science/CEAS Exploratory or Computer

Science/ Exploratory Advising). Transfer students can appeal their CEAS admission status, which will be determined by a committee chaired by the CEAS Associate Dean for Undergraduate Programs and Assessment.

CEAS has a joint admission program with Kellogg Community College and Muskegon Community College. Several community colleges in southwest Michigan have made inquiries to establish such joint admission agreement with CEAS.

CEAS intends to publish clear pathways for high-school students with various levels of mathematics preparation and who are interested in pursuing studies in engineering and applied sciences at WMU. This would allow the CEAS and the community college partners that have joint admissions program to recruit at high schools together by describing the various pathways toward a baccalaureate degree in engineering and applied sciences, either directly at WMU or through a pathway involving a community college partner.

Appendix I. Admission to CEAS

Guiding Principles of CEAS Admission

- Remain an institution that provides access to students of all social and economic background
- Support truth in advertising
- Maintain admission standard
- Improve student success and retention
- Maintain enrollment capacity
- Improve reputation

The admission requirements described below do not apply to students interested in the Graphics & Printing Science program.

Exploratory Advising	CEAS Exploratory	Pre-xxxEngineering or Pre-xxxEngineering Technology/Pre-Computer Science
MATH SAT <490 or ACT <20	MATH SAT 490-579 or ACT 20-24 <ul style="list-style-type: none"> • Students are eligible to declare a major in Computer Science • Students are eligible to participate in Summer Bridge Program 	MATH SAT \geq 580 or ACT \geq 25 <ul style="list-style-type: none"> • Students are eligible to declare a major in Pre-xxxEngineering, Pre-xxxEngineering Technology and Computer Science
Admission to Pre-xxxEngineering or Pre-xxx Engineering Technology <ul style="list-style-type: none"> • GPA of 3.0 or higher in MATH 1100 and MATH 1110 or equivalents in no more than two attempts in each course 	Admission to Pre-xxxEngineering or Pre-xxxEngineering Technology <ul style="list-style-type: none"> • Grade of 3.0 or higher in MATH 1110 or equivalents in no more than two attempts in each course 	Admission to Professional Engineering and Engineering Technology Programs <ul style="list-style-type: none"> • Fulfill the Pre-Engineering/Pre-Engineering Technology admission requirements described in the Undergraduate Catalog
EDITORIAL NOTES FOR CURRICULUM CHANGE PROPOSAL PURPOSES. REFER TO THE CATALOG FOR CURRENT ELIGIBILITY.		
Appropriate level and content of general education courses	Eligible to take: MATH 1110 EDMM 1420 (for some programs) GPS (IMAG) 1500 EDMM 1500/EDMM 1220 ENGR 1002 Appropriate level and content of general education courses	Eligible to take: MATH 1180/1220/1700 or higher CHEM 1100 IEE 1020 EDMM 1420 & (1430 EDT only) CHEG 1010 PAPR 1000 ECE 2500 CS 1110 CS 1021/1022/1023/ CS 1106 ENGR 1001 ENGR 1990 Appropriate level and content of general education courses
Courses leading to academic success and program preparation		