

What you need to know for your upcoming CEAB accreditation visit June 6, 2018

Wayne MacQuarrie, FEC, P. Eng.
Lynn Villeneuve, LL.B, FEC(Hon.)
Mya Warken



Learning objectives

By the end of this session, you will be able to:

1. Describe the CEAB accreditation processes and criteria at a high-level.
2. Discuss approaches to demonstrating compliance with the CEAB accreditation criteria.
3. Implement a plan to prepare to receive a CEAB site visit.

What are your objectives?

Outline

Introductions

CEAB
accreditation

Recent
changes

A greater
focus on
GA/CI
process

Group work

Wrap-up

Your handouts



?	What about...	What did I learn?	💡
📄	Things to share	Jot it down! (so I don't forget)	✍️

Getting to know you



Raise your hand if you are with a:

- Institution
- Regulator
- Other

Getting to know you



Raise your hand if you are a:

- Administrator
- Dean/associate dean
- Faculty
- Student

Getting to know you



Raise your hand if you are directly involved in the GA/CI processes at your program or institution.

CEAB accreditation



The Accreditation Board

Established in

1965

- Accredits undergraduate engineering educational programs

Volunteer members are

17 P.Eng./ing.

- Deans, former deans, senior faculty members, and industry representatives
- Most members from academia have also worked in industry
- 35% of members are women, 40% of members are bilingual

What does the Accreditation Board do?

The visiting team



Visiting team not responsible for accreditation decisions



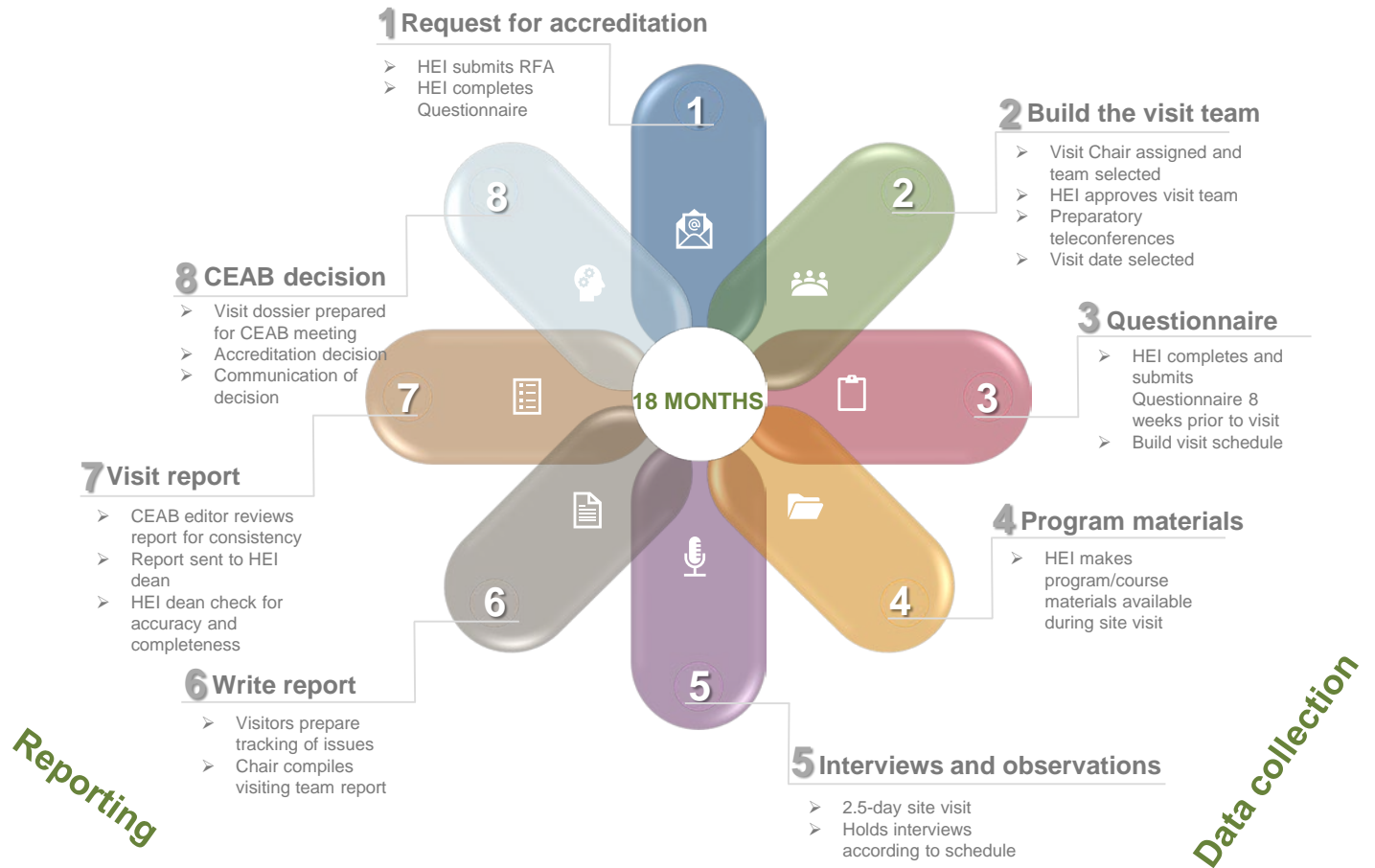
Program information gathering and review



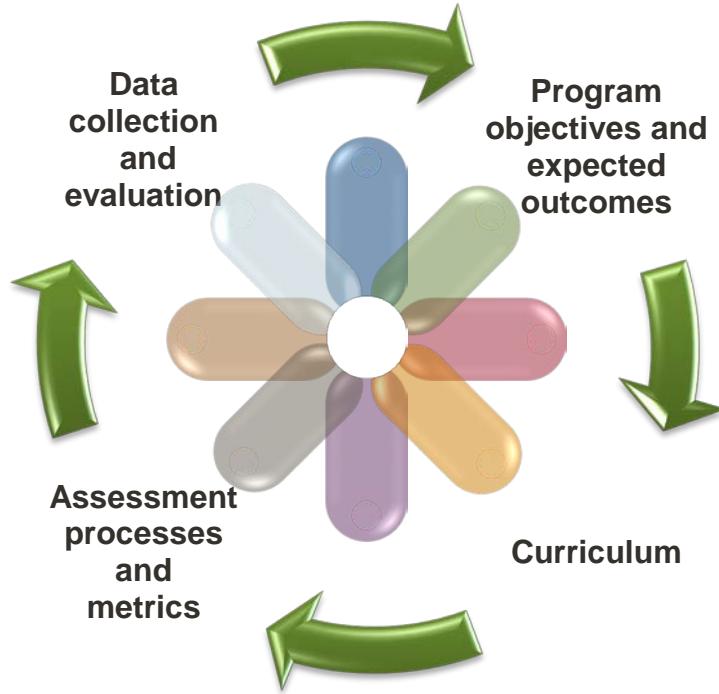
**CEAB
accreditation decision**

How do we do it?

The accreditation process:



Accreditation and continual improvement



Plan. Do. Check. Act

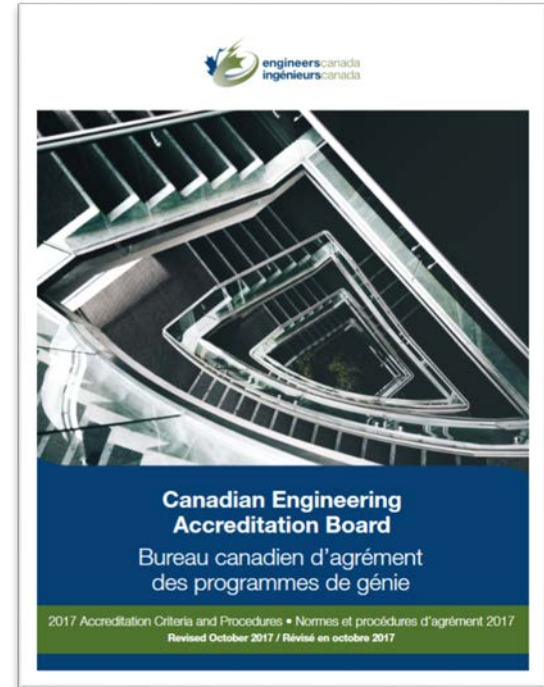
- Accreditation is based on a snapshot in time of a given program
- The accreditation process has a definitive start and end
- HEIs must continue to continually improve for the duration of their accreditation period

Accreditation criteria and procedures

The processes of accreditation place emphasis on the quality of the:

- Students
- Curriculum
- Academic staff/support staff
- Facilities and resources

Reminder: The onus is on the HEI to demonstrate compliance with the criteria.



Common issues identified

Program environment

- Inadequate lab facilities and insufficient space (3.5.1.2)
- Inadequate number of full-time faculty (3.5.2.1)

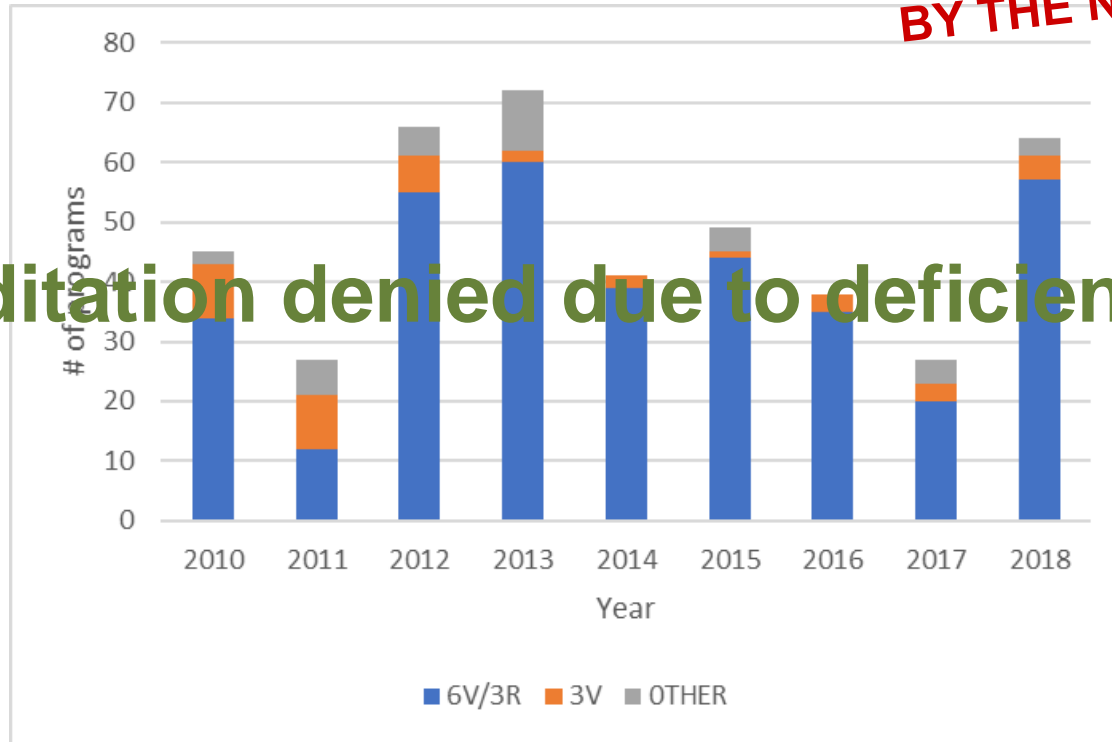
Curriculum content and quality

- Insufficient introduction to a culture of occupational health and safety (3.4.2)
- AU adjustments to:
 - natural science (3.4.3.2)
 - engineering science (3.4.4.1)
 - engineering design (3.4.4.3)

CEAB visit decisions 2010-2018

BY THE NUMBERS

accreditation denied due to deficiencies = 0



Accreditation activities

BY THE NUMBERS

279

accredited programs

44

HEIs in Canada

11

Substantially equivalent programs

2

HEIs outside of Canada



Recent relevant changes-

To criteria, procedures, tools



Appendices



Appendix 7: Interpretive Statement on Significant Program Changes

- CEAB can provide feedback on proposed changes to programs before a visiting team arrives on site
- Not sure if the change is “significant”? The CEAB secretariat can provide guidance

Appendix 13 – Program Development Advisory Procedure

- Discussion with the CEAB secretariat, curriculum assessment by AB members or a informal visit
- Institutions developing new programs, new options, or making other changes to program delivery may make use of any of these voluntary advisory opportunities



Documentation changes

New guidance on 3.2.3 in the **CI assessment rubric**:

There must be a demonstration that the continual improvement process has led to consideration of specific actions corresponding to identifiable improvements in the program and/or its assessment process. **Note, if the evidence suggests no change is warranted, then no change is necessary.** This criterion does not apply to new programs.

A more efficient site visit schedule



- **2.5 days**
 - Sunday, Monday, Tuesday
 - October-November - existing programs
 - January-February - new programs
- **3 Objectives:**
 - **Validate** and seek **clarification** of program details based on a review of the institution's completed Questionnaire.
 - **Gather information** about the program(s) and assess the extent to which Accreditation Board criteria are met.
 - **Evaluate** the measures taken to **resolve** issues raised previously by the Accreditation Board regarding the program (if applicable).

Example of visit schedule – Engineers Canada website

Visiting team chair and HEI

Meet and greet



February before a scheduled visit

- Institutions receiving visits 2019/2020 are invited to Ottawa February, 2019

The beginning of a relationship between the HEI and visiting team chair – a relationship which will continue for the better part of one year

- Visiting team chair and designated official in regular contact leading up to the visit
- A goal: by the time the team arrives onsite, the dean/designated official has a good understanding of what the potential issues are

Are there other ways we could improve communication between visiting teams and HEIs?

Input and outcomes criteria - A greater focus on GA/CI *processes*



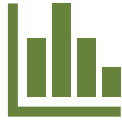
Input and outcomes criteria: Why both?

Input criteria



Outcomes criteria

- Prescribed exposure times to essential curriculum elements



ACCREDITATION DECISION

- Defines graduate attributes



- Enables easy calculation of the minimum path



- Curriculum exposure criteria provides a reasonable proxy for attainment of desired graduate attributes

Toward a greater focus on 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.



HEIs still need to demonstrate continuous program improvement.

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

GA/CI elements

Graduate attributes:

- 3.1.1 Organization and engagement
- 3.1.2 Curriculum maps
- 3.1.3 Indicators
- 3.1.4 Assessment tools
- 3.1.5 Assessment results

Continual improvement:

- 3.2.1 Improvement process
- 3.2.2 Stakeholder engagement
- 3.2.3 Improvement actions

What is the AB looking for?

An example:

AB criteria	Process elements
3.1.1 Organization & engagement	<ul style="list-style-type: none">• Assessment cycle rationale• GA training on AB requirements• Assessment element evaluation processes• Data analysis and validation processes• Proposed change processes

Discussion

Individual reflection

- Jot down your thoughts on your worksheet

Small group discussion

- Share your thoughts with your table
(assign a scribe and a reporter)

Larger group discussion

- Build on what the group before you shared. What did your group discuss? What else can you add?

1. What are the positive and negative impacts of a greater focus on GA/CI processes vs. the focus on data collection and data analysis?
2. Refer to your handout. Does your institution already have these processes in place? Which ones do you have? What else do you do? How difficult would it be to introduce the processes if they are not already in place?

Sustainable indicator selection



3.1.6 Individual and team work

An ability to work effectively as a member and leader in teams, preferably in a multi-disciplinary setting.

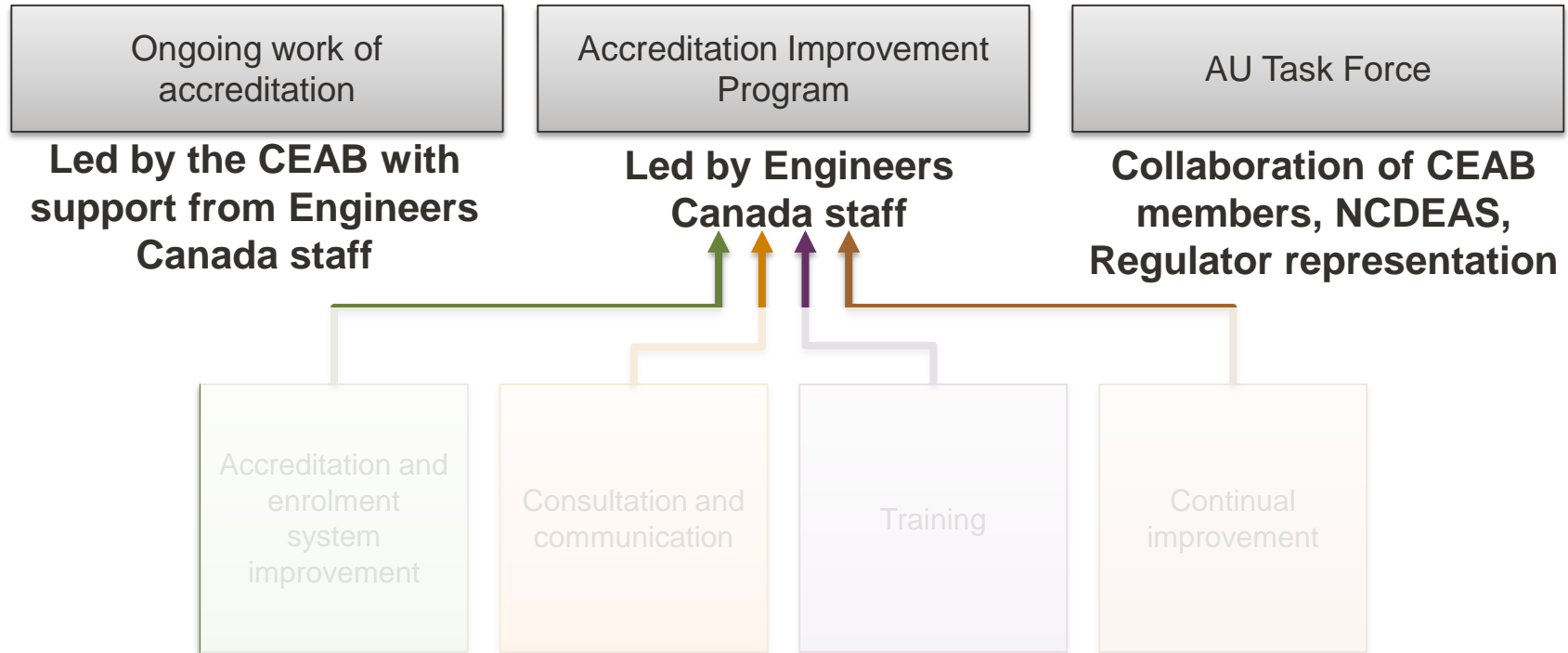
- 6.1 Identify the stages of team formation and lifecycle as well as the roles and responsibilities of team members.
- 6.2 Evaluate team effectiveness and plan for improvements.
- 6.3 Execute the planning and facilitation of effective meetings.
- 6.4 Practice conflict negotiation and resolution.
- 6.5 Assume responsibility for own work and participate equitably.
- 6.6 Exercise initiative and contribute to team goal setting.
- 6.7 Demonstrate capacity for initiative and technical or team leadership while respecting other's roles.

Indicator	Course learning outcome (sub-indicator)	Rationale for course learning outcome	Assessment tool
6.4 6.7	Work effectively in teams. (ENGG 200, D)	Teamwork skill can be improved by reflecting on their teamwork experience, and it is a way to reduce repeated mistakes. Reflection also includes how they compare teamwork training in the actual project practice.	<i>Individual Teamwork Reflection Project 4</i> Students are asked to write a reflection report for teamwork conflicts experienced and observed in Project 4.
6.5 6.6 6.7	Internship Attribute Coaching Tool (IACT) Survey. (INTE 513, A)	During internships students have to work as an individual and in teams. IACT survey provides an ideal sub-indicator of performance in this GA.	<i>Industry supervisor questionnaire.</i> Three evenly spaced supervisor surveys conducted over internship, where nine questions probed students' performance in this attribute using a Likert scale.
6.1 6.2 6.5	Teamwork survey items in areas including: attitudes towards teams, perceived emphasis and support, perceived skill, and perceived importance.	The survey items were created and validated based on teamwork literature, and specifically tailored for the CEAB attribute.	Questions were rated on a five item Likert-scale (strongly disagree to strongly agree). Student survey responses were analyzed.

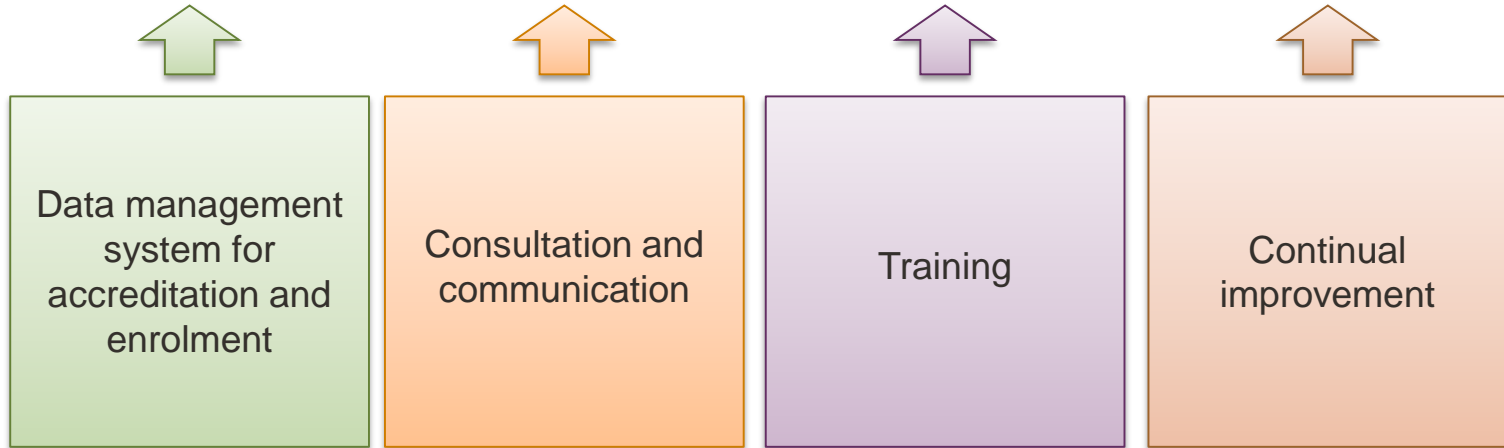
What's next?



Understanding Engineers Canada's accreditation portfolio



Accreditation Improvement Program



AU Task Force Report

Consultations on 2 recommendations:

1. Interpretive statement for criterion 3.4.1.4 on the “Learning Unit”.
2. Preliminary measure of a Learning Unit as equivalent to 2.5 hours of learning time.

Consultation report to be published this summer to be considered at the Fall meeting of the CEAB, EC Board.

www.engineerscanada.ca/accreditation/consultation-AU-task-force



Criteria evolution



- Linking AUs with graduate attributes (recommendation #4)
- Non-academic student support a growing need

6

Wrap-up



Learning objectives

Are you now able to:

1. Describe the CEAB accreditation processes and criteria at a high-level?
2. Discuss approaches to demonstrating compliance with the CEAB accreditation criteria?
3. Implement a plan to prepare to receive a CEAB site visit?

Take a moment to reflect on:

1. One thing you learned?
2. The first thing you will share when you return to the office?
3. What do you wish we covered but didn't?



Need help?



www.engineerscanada.ca/accreditation



New programs – Optional “mock visit”



A team dedicated to accreditation

TRAINING



Accredited programs can access the training available to visitors – anytime!

Need 1:1 training? We can do that.

Thank you

For more information:

visits@engineerscanada.ca | 613.232.2474

engineerscanada.ca

