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GACIP Summit Plus 2020

CEAB Presentation

Presented by Bob Dony, CEAB Chair, Ph.D., P.Eng., CEng, FIEE, FEC



Today's update will cover:

1. Recent relevant changes
2. CEAB working groups, taskforces, and consultations
3. COVID-19 response
4. 2021/2022 visit information
5. Discussion

Recent relevant changes -

To criteria, procedures, tools

21/22 accreditation resources posted



Canadian Engineering Accreditation Board Bureau canadien d'agrément des programmes de génie

2020 Accreditation Criteria and Procedures • Normes et procédures d'agrément 2020
Revised September 2020 / Révisé en septembre 2020



Revision history

| Version | Criteria/Appendix | Description of changes |
|-------------------|--|--|
| 2020 | 2. Purpose of accreditation | This section now includes Engineers Canada Board motion #5596, as approved in September 2016. |
| | Criterion 3.4.6 | The program must have a minimum of 1,850 1,850 Accreditation units that are at a university level. |
| | Appendix 7 – Interpretive statement on accreditation unit categories | This appendix has been updated to reflect the change made to criterion 3.4.6. All references to 405 accreditation units "beyond the minimum sub-total of 1,545 AUs arising from the five specified AU categories" have been adjusted to 305 to reflect the new minimum requirement of 1,850 AUs. |
| 2019 | 1. CEAB Terms of reference | The Canadian Engineering Accreditation Board's terms of reference has been removed as they are no longer reproduced in this document. They can be viewed at the following link under section 6.9, page 57: https://engineerscanada.ca/sites/default/files/governancemanual/Board-Policy-Manual-Combined-e.pdf |
| | Criterion 3.1.5 | Assessment results: At least one set of assessment results must be obtained for all twelve attributes over a period cycle of six years or less. The results should provide clear evidence that graduates of a program possess the above list of attributes |
| | New criterion | 3.4.4.1 A minimum of 600 Accreditation Units (AU) of a combination of engineering science and engineering design curriculum content in an engineering program shall be delivered by faculty members holding, or progressing toward, professional engineering licensure as specified in the Interpretive statement on licensure expectations and requirements. |
| | Criterion 3.4.4.1 | 3.4.4.1 3.4.4.2 A minimum of 225 AU in engineering science is required. Engineering science subjects involve the application of mathematics and natural science to practical problems. They may involve the development of mathematical or numerical techniques, modeling, simulation, and experimental procedures. Such subjects include, among others, the applied aspects of strength of materials, fluid mechanics, thermodynamics, electrical and electronic circuits, soil mechanics, automatic control, aerodynamics, transport phenomena, and elements of materials science, geoscience, computer science, and environmental science. |
| | Criterion 3.4.4.2 | 3.4.4.2 3.4.4.3 In addition to program-specific engineering science, the curriculum must include engineering science content that imparts an appreciation of the important elements of other engineering disciplines. |
| Criterion 3.4.4.3 | 3.4.4.3 3.4.4.5 A minimum of 225 AU in engineering design is required. Engineering design integrates mathematics, natural sciences, engineering sciences, and complementary studies in order to develop elements, systems, and processes to meet specific needs. It is a creative, iterative, and open-ended process, subject to constraints which may be governed by standards or legislation to varying degrees depending upon the discipline. These constraints may also relate to economic, health, safety, environmental, societal or other interdisciplinary factors. | |

Criteria changes

| 2019 Accreditation criteria and procedures | 2020 Accreditation criteria and procedures |
|--|---|
| <p data-bbox="107 396 415 435">Criterion 3.4.6</p> <p data-bbox="107 511 1105 611">The program must have a minimum of 1,950 Accreditation units that are at a university level.</p> <p data-bbox="107 682 1230 782">Appendix 7 – Interpretive statement on accreditation unit categories</p> <p data-bbox="107 853 1212 1011">405 accreditation units “beyond the minimum sub-total of 1,545 AUs arising from the five specified AU categories.”</p> | <p data-bbox="1276 386 1582 425">Criterion 3.4.6</p> <p data-bbox="1276 496 2308 596">The program must have a minimum of 1,950 1,850 Accreditation units that are at a university level.</p> <p data-bbox="1276 711 2104 811">Appendix 7 – Interpretive statement on accreditation unit categories</p> <p data-bbox="1276 875 2232 975">This appendix has been updated to reflect the change made to criterion 3.4.6.</p> <p data-bbox="1276 1046 2288 1310">All references to 405 accreditation units “beyond the minimum sub-total of 1,545 AUs arising from the five specified AU categories” have been adjusted to 305 to reflect the new minimum requirement of 1,850 AUs.</p> |

Toward a greater focus on GA/CI process

On February 10, 2018 the CEAB agreed that outcomes assessments should place a greater focus on *GA/CI processes*.

The use of **both** input and outcomes assessments is desired by many regulators.



Having **both** input and outcomes assessment criteria



greater focus on GA/CI processes and **less** focus on assessment results.



Programs **still** need to demonstrate:

- achievement of graduate attributes
- continuous improvement

HEIs are in the best position to determine graduate attribute compliance and to implement required program improvements

Documentation

Focus on GA/CI process: Summary of changes

Exhibit 1

- Select **3 – 5** courses (or learning activities) used to assess achievement of each GA. For each course, discuss curriculum maps, indicators, and assessment tools.
- Discuss assessment results for each Graduate Attribute.

Questionnaire

- Reduces the on-site “Graduate Attributes Dossier” by focusing on **three examples where change to a program was considered** rather than **ALL** data for **ALL** changes.
- On-site GA/CI presentation: Describe overall GA/CI process; reflection on what’s working and what’s not working on the GA/CI process.

Other CEAB activities

Consultations

Proposed changes to clauses 8 and 9 of the *Interpretive statement on licensure expectations and requirements* (until January 29)

The proposed changes, jointly developed with the Deans Liaison Committee, will address concerns that the current interpretive statement inhibits good pedagogy by limiting the number of accreditation unit (AU) categories that can be claimed within one course.

Engineering Design Task Force recommendations (closed)

Thank you for providing feedback! The task force will now review all feedback and present a consultation report to the CEAB as early as February 2021.

Working groups and taskforces

Student Learning Experiences in the Age of COVID (first report February 2021)

- Study measures taken by programs to respond to the pandemic challenge vis-à-vis accreditation criteria.

Respond to the Engineers Canada “30 by 30” Initiative (initial recommendations February 2021)

- Develop appropriate ways within the accreditation process to incorporate the goals of the 30 by 30 initiative. Various mechanisms are being explored including CEAB operations, criteria, and culture.

Working groups and taskforces (cont'd)

Review the Policy and Procedures (P&P) Committee Terms of Reference (update February 2021)

- Consider the composition and representation requirements, the transparency of the process for member selection, and the authority and accountability of the committee.

Required Visit Materials Working Group (final report and recommendations considered February 2021)

- Holistic review of all documentation submitted by a program to the visiting team (including materials submitted with the Questionnaire, Exhibit 1, and those traditionally provided on-site). Responds to feedback from HEIs (who note the significant work effort to collect and present the materials) and visiting team members (who require information in order to adequately assess the curriculum content and quality).

COVID and Virtual Visits

COVID-19 response

Four statements issued to-date:

- March 12 CEAB statement on COVID-19 (novel coronavirus)
- For regulators: March 31, 2020 CEAB statement on COVID-19
- For HEIs: March 31, 2020 CEAB statement on COVID-19
- Accreditation extensions due to COVID-19

COVID-19 response

On April 28, the Engineers Canada Board approved the following motions on the CEAB's recommendation:

THAT visits to currently accreditation programs in the 2020/2021 cycle be deferred for one year to the 2021/2022 cycle.

THAT a one-time, one-year accreditation cycle extension be granted to all programs who received a favorable accreditation decision before June 5, 2020.

Virtual visits: The big questions



What stays the same?

What changes?

An approach to virtual visits: What stays the same?

- Visiting team composition
- Time allocated for the visit (equivalent of three days)
- Questionnaire, Exhibit 1, Excel spreadsheets provided 8 weeks before visit
- Application of criteria
- Triangulation of evidence

An approach to virtual visits: What changes?

- Visit Team cohesion and teamwork
 - How to ensure the team works efficiently together; how to support document review
- On-site materials available ahead of visit (rather than on-site)
 - GA/CI process examples, course materials, samples of student work, safety materials, etc.
- Examination of labs, study and club spaces, teaching facilities
 - Campus maps, links to training videos, pre-recorded walkthroughs with annotated photos, as necessary
- Summary of the program's response to COVID-19
 - To give us a greater appreciation for how programs across Canada have responded to the situation caused by the pandemic (5 pages max)
- Shared hosting responsibilities
 - Program technology used for faculty interviews and meetings
 - Engineers Canada technology for visiting team meetings

Virtual visits: Other considerations

- Privacy and confidentiality (of documentation, programs, individuals, groups)
- Technology requirements (including contingency plans)
- Avoiding 'Zoom fatigue'
- Visitor training
- This is a new process for all everyone. Collaboration and flexibility will be important to ensure successful visits.

21/22 and 22/23 cycles on the horizon

- February 6 CEAB meeting - discussion about 21/22 visit format
- February 7 (virtual) meet-and-greet between visiting team chairs and program officials
- 2021/2022 and 2022/2023 CEAB will be flexible on the “snapshot year” of data that the programs submit to the visiting team

Our opportunities

- Proof-of-concept
 - Indicators of success
 - Catalogue of lessons learned
- Learn from other accreditors, other professions
- Critical examination of in-person visit objectives
- Collaborate with institutions to make system improvements
- Question the status quo

Discussion and thank you!

Join us for lunch?

Email us later? accreditation@engineerscanada.ca

