

<https://www.abet.org/wp-content/uploads/2018/11/E001-19-20-EAC-Criteria-11-24-18.pdf>

3. What is the timeline for implementing these changes?  
The changes will be in effect for the first time in the 2019-20 accreditation cycle. All programs scheduled for a General Review in the 2019-20 and following cycles (except for those scheduled for an Interim Review or Visit as described below) should begin transitioning to the new criteria as needed to assure as much implementation as practical for the next General Review.
4. Our institution was evaluated in 2018- 19. If a program received an IR or IV, which criteria should we use in preparing for the report/visit?  
When responding to an IR or IV received before the 2019-20 cycle, a program has the option of using either the criteria in effect when the IR or IV was received OR using the current criteria in effect. However, ALL PROGRAMS AT AN INSTITUTION MUST USE THE SAME CRITERIA FOR THE REVIEW. (refer to Section I.E.2.b of the 2019-2020 APPM)
5. Our program must respond to an IR or IV action in the 2019 – 2020 or later cycle that was received before the 2019- 20 accreditation cycle. Which criteria should we use in preparing for the report/visit?  
A program has the option of using either the criteria in effect when the IR or IV was received OR using the current criteria in effect. ALL PROGRAMS AT AN INSTITUTION MUST USE THE SAME CRITERIA FOR THE REVIEW. (refer to Section I.E.2.b of the 2019-2020 APPM)
6. If our program is being visited in 2019- 20 or 2020-21 and we have only one year or less of data from the new outcomes and older data from the (a) —(k) outcomes, how can we aggregate the results?  
It is not necessary to aggregate data from student outcomes (a)-(k) and (1)-(7), UNLESS THE PROGRAM FINDS THE AGGREGATION USEFUL. Presumably, each program has followed its continuous improvement process for the five prior years and has

evidence of the degree to which outcomes (a)-(k) were obtained during that period, and how that assessment data was used as input to the program's continuous improvement process. PEVs will expect to see the plans for assessing and evaluating attainment of student outcomes (1)-(7) and implementation of these plans as much as practical, including the assessment data collected for (1)-(7), the degree to which (1)-(7) have been attained, and the manner in which evaluations of the assessment data have been used as input to the continuous improvement process.

7. Can we add our own student outcomes?  
Yes, programs have always had the ability to incorporate additional outcomes. If they do so, these additional outcomes must be assessed and evaluated as required by Criterion 4.
  
8. What are the impacts of these changes on Master's programs?  
For students who have graduated from a baccalaureate program accredited by EAC of ABET, we presume that they have completed a curriculum that supported the attainment of the then-current Criterion 3 student outcomes, whether those outcomes were (a)-(k) or (1)-(7).

For students who are not graduates from a baccalaureate program accredited by EAC of ABET, the master's program must ensure that each student has completed the experiences required by the criteria (<https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2019-2020/>)

The master's program must have and enforce procedures for verifying that each student has completed a set of post-secondary educational and professional experiences that:

- (a) Supports the attainment of student outcomes of Criterion 3 of the general criteria for baccalaureate level engineering programs, and
- (b) Includes at least one year of math and basic science (basic science includes the biological, chemical, and physical sciences), as well as at least one-and-one-half years of engineering topics and a major design experience that meets the requirements of Criterion 5 of the general criteria for baccalaureate level engineering programs.

The student outcomes referenced in (a) and the curriculum requirements referenced in (b) are those in effect at the time of the review; thus, outcomes (1)-(7) are required for

April 8, 2019

level mathematics.

Complex Engineering Problems: It is important to pay attention to the complexity of problems used to develop and assess

judgment to draw conclusions. There is no requirement that students be able to design an experiment.

Student Outcome #7 requires that students be able to acquire and apply new knowledge as needed, using appropriate learning strategies. The ABET Industrial Advisory Council indicated that it is important for students to take responsibility for their own learning. There are many ways a student can demonstrate this ability. For example, students could engage in such activities as identifying needed information for a project, examining sources for the information, determining an appropriate source and applying the information.

10. What is the general guidance on level of shortcoming versus degree to which assessment and evaluation of the extent to which the Criterion 3 Student Outcomes (1)-(7) are attained have been implemented in the 2019-20 cycle? These decisions will be TEAM decisions made during the visit. As a minimum, a plan for implementing assessment and evaluation of attainment for student outcomes (1)-(7) should exist and programs should be as far along as practical in assessing and evaluating elements of (1)-(7). PEVs will examine the robustness of a program's continuous improvement process.

11. What are the expectations for programs in the 2019-20 cycle regarding mapping, assessing and evaluating Criterion 3 Student Outcomes (1)-(7)? Many programs use performance indicators to describe (a)-(k). Many of these performance indicators should be directly applicable for (1)-(7). It is likely that some programs will make only minor adjustments to their assessment processes. In these cases, transition to (1)-(7) may well be fully implemented during the 2019-20 cycle. If major changes to the assessment and evaluation processes are required, it is expected that a plan for the change will be fully developed and significant elements of the plan will be implemented.

12. For student outcomes such as Student Outcome 4, which states "an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts", how should programs handle the list of contexts? Is it expected each problem address all contexts, not necessarily in a single problem but strategically covered throughout the entire program? Or, are programs allowed to choose the contexts relevant to the program?

It is expected that programs assess the ability of students to consider all impacts listed. How a program chooses to address the requirement is the responsibility of the program.

13. Student Outcome 5 req.3(e-4.3(esponsi)-s5(m)-44.3(s)1-6.7(n))TJ 0 -1)4.9(o02 .5( 5 r)-4.360.5( 54)-5r5

7 06.533d.

- a. Videotaping a team meeting and evaluating the team performance using a rubric.
- b. Students write descriptions of their contributions and their team members' contributions indicating how they collaborated and were inclusive. A rubric is often used to evaluate the description.
- c. External clients meet with students over a period of time and evaluate their contributions and inclusiveness.
- d. Use of web-based peer evaluations such as CATME.org or TEAMMATES. The peer evaluations includ-1.141n4dh,p(uat)-6.6ewo 0.337 0 Td w( )11.2(m)-5.9( 0 Td p i)2.6(pEMC793e.3(e

April 8, 2019

The emphasis for informed judgments is the ability of the student to consider impacts in