Computing Accreditation Commission
Side-by-side Comparison: Current Criteria (Version 1) v. 2019-20 Criteria (Version 2)
April 18, 2018

GENERAL CRITERIA

DEFINITIONS

CAC Criteria Currently In Use (Version 1)	CAC Criteria for Use in 2019-20 (Version 2)
While ABET recognizes and supports the prerogative of institutions to adopt and use the terminology of their choice, it is necessary for ABET volunteers and staff to have a consistent understanding of terminology. With that purpose in mind, the Commissions will use the following basic definitions: **Program Educational Objectives** – Program educational objectives are broad statements that describe what graduates are expected to attain within a few years of graduation. Program educational objectives are based on the needs of the program's constituencies. **Student Outcomes** – Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program. **Assessment** – Assessment is one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process. **Evaluation** – Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained.	While ABET recognizes and supports the prerogative of institutions to adopt and use the terminology of their choice, it is necessary for ABET volunteers and staff to have a consistent understanding of terminology. With that purpose in mind, the Commissions will use the following basic definitions: **Program Educational Objectives** – Program educational objectives are broad statements that describe what graduates are expected to attain within a few years of graduation. Program educational objectives are based on the needs of the program's constituencies. **Student Outcomes** – Student outcomes describe what students are expected to know and be able to do by the time of graduation. These relate to the knowledge, skills, and behaviors that students acquire as they progress through the program. **Assessment** – Assessment is one or more processes that identify, collect, and prepare data to evaluate the attainment of student outcomes. Effective assessment uses relevant direct, indirect, quantitative and qualitative measures as appropriate to the outcome being measured. Appropriate sampling methods may be used as part of an assessment process. **Evaluation** – Evaluation is one or more processes for interpreting the data and evidence accumulated through assessment processes. Evaluation determines the extent to which student outcomes are being attained.

Evaluation results in decisions and actions regarding program improvement.	Evaluation results in decisions and actions regarding program improvement.
[No CAC-specific definitions section]	*[No CAC-specific definitions section]*
[The definition of "one academic year" was previously only provided in the self-study document, and was not explicitly provided in the criteria]	*[The definition of "one academic year" was removed in favor of 30 semester units or equivalent.]*
[Not explicitly defined in the criteria]	*[Not explicitly defined in the criteria, but now described in General Criteria, Criterion 5, Paragraph 1]*

CRITERION 3, STUDENT OUTCOMES

CAC Criteria Currently In Use (Version 1)	CAC Criteria for Use in 2019-20 (Version 2)
The program must have documented student outcomes that prepare graduates to attain the program educational objectives. There must be a documented and effective process for the periodic review and revision of these student outcomes.	The program must have documented and publicly stated student outcomes that include (1) through (5) below and any outcomes required by applicable Program Criteria. The program may define additional outcomes. Graduates of the program will have an ability to: …
The program must enable students to attain, by the time of graduation.	*["Must enable" language has been removed. Items below in Criterion 3 are now student outcomes that must be assessed.]*
(a) An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline.	*[Now incorporated into Criterion 5, Paragraph 1]*
(b) An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution.	1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
(c) An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.	2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
(d) An ability to function effectively on teams to accomplish a common goal.	5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
(e) An understanding of professional, ethical, legal, security and social issues and responsibilities.	6. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
(f) An ability to communicate effectively with a range of audiences.	3. Communicate effectively in a variety of professional contexts.

(g) An ability to analyze the local and global impact of computing on individuals, organizations and society.	*[Now incorporated into Criterion 5, Paragraph 2, Item 3]*
(h) Recognition of the need for and an ability to engage in continuing professional development.	*[Now incorporated into Criterion 5, Paragraph 1]*
(i) An ability to use current techniques, skills, and tools necessary for computing practice.	*[Now incorporated into Criterion 5, Paragraph 2, Item 1]*

CRITERION 5, CURRICULUM

CAC Criteria Currently In Use (Version 1)	CAC Criteria for Use in 2019-20 (Version 2)
The program's requirements must be consistent with its program educational objectives and designed in such a way that each of the student outcomes can be attained. The curriculum must combine technical and professional requirements with general education requirements and electives to prepare students for a professional career and further study in the computing discipline associated with the program, and for functioning in modern society.	The program's requirements must be consistent with its program educational objectives and designed in such a way that each of the student outcomes can be attained. The curriculum must combine technical, professional, and general education components to prepare students for a career, further study, and lifelong professional development in the computing discipline associated with the program.
The technical and professional requirements must include at least one year of up-to-date coverage of fundamental and advanced topics in the computing discipline associated with the program. In addition, the program must include mathematics appropriate to the discipline beyond the pre-calculus level.	The curriculum requirements specify topics, but do not prescribe specific courses. The program must include mathematics appropriate to the discipline and at least 30 semester credit hours (or equivalent) of up-to-date coverage of fundamental and advanced computing topics that provide both breadth and depth. The computing topics must include:
For each course in the major required of all students, its content, expected performance criteria, and place in the overall program of study must be published.	*[No analog]*
[From Criterion 3, Item (i)]	1. Techniques, skills, and tools necessary for computing practice.
[No analog]	2. Principles and practices for secure computing. ← New
[From Criterion 3, Item (g)]	3. Local and global impacts of computing solutions on individuals, organizations, and society.