1

Accreditation

From Engineers Canada:

- Engineers Canada accredits Canadian undergraduate programs in engineering. Students who successfully receive a degree from an accredited engineering program meet the academic requirements needed to become licensed with Canada's engineering regulators.

- Accredited engineering programs bring multiple benefits for both students and regulators:

  - Regular accreditation of programs fosters the continual improvement of education

  - Accreditation ensures that programs are meeting the high standards necessary for licensure

  - Degrees from accredited programs are accepted by engineering regulators nationwide and are also recognized by our international partners.

https://engineerscanada.ca/accreditation/about-accreditation

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2

Accreditation Criteria

- Graduate Attributes
- Continual Improvement Process
- Curriculum Content and Quality
- Policies for Admission, Counselling, Promotion and Graduation of Students
- Program Environment (Students, Faculty, Staff, Facilities, Financial Resources, Library, etc.)
- Additional Criteria (Title of Program, Options, etc.)

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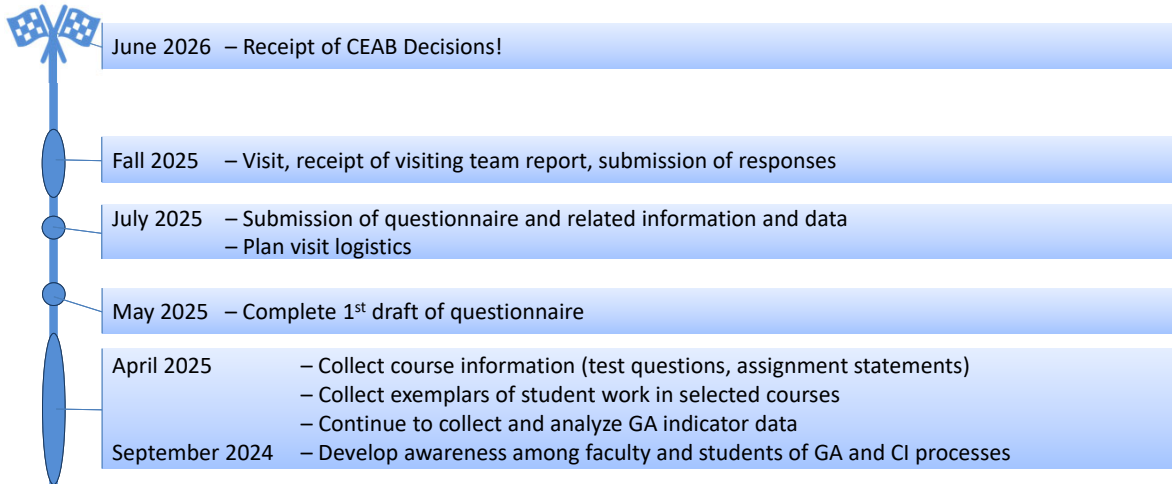
3

Accreditation of U of T Engineering Programs

- All programs were accredited for the maximum 6-year period in 2019 (July 2019 – June 2025 + 1 year extension due to COVID)
- What is new this time?
  - Increased expectations for our implementation of the Graduate Attribute and Continual Improvement processes
  - Changes in U of T sessional dates impact number of teaching days
  - Changes in PEO licensure policies
  - Introduction of an online system for submission of information and data (replaces PDF and Excel files)
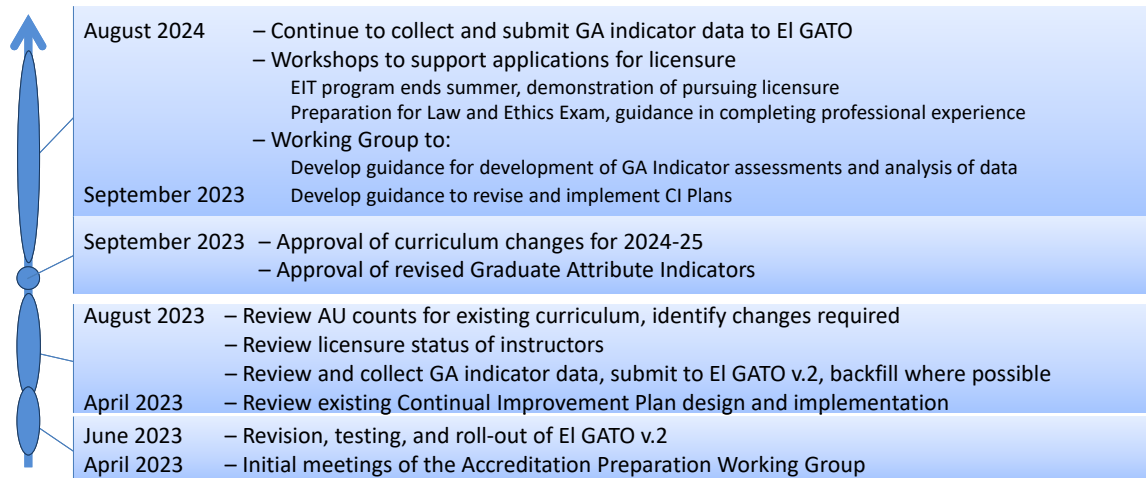
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4

Accreditation Preparation Timeline

June 2026	– Receipt of CEAB Decisions!
Fall 2025	– Visit, receipt of visiting team report, submission of responses
July 2025	– Submission of questionnaire and related information and data – Plan visit logistics
May 2025	– Complete 1st draft of questionnaire
April 2025	– Collect course information (test questions, assignment statements) – Collect exemplars of student work in selected courses – Continue to collect and analyze GA indicator data
September 2024	– Develop awareness among faculty and students of GA and CI processes

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5

Accreditation Preparation Timeline

August 2024	– Continue to collect and submit GA indicator data to El GATO
	– Workshops to support applications for licensure
	  EIT program ends summer, demonstration of pursuing licensure
	  Preparation for Law and Ethics Exam, guidance in completing professional experience
	– Working Group to:
	  Develop guidance for development of GA Indicator assessments and analysis of data

September 2023	Develop guidance to revise and implement CI Plans
September 2023	– Approval of curriculum changes for 2024-25 – Approval of revised Graduate Attribute Indicators
August 2023	– Review AU counts for existing curriculum, identify changes required – Review licensure status of instructors – Review and collect GA indicator data, submit to El GATO v.2, backfill where possible
April 2023	– Review existing Continual Improvement Plan design and implementation
June 2023	– Revision, testing, and roll-out of El GATO v.2
April 2023	– Initial meetings of the Accreditation Preparation Working Group

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6

Graduate Attributes and Continual Improvement

From the EGAD Project

2 Mapping the Curriculum

3 Collecting the Data

1 Defining Program Objectives and Indicators

4 Analysing and Interpreting the Data

6 Managing and Implementing Change

5 Improving Curriculum and Processes

https://egad.engineering.queensu.ca/?page_id=2671

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7

Graduate Attributes

From the EGAD Project

Graduate Attributes

Set by CEAB
Knowledge Base   Communication
Problem Analysis   Professionalism
Investigation   Impact of Engineering
Design   Ethics and Equity
Engineering Tools   Economics and Project Management
Individual and Teamwork Life-long Learning

Indicators

Set by a Faculty/Program
Measurable and meaningful descriptions of aspects of the graduate attributes in the context of the program

Course Learning Outcomes

Set by an Instructor
Measurable and meaningful descriptions of the indicator, in the context of the course, phrased as a positive definition of student performance

https://egad.engineering.queensu.ca/?page_id=2671

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8

Graduate Attributes

- Graduate Attributes and Continual Improvement
  From the Engineering Graduate Attribute Development (EGAD) Project

1	Programs set their own requirements and priorities
2	Programs develop their own indicators for Graduate Attributes
3	Programs map indicators to curriculum
4	Instructors assess indicators, programs collect data
5	Programs process and interpret data, working with stakeholders to make meaning and gain insight
6	Programs use insights and meaning to improve programs and processes

  https://egad.engineering.queensu.ca/?page_id=2671

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9

Curriculum Content and Quality

- All students must meet all curriculum content and quality criteria
- Accreditation Units (AU) or alternatives are used to measure curriculum content in 5 components (1 AU = 1 hr lecture = 2 hr lab/tutorial)
  - Mathematics
  - Natural sciences
  - Engineering science (instructor must be P.Eng., L.L., or EIT*)
  - Engineering design (instructor must be P.Eng. or L.L.)
  - Complementary studies

  *EIT program ends Summer 2023

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10