Discussion topics:

Recap: The Accreditation Board and what it does

Update: Accreditation Board accomplishments October 2016-May 2017

Upcoming activities

About the Accreditation Board

15+ P.Eng./ing. make up the Accreditation Board:

- All are volunteers. They are drawn from the private, public and academic sectors
- Many members are former deans (4), senior faculty members (6). Others are from industry (6) (vice-president, CEO, senior executive).
- Most members from academia have also worked in industry
- They represent a wide range of disciplines
- Most members serve for the maximum 9 years

About the Accreditation Board

Accreditation Board members

- Lead one or more accreditation visits every year

- Work on task group assignments and/or on the Policies & Procedures Committee

- Review reports from engineering programs throughout the year. Provide opinions regarding compliance with criteria based on report information

- Attend face-to-face Accreditation Board meetings at least three times a year

- Speak to engineering program officials and other interested groups about accreditation

- Volunteer an estimated 30-40 days per year. 60-80 days for executive committee members

WHAT does the Accreditation Board Do?

- The Accreditation Board's major deliverables are accreditation decisions
- To allow the Accreditation Board to make those decisions, teams of experts (who are also volunteers) visit programs to be the "eyes and ears" of the Accreditation Board:
- They review program information, both on paper and on-site
- They gather information about the programs in a visit report
- This report, plus any additional relevant information, as well as the Board's collective experience is used to produce accreditation decisions

Goals of the Accreditation Board

- Engineering programs offered by Canadian institutions meet or exceed minimum educational standards acceptable for professional engineering licensure in Canada

- The quality and relevance of engineering education continuously improve

- The Engineers Canada Board of Directors are provided with advice and recommendations on international matters relating to engineering accreditation and education

Recent Accomplishments

- Accreditation Criteria were amended to reflect the changes approved by the Engineers Canada Board in September 2016

- Review of changes revealed further clarifications required. More on this later

- Communications and engagement activities continue. These include…. (next slide)

Recent Accomplishments

- Presentations to various HEI groups in December 2016 (ON), March 2017 (QC, Atlantic)

- Meetings with NCDEAS in November 2016 and April 2017

- 2 Regulator representatives participated in recent Policies and Procedures meetings (April 2017)

- Presentations to other stakeholders and to regulators in April and May 2017

Recent Accomplishments

- More information provided to programs in the form of 3 new interpretive statements:

  - Interpretive statement on AU categories

  - Interpretive statement on Graduate Attributes

  - Interpretive statement on Continual Improvement

Recent Accomplishments

- Review of Program development advisory procedure to provide more advice to programs

- Review of Interpretive statement on significant change to deal with concerns raised at the Accreditation Forum

- Task group including AB Vice-Chair, two AB members, one NCDEAS representative and one regulator representative are reviewing alternatives to AU curriculum assessment process

AU Task Group Progress

Task group has developed terms of reference. The aims of this group are:

1.	To consider the definition of an AU in its present form (criteria 3.4.1.1) and to identify, the advantages, disadvantages and ramifications of any definition change on existing criteria.

2.	To envisage how curriculum content requirements could be linked to student outcomes/graduate attributes whatever system of AU counts is used.

AU Task Group Progress

Various global systems which are in use and could be used 'as-is' or after modification in EC/AB accreditation requirements were identified as follows:

The current AU system.

A modified AU system.

A credit or credit hour system similar to the ABET approach.

A credit or credit hour system defined by individual Canadian HEIs or a standardized system agreed by HEIs in consultation with EC/AB and regulators.

A student workload approach along the lines of the EU(ETCS), UK (Engineering Council) or New Zealand (Engineers New Zealand System).

AU Task Group Progress

A preliminary report will be provided at the June 3-4 Accreditation Board meeting

Task group is working towards (a) recommendation(s) that would be supported by the different stakeholder representatives

Task group chair has developed preliminary recommendations, but these have not yet been endorsed by other members of the group

AU Task Group Progress

Preliminary recommendation (Task group chair): "*A modified and less proscriptive AU system should be considered especially with respect to categorization.*

The NZ credit system should be thoroughly reviewed as they have an outcomes based approach which appears to meet many of our concerns and they are a Washington Accord signatory.

The overloading of Canadian engineering students because of apparently excessive laboratory work requirements needs to be investigated by all involved stakeholders."

By September more details will be available as to suggested improvements to the system endorsed by members of the Task group

And from the Engineers Canada staff

- Overview of the Accreditation Improvement Program

- Scope of the Program

- Areas of focus (to date):

    - **Accreditation Process Improvements Project**

    - **Enrolment Database Project**

    - Progress

    - Next Steps

Overview of Accreditation Improvement Program

Accreditation Process Improvement: Accreditation System Project	Reduce workload for Higher Education Institutions by automating the management of information in the Accreditation of Engineering Programs process.
Accreditation Stakeholder Engagement and Communications Project	Establish change leadership strategies and tactics to ensure the appropriate level of stakeholder consultation, involvement and awareness of any changes planned or in progress for Accreditation. It is anticipated this project will transition to an ongoing operational program once established.
Accreditation Visit Team Onboarding and Enablement Project	Provide the processes, tools and training to ensure all visit team members are appropriately prepared for a site visit.
Accreditation Continuous Improvement Project	Establish a repeatable, sustainable approach for identification, prioritization and delivery of ongoing improvements to Accreditation

Recent Decision Made re: Scope

Enrolment Database Project _will be included_ as part of the Accreditation Improvement Program

The development of a new Enrolment and Degrees Awarded (EDA) Database solution to maintain / improve the ability to annually report on enrolment, degrees awarded and resources.

Benefits & Considerations

Benefits:

- One solution that encompasses all pieces of the program
- Streamlined process for staff and volunteers
- One system to access and complete multiple functions
- One RFP process
- Enrolment Database could be started first to ensure deadlines are met. (assumption)

Considerations (Risks) :

- Deployment will need to be carefully planned and staged
- Implementation of the Enrolment Database may not be feasible for the end of this year
- The current enrolment database could fail prior to a new solution being implemented

Accreditation Process Improvement: System Modernization Project

Accreditation Stakeholder Engagement and Communications Project

Enrolment Database Project

Going forward: The Enrolment Database will be included in the scope of the Accreditation Process Improvement: Accreditation System Project
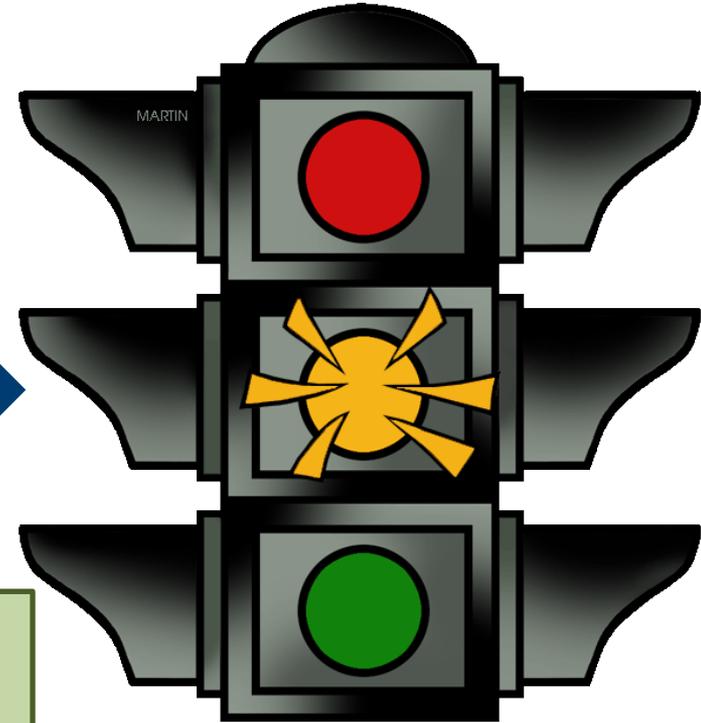
High Level Business Needs

Accreditation Process Improvement: Accreditation System Project	Enrolment Database Project
Enhance and ensure the continued support systems for conducting accreditation of engineering programs	Increase capability to conduct surveys and generate reports. Eliminate the high risk that Engineers Canada will lose its web site and database as the interface has become obsolete.
Automate the process of conducting and reporting on accreditation, which currently is manually intensive (error-prone)	Automate the survey, analysis and communication of data and reduce manually intensive, error-prone operation, which is not sustainable.
Provide a new solution that will easily implement future new accreditation requirements or changes	Create the opportunity to easily conduct surveys and generate reports on new requirements – e.g. reporting on gender and racial minorities

Program Status (to date)

- Development of a program charter initiated

- Requirements Discovery & Analysis near completion

- Solutions Analysis & Recommendation imminent

Rationale
There has not been sufficient focus and consultation with external stakeholders groups – Change management and communications strategies are being developed to mitigate this. Face-to-face consultation with HEIs scheduled for June 5.

Identified Must Have Requirements

Enrolment Database Project

- ✓ Functionality to prepare, send out, and respond to Annual Enrolment and Resources Survey
- ✓ Functionality to prepare and complete the Enrolment and Resources questionnaires
- ✓ Functionality to conduct analysis and prepare reports of survey data

Accreditation Process Improvement: System Modernization Project

- ✓ Functionality to prepare all pre-visit documentation;
- ✓ Functionality to maintain records of Accreditation status and history
- ✓ Functionality to manage volunteers
- ✓ Functionality to manage Accreditation Project tasks, due dates, and status
- ✓ Functionality to conduct analysis and prepare reports of accreditation data

Objective: Decrease workload for volunteers & HEIs

Next Steps & Mitigation

People/ Change Leadership
- Communicate with stakeholders and further development of communications plan
- Focus on building stakeholder awareness & involvement
- Present a communications approach in the coming weeks

Technology Decisions
- Program to decide which option to move forward with
- Validate requirements with stakeholders
- Obtain decision on Must-Have and Nice to have Requirements
- Vendor Selection/ RFP Process

Mitigation
- Establish change leadership and communication strategies. They will be crucial to the success of this implementation
- An appropriate RFP process will be required

Upcoming events

June 3 and 4, 2017 CEAB meeting: main purpose is to make accreditation decisions following visits that occurred in the fall 2016/winter 2017

June 17-22, International Engineering Alliance meetings, including Washington Accord meetings

and now for "later"

September 2016 Engineers Canada Board meeting passes motion 5594 which reads, in part :

THAT the proposed changes to criteria of a "housekeeping" nature (identified as housekeeping in consultants' report)…be approve (Carried)

Consultant's report refers only to criterion 3.5.3 and 3.5.8. It contains typographical errors in criterion 3.5.3. The report failed to include changes to criterion 3.5.5 recommended by the AB in September 2015 where there is a similar wording.

Proposed motion

THAT criterion 3.5.3 and 3.5.5 of the Canadian Engineering Accreditation Board criteria be amended to **remove** the words "….preferably in the jurisdiction in which the institution is located. In those jurisdictions where the teaching of engineering is the practice of engineering, they are expected to be licensed in that jurisdiction…."

Questions?

Thank you

For more information:

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