ETAC Criterion 3 and Program Criteria: How Can We Improve?

September 23, 2016

Overview

- Existing ETAC Criterion 3
- Other International Criteria
- EAC Criteria 3 and 5 Changes
- ETAC Criteria Change Considerations
- Other Issues
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Introduction

- Criterion 3. Student Outcomes Written 20 Years Ago for Outcomes-Based Education
- Program Assessment Issues
- International Agreements and Global Accreditation Alignment
- Time to Review and Update

Existing Criterion 3

Criterion 3. Student Outcomes

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.

For purposes of this section, <u>broadly defined</u> activities are those that involve a variety of resources; that involve the use of new processes, materials, or techniques in innovative ways; and that require a knowledge of standard operating procedures. <u>Narrowly defined</u> activities are those that involve limited resources, that involve the use of conventional processes and materials in new ways, and that require a knowledge of basic operating processes.

Criterion 3. Associate Degree

a) an ability to apply the knowledge, techniques, skills, and modern tools of the discipline to narrowly defined engineering technology activities;
b) an ability to apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require limited application of principles but extensive practical knowledge;
c) an ability to conduct standard tests and measurements, and to conduct, analyze, and interpret experiments;
d) an ability to function effectively as a member of a technical team;
e) an ability to identify, analyze, and solve narrowly defined engineering technology problems;
f) an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;
g) an understanding of the need for and an ability to engage in self-directed continuing professional development;
h) an understanding of and a commitment to address professional and ethical responsibilities, including a respect for diversity; and
i) a commitment to quality, timeliness, and continuous improvement.

Criterion 3. Bachelor's Degree

a) an ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
b) an ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;
c) an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;
d) an ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;
e) an ability to function effectively as a member or leader on a technical team;
f) an ability to identify, analyze, and solve broadly-defined engineering technology problems;
g) an ability to apply written, oral, and graphical communication in both technical and non-technical environments; and an ability to identify and use appropriate technical literature;
h) an understanding of the need for and an ability to engage in self-directed continuing professional development;
i) an understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
j) a knowledge of the impact of engineering technology solutions in a societal and global context; and
k) a commitment to quality, timeliness, and continuous improvement.

International Criteria

- International Engineering Alliance http://www.ieagreements.org/
- http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf

- Dublin Accord–Engineering Technician (A.S. Degree)

- Sydney Accord–Engineering Technologist (B.S. Degree)

Scope and Organization of Graduate Attributes

- For example, the Knowledge of Engineering Sciences attribute:
- Common Stem: Apply knowledge of mathematics, science, engineering fundamentals and an engineering specialization …
- **Engineer Range**: … as described in the engineer knowledge profile to the solution of complex engineering problems.
- **Engineering Technologist Range**: … as described in the engineering technologist knowledge profile to defined and applied engineering procedures, processes, systems or methodologies.
- **Engineering Technician Range**: … as described in the engineering technician knowledge profile to wide practical procedures and practices.

(http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf)

Knowledge Profile

A Sydney Accord program provides:	**A Dublin Accord program** provides:
SK1: A systematic, theory-based understanding of the **natural sciences** applicable to the sub-discipline	**DK1:** A descriptive, formula-based understanding of the **natural sciences** applicable in a sub-discipline
SK2: Conceptually-based **mathematics**, numerical analysis, statistics and aspects of computer and information science to support analysis and use of models applicable to the sub-discipline	**DK2:** Procedural **mathematics**, numerical analysis, statistics applicable in a sub-discipline
SK3: A systematic , theory-based formulation of **engineering fundamentals** required in an accepted sub-discipline	**DK3:** A coherent procedural formulation of **engineering fundamentals** required in an accepted sub-discipline
SK4: Engineering **specialist knowledge** that provides theoretical frameworks and bodies of knowledge for an accepted sub-discipline	**DK4:** Engineering **specialist knowledge** that provides the body of knowledge for an accepted sub-discipline

(http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf)

Knowledge Profile

A Sydney Accord program provides:	**A Dublin Accord program** provides:
SK5: Knowledge that supports **engineering design** using the technologies of a practice area	**DK5:** Knowledge that supports **engineering design** based on the techniques and procedures of a practice area
SK6: Knowledge of **engineering technologies** applicable in the sub-discipline	**DK6:** Codified **practical engineering knowledge** in recognised practice area.
SK7: Comprehension of the role of technology in society and identified issues in applying engineering technology: ethics and impacts: economic, social, environmental and sustainability	**DK7: Knowledge** of issues and approaches in engineering technician practice: ethics, financial, cultural, environmental and sustainability impacts
SK8: Engagement with the **technological literature** of the discipline	
A program that builds this type of knowledge and develops the attributes listed below is typically achieved in 3 to 4 years of study, depending on the level of students at entry.	A program that builds this type of knowledge and develops the attributes listed below is typically achieved in 2 to 3 years of study, depending on the level of students at entry.

(http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf)

Graduate Attribute Profiles

A **Sydney Accord program** provides:	A **Dublin Accord program** provides:
SK1: A systematic, theory-based understanding of the **natural sciences** applicable to the sub-discipline	**DK1:** A descriptive, formula-based understanding of the **natural sciences** applicable in a sub-discipline
SK2: Conceptually-based **mathematics**, numerical analysis, statistics and aspects of computer and information science to support analysis and use of models applicable to the sub-discipline	**DK2:** Procedural **mathematics**, numerical analysis, statistics applicable in a sub-discipline
SK3: A systematic , theory-based formulation of **engineering fundamentals** required in an accepted sub-discipline	**DK3:** A coherent procedural formulation of **engineering fundamentals** required in an accepted sub-discipline
SK4: Engineering **specialist knowledge** that provides theoretical frameworks and bodies of knowledge for an accepted sub-discipline	**DK4:** Engineering **specialist knowledge** that provides the body of knowledge for an accepted sub-discipline
SK5: Knowledge that supports **engineering design** using the technologies of a practice area	**DK5:** Knowledge that supports **engineering design** based on the techniques and procedures of a practice area
SK6: Knowledge of **engineering technologies** applicable in the sub-discipline	**DK6:** Codified **practical engineering knowledge** in recognised practice area.
SK7: Comprehension of the role of technology in society and identified issues in applying engineering technology: ethics and impacts: economic, social, environmental and sustainability	**DK7: Knowledge** of issues and approaches in engineering technician practice: ethics, financial, cultural, environmental and sustainability impacts
SK8: Engagement with the **technological literature** of the discipline	
A program that builds this type of knowledge and develops the attributes listed below is typically achieved in 3 to 4 years of study, depending on the level of students at entry.	A program that builds this type of knowledge and develops the attributes listed below is typically achieved in 2 to 3 years of study, depending on the level of students at entry.

(http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf)

Graduate Attribute Profiles

Differentiating Characteristic	… for Sydney Accord Graduate	… for Dublin Accord Graduate
Engineering Knowledge:	**SA1:** Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization as specified in SK1 to SK4 respectively to defined and applied engineering procedures, processes, systems or methodologies.	**DA1:** Apply knowledge of mathematics, natural science, engineering fundamentals and an engineering specialization as specified in DK1 to DK4 respectively to wide practical procedures and practices.
Problem Analysis Complexity of analysis	**SA2:** Identify, formulate, research literature and analyse *broadly-defined* engineering problems reaching substantiated conclusions using analytical tools appropriate to the discipline or area of specialization. (SK1 to SK4)	**DA2:** Identify and analyse *well-defined* engineering problems reaching substantiated conclusions using codified methods of analysis specific to their field of activity. (DK1 to DK4)
Design/ development of solutions: Breadth and uniqueness of engineering problems i.e. the extent to which problems are original and to which solutions have previously been identified or codified	**SA3:** Design solutions for *broadly- defined* engineering technology problems and *contribute to* the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations. (SK5)	**DA3:** Design solutions for *well-defined* technical problems and *assist with* the design of systems, components or processes to meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental considerations. (DK5)
Investigation: Breadth and depth of investigation and experimentation	**SA4:** Conduct investigations of *broadly-defined* problems; locate, search and select relevant data from codes, data bases and literature (SK8), design and conduct experiments to provide valid conclusions.	**DA4:** Conduct investigations of *well-defined* problems; locate and search relevant codes and catalogues, conduct standard tests and measurements.
Modern Tool Usage: Level of understanding of the appropriateness of the tool	**SA5:** Select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling, to *broadly-defined* engineering problems, with an understanding of the limitations. (SK6)	**DA5:** Apply appropriate techniques, resources, and modern engineering and IT tools to *well- defined* engineering problems, with an awareness of the limitations. (DK6)

(http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf)

Graduate Attribute Profiles

Differentiating Characteristic	… for Sydney Accord Graduate	… for Dublin Accord Graduate
The Engineer and Society: Level of knowledge and responsibility	**SA6:** Demonstrate understanding of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technology practice and solutions to broadly defined engineering problems. (SK7)	**DA6:** Demonstrate knowledge of the societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to engineering technician practice and solutions to well defined engineering problems. (DK7)
Environment and Sustainability: Type of solutions.	**SA7:** Understand and evaluate the sustainability and impact of engineering technology work in the solution of broadly defined engineering problems in societal and environmental contexts. (SK7)	**DA7:** Understand and evaluate the sustainability and impact of engineering technician work in the solution of well defined engineering problems in societal and environmental contexts. (DK7)
Ethics: Understanding and level of practice	**SA8:** Understand and commit to professional ethics and responsibilities and norms of engineering technology practice. (SK7)	**DA8:** Understand and commit to professional ethics and responsibilities and norms of technician practice. (DK7)
Individual and Team work: Role in and diversity of team	**SA9:** Function effectively as an individual, and as a member or leader in diverse teams.	**DA9:** Function effectively as an individual, and as a member in diverse technical teams.
Communication: Level of communication according to type of activities performed	**SA10:** Communicate effectively on *broadly- defined* engineering activities with the engineering community and with society at large, by being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions	**DA10:** Communicate effectively on *well-defined* engineering activities with the engineering community and with society at large, by being able to comprehend the work of others, document their own work, and give and receive clear instructions
Project Management and Finance: Level of management required for differing types of activity	**SA11:** Demonstrate knowledge and understanding of engineering management principles and apply these to one's own work, as a member or leader in a team and to manage projects in multidisciplinary environments.	**DA11:** Demonstrate knowledge and understanding of engineering management principles and apply these to one's own work, as a member or leader in a technical team and to manage projects in multidisciplinary environments
Lifelong learning: Preparation for and depth of continuing learning.	**SA12:** Recognize the need for, and have the ability to engage in independent and life-long learning in specialist technologies.	**DA12:** Recognize the need for, and have the ability to engage in independent updating in the context of specialized technical knowledge.

(http://www.ieagreements.org/IEA-Grad-Attr-Prof-Competencies.pdf)

EAC Criterion 3 & 5 Review

- EAC also surveyed program evaluators during the 2010-11 cycle regarding the elements of Criterion 3 that led to citations of shortcoming.
- Shortcomings were reported in all 11 of the (a)-(k) components of Criterion 3, mostly at the weakness or concern level.
- Programs had the most difficulty determining the extent of outcome attainment with components 3(d) (ability to function on multidisciplinary teams), 3(f) (understanding of professional and ethical responsibility), 3(h) (a broad education to understand engineering solutions in global, economic, environmental, and societal context), 3(i) (recognition of the need for and ability to engage in life-long learning), and 3(j) (knowledge of contemporary issues).
- The Criterion 3 task force concluded that some of the (a)-(k) components were interdependent, broad and vague in scope, or impossible to measure. As a consequence, program evaluators were inconsistent in their interpretation of how well programs were complying with Criterion 3.

http://www.abet.org/accreditation/accreditation-criteria/accreditation-alerts/rationale-for-revising-criteria-3/

Proposed Revisions to EAC Criteria

- **Criterion 3. Student Outcomes**
- ~~The program must have documented student outcomes that prepare graduates to attain the program educational objectives.~~
- ~~Student outcomes are outcomes (a) through (k) plus any additional outcomes that may be articulated by the program.~~

~~(a) an ability to apply knowledge of mathematics, science, and engineering~~

~~(b) an ability to design and conduct experiments, as well as to analyze and interpret data~~

~~(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability~~

~~(d) an ability to function on multidisciplinary teams~~

~~(e) an ability to identify, formulate, and solve engineering problems~~

~~(f) an understanding of professional and ethical responsibility (g) an ability to communicate effectively~~

~~(h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context~~

~~(i) a recognition of the need for, and an ability to engage in life-long learning (j) a knowledge of contemporary issues~~

~~(k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.~~

Proposed Revisions to EAC Criterion 3

- The program must have documented student outcomes. Attainment of these outcomes prepares graduates to enter the professional practice of engineering. Student outcomes are outcomes (1) through (7) plus any additional outcomes that may be articulated by the program.

  1. An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics.
  2. An ability to apply both analysis and synthesis in the engineering design process, resulting in designs that meet desired needs.
  3. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.
  4. An ability to communicate effectively with a range of audiences.
  5. 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.
  6. An ability to recognize the ongoing need for additional knowledge and locate, evaluate, integrate, and apply this knowledge appropriately.
  7. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.

Responses to Proposed EAC Revisions

- National Academy of Engineering and ASEE Forums
- Concerns about proposed Criterion 3
  - Removal of broad education, and multidisciplinary teams
  - Elimination of health, safety, and sustainability
  - Number of words about the same as in current Criterion 3
  - Lumping items for assessment causes problems
  - Programs may do the bare minimum for accreditation
  - Soft skills important in industry but now have lower priority
  - Changes in Definitions associated with proposed Criterion 3
- Support for proposed Criterion 3
  - Outcomes are stated in a more measurable way
  - Fewer outcomes may encourage innovation, adding outcomes
  - Outcome 7 aligns better with global engineering definition

EAC Updates from July Meeting

- Modifications to the content of the proposal approved by the full EAC.
- Side-by-Side Comparison
- Proposal to Engineering Area Delegation
- Another year public review and comment
- http://www.abet.org/blog/news/criteria-updates-from-the-july-eac-commission-meeting/

ENGINEERING ACCREDITATION COMMISSION

Comparison of Proposal Submitted in 2015 to Proposal Submitted in 2016

Submitted in 2015	Proposed for First Reading in 2016
INTRODUCTION	**INTRODUCTION**
These criteria are intended to provide a framework of education that prepares graduates to enter the professional practice of engineering who are (i) able to participate in diverse multicultural workplaces; (ii) knowledgeable in topics relevant to their discipline, such as usability, constructability, manufacturability and sustainability; and (iii) cognizant of the global dimensions, risks, uncertainties, and other implications of their engineering solutions. Further, these criteria are intended to assure quality to foster the systematic pursuit of improvement in the quality of engineering education that satisfies the needs of constituencies in a dynamic and competitive environment. It is the responsibility of the institution seeking accreditation of an engineering program to demonstrate clearly that the program meets the following criteria.	These criteria apply to all accredited engineering programs. Furthermore, these criteria are intended to foster the systematic pursuit of improvement in the quality of engineering education that satisfies the needs of its constituencies in a dynamic and competitive environment. It is the responsibility of the institution seeking accreditation of an engineering program to demonstrate clearly that the program meets the following criteria.
The Engineering Accreditation Commission of ABET recognizes that its constituents may consider certain terms to have certain meanings; however, it is necessary for the Engineering Accreditation Commission to have consistent terminology. Thus, the Engineering Accreditation Commission will use the following definitions:	The Engineering Accreditation Commission of ABET recognizes that its constituents may consider certain terms to have certain meanings; however, it is necessary for the Engineering Accreditation Commission to have consistent terminology. Thus, the Engineering Accreditation Commission will use the following definitions in applying the criteria:

Submitted in 2015	Proposed for First Reading in 2016
Basic Science – Basic sciences consist of chemistry and physics, and other biological, chemical, and physical sciences, including astronomy, biology, climatology, ecology, geology, meteorology, and oceanography.	**Basic Science** – Basic sciences are disciplines focused on knowledge or understanding of the fundamental aspects of natural phenomena. Basic sciences consist of chemistry and physics and other natural sciences including life, earth, and space sciences.
College-level Mathematics – College-level mathematics consists of mathematics above pre-calculus level.	**College-Level Mathematics** – College-level mathematics consists of mathematics that requires a degree of mathematical sophistication at least equivalent to that of introductory calculus. For illustrative purposes, some examples of college-level mathematics include calculus, differential equations, probability, statistics, linear algebra, and discrete mathematics.
Engineering Science – Engineering sciences are based on mathematics and basic sciences but carry knowledge further toward creative application needed to solve engineering problems.	**Engineering Science** – Engineering sciences are based on mathematics and basic sciences but carry knowledge further toward creative application needed to solve engineering problems. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other.

Engineering Design – Engineering design is the process of devising a system, component, or process to meet desired needs, specifications, codes, and standards within constraints such as health and safety, cost, ethics, policy, sustainability, constructability, and manufacturability. It is an iterative, creative, decision-making process in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally into solutions.	**Engineering Design** – Engineering design is the process of devising a system, component, or process to meet desired needs and specifications within constraints. It is an iterative, creative, decision-making process in which the basic sciences, mathematics, and engineering sciences are applied to convert resources into solutions. The process involves identifying opportunities, performing analysis and synthesis, generating multiple solutions, evaluating those solutions against requirements, considering risks, and making trade-offs to identify a high quality solution under the given circumstances. For illustrative purposes only, examples of possible constraints include accessibility, aesthetics, constructability, cost, ergonomics, functionality, interoperability, legal considerations, maintainability, manufacturability, policy, regulations, schedule, sustainability, or usability.
Teams – A team consists of more than one person working toward a common goal and may include individuals of diverse backgrounds, skills, and perspectives.	**Team** – A team consists of more than one person working toward a common goal and should include individuals of diverse backgrounds, skills, or perspectives consistent with ABET's policies and positions on diversity and inclusion.
One Academic Year – One academic year is the lesser of 32 semester credits (or equivalent) or one-fourth of the total credits required for graduation with a baccalaureate degree.	*[The definition of Academic Year was deleted]*

Submitted in 2015	Proposed for First Reading in 2016
CRITERION 3. STUDENT OUTCOMES	**GENERAL CRITERION 3: STUDENT OUTCOMES**
The program must have documented student outcomes. Attainment of these outcomes prepares graduates to enter the professional practice of engineering. Student outcomes are outcomes (1) through (7) plus any additional outcomes that may be articulated by the program.	The program must have documented student outcomes that support the program educational objectives. Attainment of these outcomes prepares graduates to enter the professional practice of engineering. Student outcomes are outcomes (1) through (7), plus any additional outcomes that may be articulated by the program.
1. An ability to identify, formulate, and solve engineering problems by applying principles of engineering, science, and mathematics.	(1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.
2. An ability to apply both analysis and synthesis in the engineering design process, resulting in designs that meet desired needs.	(2) An ability to apply the engineering design process to produce solutions that meet specified needs with consideration for public health and safety, and global, cultural, social, environmental, economic, and other factors as appropriate to the discipline.
3. An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.	(3) An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

4. An ability to communicate effectively with a range of audiences.	(4) An ability to communicate effectively with a range of audiences.
5. 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.	(5) 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.
6. An ability to recognize the ongoing need for additional knowledge and locate, evaluate, integrate, and apply this knowledge appropriately.	(6) An ability to recognize the ongoing need to acquire new knowledge, to choose appropriate learning strategies, and to apply this knowledge.
7. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.	(7) An ability to function effectively as a member or leader of a team that establishes goals, plans tasks, meets deadlines, and creates a collaborative and inclusive environment.

Submitted in 2015	Proposed for First Reading in 2016
CRITERION 5. CURRICULUM	**GENERAL CRITERION 5: CURRICULUM**
The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses. The curriculum must support attainment of the student outcomes and must include:	The curriculum requirements specify subject areas appropriate to engineering but do not prescribe specific courses. The program curriculum must provide adequate content for each area, consistent with the student outcomes and program educational objectives, to ensure that students are prepared to enter the practice of engineering. The curriculum must include:
(a) one academic year of a combination of college-level mathematics and basic sciences (some with experimental experience) appropriate to the program.	(a) a minimum of 30 semester credit hours (or equivalent) of a combination of college-level mathematics and basic sciences with experimental experience appropriate to the program.
(b) one and one-half academic years of engineering topics, consisting of engineering sciences and engineering design appropriate to the program and utilizing modern engineering tools.	(b) a minimum of 45 semester credit hours (or equivalent) of engineering topics appropriate to the program, consisting of engineering sciences and engineering design, and utilizing modern engineering tools.
(c) a broad education component that includes humanities and social sciences, complements the technical content of the curriculum, and is consistent with the program educational objectives.	(c) a broad education component that complements the technical content of the curriculum and is consistent with the program educational objectives.
Students must be prepared to enter the professional practice of engineering through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple constraints.	(d) a culminating major engineering design experience based on the knowledge and skills acquired in earlier course work that incorporates appropriate engineering standards and multiple constraints.

ETAC Criteria Revision Considerations

- Opportunity to further define engineering technology
- Align with IEA graduate attributes
- Use EAC criteria as a model or fresh start?
- Associate degree and baccalaureate degrees
- New Ideas:
  - Program lengths two-three-four years?
  - Curriculum with “hands-on” tool learning period?
  - EAC and ETAC Commissions within ABET
  - Others?

Other Issues

- Program Criteria
  - ABET and Societies Collaborate on Program Criteria
  - ETAC Program Criteria Committee
    - Revised Program Criteria Template to Streamline
    - Proposing to Eliminate Program Outcomes in Program Criteria
- Applied Engineering
  - ETAC Proposed APPM Revision for ETAC Accreditation of Applied Engineering
  - Presentations to ETAD, EAD, & EAC. ETAC ExCom's Resolution to Continue to Support.

ABET

Discussion

ETAC Criterion 3 and Program Criteria: How Can We Improve?