

118th MEETING OF THE CANADIAN ENGINEERING QUALIFICATIONS BOARD SATURDAY, April 9, 2022 8:30 a.m. – 4:30 p.m. EDT

Hybrid meeting and workshop held at Fairmont Chateau Laurier, Ottawa and via Zoom

AGENDA

	Agenda item	Scheduled time	Presenter	
1	Opening of the meeting	8:30 a.m.	Frank George	
1.1	Call to order and introduction of attendees	8:35 a.m.	Frank George	
	Approval of the agenda			
1.2	Motion: That the agenda for the 118 th meeting of the Qualifications Board be approved as distributed.		Frank George	
1.3	Declaration of conflict of interest (attachment 1.3)		Frank George	
	Approval of minutes of the previous meeting (attachment 2)	9:00 a.m.		
2	Motion: That the minutes from the 117 th meeting of the Qualifications Board held on January 29, 2022, be approved as distributed.		Frank George	
3	Review of action items from last meeting		Ryan Melsom	
4	Committee and task force reports	9:10 a.m.	Frank George	
4.1	Practice Committee (attachments 4.1.1 a-c)		Sam Inchasi	
4.1.1	Motion: That the final General direction for a Guideline for engineers and engineering firms on Indigenous consultation and engagement be approved.		Sam Inchasi	
4.2	Syllabus Committee (attachments 4.2.1 a-b)	9:30 a.m.	Kamran Behdinan	
4.2.1	Motion: That the revised Agricultural/Biosystems/Bioresource/Food engineering syllabus be approved for regulator consultation.		Kamran Behdinan	
4.3	Admission Issues Committee	9:45 a.m.	Qing Zhao	



4.4	Task Force on Alternative Methods of Academic Assessment for Non-CEAB Applicants		Amy Hsiao
4.5	Task Force on Software Engineering	10:05 a.m.	Ian Sloman
4.6	Task Force on Workplace Gender Equity		Margaret Anne Hodges
4.7	CEQB Executive Committee update	10:30 a.m.	Frank George
5	National groups	11:00 a.m.	Frank George
5.1	National Admissions Officials Group update		Jason Ong
5.2	National Discipline & Enforcement Officials Group update	11:30 a.m.	Carol MacQuarrie
5.3	National Practice Officials Group update		Bill Hunt
5.4	Comments from the regulators	11:45 a.m.	Frank George
	BREAK (12:00 p.m. – 1:30 p.m.)		
6	Information and discussion items from other Engineers Canada groups	1:30 p.m.	Frank George
6.1	Engineers Canada updates		Stephanie Price / Megan Falle
6.2	Report from the Canadian Engineering Accreditation Board		Pierre Lafleur
6.3	Report on Engineers Canada Board activities and decisions		Chris Zinck
7	Other Qualifications Board business	2:10 p.m.	Frank George
7.1	2023 priorities discussion (attachments 7.1 and 7.1.1 a-d)		Frank George
	2023 priorities vote		
7.1.1	Motion: That the top 2 priorities chosen by CEQB be put on the 2022 priorities list and distributed for consultation.		Frank George
7.2	Vice-Chair election process (attachment 7.2 a-b)	2:50 p.m.	Chris Zinck
8	Items added to the agenda	3:05 p.m.	Frank George
9	Future meetings		Frank George



	CEQB Teleconference call: July 18, 2022 CEQB Fall meeting: September 19-20, 2022 (Vancouver) CEQB Teleconference call: January 2023 (Date to be determined by Doodle poll) CEQB Spring meeting: April 1-2, 2023 (Ottawa)		
10	Discussion of CEQB norms (in camera)	3:15 p.m.	Frank George
10.1	Motion: That the meeting be moved to in-camera for CEQB members and members of the CEQB Secretariat (Engineers Canada staff).		Frank George
11	Review of action items of 118 th Qualifications Board meeting	4:25 p.m.	Ryan Melsom
12	Conclusion	4:30 p.m.	Frank George



MINUTES OF THE 118TH MEETING

1. Opening of the meeting

The Chair welcomed everyone to the meeting.

1.1. Call to order and introduction of attendees

	Frank George, P.Eng., MBA, FEC,	Chair
	FGC (Hon.)	
	Margaret Anne Hodges, FEC, FGC	Vice-Chair
	(Hon.), P.Eng., PMP	
	Mahmoud Mahmoud, PhD, FEC,	Past Chair
	P.Eng.	
	Anil Gupta, P.Eng., FEC, FGC	Alberta, Northwest Territories and
	(Hon.)	Nunavut Representative
	Frank Collins, FEC, P.Eng.	Atlantic Provinces Representative
Canadian Engineering	Amy Hsiao, PhD, MBA, P.Eng.	Atlantic Provinces Representative
Qualifications Board Members	Karen Savage, FEC, P.Eng.	British Columbia, Yukon
		Representative
	Marcie Cochrane, P.Eng., MBA	Member-at-Large Representative
	Kamran Behdinan, PhD, P.Eng.,	Member-at-Large Representative
	FAAAS, FASME, FCAE, FEIC	
	Samer Inchasi, P.Eng., PMP	Member-at-Large Representative
	Roydon Fraser, PhD, FEC, P.Eng.	Ontario Representative
	Nadia Lehoux, ing., PhD	Québec Representative
	Ian Sloman, MEng, P.Eng.	Saskatchewan, Manitoba
		Representative
Engineers Canada Board	Chris Zinck, FEC, P.Eng.	
Appointee	Sudhir Jha, M.Eng., FEC, P.Eng.	
Engineers Canada Board	Danny Chui, FEC, P.Eng.,	
Canadian Engineering	Pierre Lafleur, FIC ing.	
Accreditation Board		
Representatives		
National Admissions Officials	Jason Ong, Engineers and Geoscier	ntists BC
Group Representative	Dill House D. France FEC DECA!!	
Practice Officials Group	Bill Hunt, P.Eng., FEC PEGNL	
Representative National Discipline and	Carol MacQuarrie, P.Eng. APEGNB	
Enforcement Officials Group	Caroliviacquarrie, P.Elig. APEGINB	
Representatives		
nopresentatives	Stephanie Price, P.Eng., CAE	Executive Vice President,
	Stephanie i nee, i ieng., one	Regulatory Affairs
Engineers Canada Staff	Ryan Melsom, PhD	Manager, Qualifications and CEQB
	.,	Secretary
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	Isabelle Flamand	Specialist, Qualifications
Mya Warken Manager, Accredita		Manager, Accreditation
	Megan Falle	Manager, Regulatory Liaison
	Delee Silvius, P.Eng.	APEGS
Observers	Kate MacLachlan, PhD, P.Geo.,	APEGS
	FEC (Hon.), FGC	

Regrets

Qing Zhao, PhD, P.Eng.	Member-at-Large Representative

1.2 Approval of the agenda

Motion: That the agenda of the 118th Meeting of the Qualifications Board be approved as distributed was moved by Anil Gupta, and seconded by Frank Collins. None were opposed. The agenda was approved.

1.3 Conflict of interest

CEQB members have an ongoing obligation to conduct themselves in an ethical, professional, and lawful manner, and to identify and disclose actual, reasonably perceived, and potential conflicts of interest. These obligations are set out in case law and are also codified in statute, under the *Canada Not-for-profit Corporations Act* ("CNCA"). Members that cannot act in the best interests of Engineers Canada or are conflicted should recuse themselves from the relevant part of the meeting, and they shall not vote on the decision at hand. Members must support the legitimacy and authority of CEQB decisions, regardless of their personal position on the issue, and shall not publicly discuss the varying opinions of individual members.

2. Minutes

Motion: That the minutes from the 117th meeting of the Qualifications Board held on January 29, 2022, be approved as distributed was moved by Samer Inchasi, and seconded by Amy Hsiao. None were opposed. The minutes were approved.

3. Review of action items from last meeting

	Action item	Assigned to	Status
117.1	Send the draft General direction for a Guideline for engineers and engineering firms on Indigenous consultation and engagement for consultation	Secretariat	Completed
117.2	Develop lessons learned coming out of the syllabus discussion (Syllabus Committee)	Secretariat	Completed



117.3	Publish the new Aerospace/Aeronautical engineering syllabus to the Engineers Canada website	Secretariat	Completed
117.4	Publish the revised Materials engineering syllabus to the Engineers Canada website	Secretariat	Completed
117.5	Send the draft Guideline for engineers and engineering firms on workplace equity for women for consultation	Secretariat	Completed
117.6	Add intent and objectives to the work plan item proposal document	Secretariat	Completed

4. Committee and task force reports

4.1 Practice Committee (attachments 4.1.1 a-c)

Sam Inchasi, chair of the Practice Committee, presented. A contractor worked with the Practice Committee to develop the draft general direction based on three regional gatherings, two national gatherings, and the group's expertise in engineering. The general direction was sent for regulator and stakeholder consultation in Winter 2022. No revision was required from the consultation, and the document was presented unchanged for final CEQB approval.

4.1.1. Final General direction for a guideline for engineers and engineering firms on Indigenous consultation and engagement

Motion: That the final General direction for a guideline for engineers and engineering firms on Indigenous consultation and engagement be provisionally approved, contingent on no further feedback from Engineers Yukon, was moved by Samer Inchasi, and seconded by Frank Collins. None were opposed. The motion carried.

4.2 Syllabus Committee (attachments 4.2.1 a-b)

Kamran Behdinan, chair of the Syllabus Committee, presented. The following examination syllabi will be reviewed in 2022: Complimentary studies, Electrical engineering, Mechatronics engineering, and Chemical engineering. The Mechanical engineering syllabus is currently under review. The Agricultural/biosystems/bioresource/food engineering syllabus was reviewed and is presented today for consultation approval.

4.2.1 Revised Agricultural/Biosystems/Bioresource/Food engineering syllabus

The Syllabus Committee asked discipline-specific experts to review the existing 2004
Agricultural/Biosystems/ Bioresource/Food engineering syllabus, and struck an expert panel in 2021.
These experts were selected based on their experience as past Canadian Engineering Accreditation
Board visitors and Canadian HEI faculty members. Expert reviewers' recommendations were shared and



approved by the Syllabus Committee. Given the unique scope of this examination syllabus, which covers both inputs (e.g., machinery, structures) and outputs (e.g., food production) of agricultural production, and given the multiplicity of approaches taken in this area by HEIs in Canada, the panel has proposed that up to three (3) Group B examinations may be substituted to satisfy Group A requirements. This approach is unique to this syllabus.

Motion: That the revised Agricultural/Biosystems/Bioresource/Food engineering syllabus be approved for regulator consultation was moved by Kamran Behdinan, and seconded by Karen Savage. None were opposed. The motion carried.

4.2.2 Change to consultation process for examination syllabi

The following are lessons learned that came out of the January 2022 CEQB meeting:

- 1. Improve Syllabus approval briefing notes:
 - o Include information on the principles applied in the syllabus' development (e.g., Principle of matching syllabi doesn't work for all syllabi).
 - Develop boilerplate language on the Use of Syllabus guideline to be included in all syllabile briefing notes.
- 2. Run a pulse-check survey with the regulators to assess value and parameters of CEQB syllabi.
- 3. Remove CEQB approval before regulator consultation on syllabi [CEQB motion required -4.2.2].

There was discussion on whether the syllabi should be presented to the CEQB for consultation approval, or whether this step should be removed. CEQB members had varying opinions on this matter. It was requested that a question about consultation frequency and timing be added to the NAOG pulse check (action item 118.2). It was also requested that the Syllabus Committee review the wording regarding the examination syllabi on the Engineers Canada website (action item 118.3).

Motion: That, from this point forward, examination syllabi be approved for consultation at the Syllabus Committee level, rather than the CEQB level was moved by Kamran Behdinan, and seconded by Frank Collins. Chris Zinck, Anil Gupta, Karen Savage and Samer Inchasi were opposed. Roydon Fraser and Mahmoud Mahmoud abstained. The motion carried.

4.3 Admission Issues Committee

Recommended changes have been identified for the revision of the Guideline on good character based on outcomes of the January 2022 workshop. The review has been delayed by 1-2 months due to delays in adding a new CEQB resource. The revised guideline is planned to go to the CEQB in July 2022 for regulator consultation approval.

4.4 Task Force on Alternative Methods of Academic Assessment for non-CEAB Applicants



The final general direction document was approved in January 2022. Since then, the consultants have begun their research and the development of the feasibility study report. The task force met in March 2022 to provide direction on the study's content and structure. The draft study is planned to go to the CEQB in July 2022 for regulator consultation approval.

4.5 Task Force on Software Engineering

The task force finalized a survey on Software engineering practice areas in August 2021. A consultant was hired to interview area experts and develop appendices covering five practice areas. The task force is still finalizing the software engineering paper and its appendices. The paper is planned to go to the CEQB in July 2022 for regulator consultation approval.

4.6 Task Force on Workplace Gender Equity

The guideline was approved for regulator and stakeholder consultation in January 2022. The consultation closed on April 1, 2022. The feedback received will inform revisions made to the guideline. The revised guideline is planned to go to the CEQB in July 2022 for final approval.

4.7 Executive Committee

The CEQB Executive Committee met in-person in Ottawa on March 5, 2022 – the first in-person meeting since October 2020.

The CEQB thanked Mahmoud Mahmoud for his contributions to the CEQB for the past 9 years as his term is ending June 30, 2022. The CEQB also thanked Chris Zinck as his term as an Engineers Canada Board appointee on the CEQB is ending June 30, 2022.

5. National Groups

5.1 National Admissions Officials Group update

Jason Ong, chair of the National Admissions Officials Group (NAOG), presented. Recent Admissions related initiatives and project updates include the nearly completed development of NMDB with expected launch in June 2021, and the CBA system nearly complete in both official languages with all participating jurisdictions live. NAOG met in September 2021 to discuss items such as challenges and new happenings (roundtable updates), time-based experience requirements, EGBC's online Technical Examination Pilot, and the Official Language Benchmarking Project. Their next annual meeting to be held next week in April 2022. Discussions will include updates on NMDB, CEQB, CEAB, Ontario's Proposed Legislation Disallowing Canadian Experience Requirements, and the acceptance of electronic academic documents.



5.2 National Discipline & Enforcement Officials Group update

Carol MacQuarrie, past chair of the National Discipline & Enforcement Officials Group (NDEOG), presented. NDEOG met virtually in November 2021 and March 2022. Discussions included regulator roundtables, current case volumes and activities, records retention, legal services, video conferencing, CPD program compliance, developed a new website page on proper use of engineer title. NDEOG created a working subgroup to develop a coordinated approach to title enforcement in the software/IT sector, received an update from Engineers Canada on the new Strategic Plan, and received an update from CEQB on draft guideline on workplace equity for women and draft general direction on indigenous consultation and engagement. Their next meeting will be held in Calgary in August 2022.

5.3 National Practice Officials Group update

Bill Hunt, chair of the National Practice Officials Group (NPOG), presented. The Practice officials met virtually in November 2021 and March 2022. Discussions included roundtable updates, Engineers Canada's Autonomous Systems draft paper, fitness to practice provisions, permit requirements for sole practitioners, digital stamps/signatures. They provided feedback to the CEQB on the Guideline for engineers and engineering firms on workplace equity for women and the draft general direction for the Guideline for engineers and engineering firms on Indigenous consultation and engagement. Their next meeting to being held virtually on June 1st.

5.4 Comments from the regulators

There were no comments.

6. Information and discussion items from other Engineers Canada groups

6.1 Engineers Canada updates

Stephanie Price, Executive Vice President, Regulatory Affairs, and Megan Falle, Manager, Regulatory Liaison, provided Engineers Canada updates on Engineers Canada Strategic Plan 2022-2024 and the Regulatory Strategic Priorities:

- SP1.1 Investigate and validate the purpose and scope of accreditation.
- SP1.2 Strengthen collaboration and harmonization.
- SP1.3 Support regulation of emerging areas.

6.2 Report from the Canadian Engineering Accreditation Board

Pierre Lafleur, chair of the Canadian Engineering Accreditation Board, presented. For the 2021/2022 cycle, there were 71 programs at 17 institutions which were all virtual. The decision meeting will be held in June 2022. For the 2022/2023 cycle, there will be in-person visits with a contingency plan for 79 programs at 25 institutions.



The CEAB has revised the definition of engineering design and interpretive statement, amended the Interpretive Statement on Licensure Expectations and Requirements, and the required visit materials were updated for the 2023/2024 visit cycle. The CEAB is currently developing a report with recommendations for the accreditation system and 30 by 30, are reviewing Policies and & Procedures terms of reference, and are completing a critical appraisal of methodologies for quantifying curriculum content (i.e., the AU).

6.3 Report on Engineers Canada Board activities and decisions

Chris Zinck, Engineers Canada Board director, provided an update on recent Board activities and decisions. CEQB members were invited to review the Engineers Canada Board meeting site for more information.

7. Other Qualifications Board business

7.1 2023 priorities discussion

Since January, CEQB members were invited, but not required, to propose workplan items to the CEQB secretariat by March 1, 2022. Due to a heavy workload in 2022, multiple items carrying over to 2023, and delays in staffing the Coordinator, Qualifications position, it was decided that CEQB members would only vote for their **top 2** priorities. The results of the vote were:

Proposed priority	Number of votes
New Guideline on assessment of qualifications for emerging disciplines	13
New Public Guideline on assessment and performance of engineering teams	8
Review of the 2016 Guideline on sustainable development and environmental	7
stewardship for professional engineers	
New Public Guideline on assessment of the engineering workplace	0

7.1.1 2023 priorities vote

Motion: That the top 2 priorities chosen by CEQB be put on the 2023 priorities list and distributed for consultation was moved by Anil Gupta, and seconded by Roydon Fraser. None were opposed. The motion carried.

7.2 Vice-chair election process

As per Engineers Canada policy 6.10, CEQB members elect their vice-chairs. The upcoming vice-chair position is from July 1, 2023, to June 30, 2024. While this position is for one-year only, the successful candidate will be expected to remain for the chair, and past chair positions (pending Engineers Canada Board approval), for a total of three years. Interested CEQB members must fill the "Declaration of interest" form (attachment 7.2b), secure support from their regulators to proceed in the process and



send Ryan Melsom their CVs, by June 15, 2022. The list of candidates will be included in the September meeting agenda book, along with their CVs.

8. Items added to the agenda

No items were added to the agenda.

9. Future meetings

CEQB Teleconference call: July 18, 2022

CEQB Fall meeting: September 19-20, 2022 (Vancouver)

CEQB Teleconference call: January 2023 (Date to be determined by Doodle poll)

CEQB Spring meeting: April 1-2, 2023 (Ottawa)

10. Norms discussion

The CEQB held a norms discussion and exercise which was moved to an in-camera session.

Motion: That the meeting be moved to in-camera for CEQB members and members of the CEQB Secretariat (Engineers Canada staff) was moved by Karen Savage, and seconded by Anil Gupta. None were opposed.

11. Review of action items of 118th Qualifications Board meeting

	Action item	Assigned to
118.1	Send Agriculture/biosystems/bioresource/food engineering syllabus for consultation.	Secretariat
118.2	Add question about consultation frequency and timing to the NAOG pulse check.	Secretariat
118.3	Syllabus Committee to review wording on Engineers Canada website.	Secretariat
118.4	Change process for syllabus approval (CEQB approvals finalized syllabus).	Secretariat
118.5	Revise emerging disciplines proposal to an investigative paper and consult with	Secretariat
	regulators on 2023 work plan priorities.	

12. Conclusion

The meeting concluded.

Prepared by: Isabelle Flamand, Specialist, Qualifications on behalf of:

Frank George, P.Eng., MBA, FEC, FGC (Hon.)

Chair, Canadian Engineering Qualifications

Board

Ryan Melsom, PhD

Secretary, Canadian Engineering

Qualifications Board