

Guide for the Virtual Evaluation of an Engineering Program

June 2021 Update

Canadian Engineering Accreditation Board

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About this document

Travel restrictions and physical distancing requirements due to the COVID-19 pandemic requires the 2020/2021 CEAB accreditation visit cycle to adjust. Where the visit would normally take place in-person, the CEAB struck a task force to develop an approach to virtual accreditation visits. This document is reflective of the lessons learned during the 2020/2021 accreditation cycle with regards to the components of a virtual CEAB accreditation visit. It serves as a starting point to help programs prepare for their review and to provide the visiting team with the necessary data to complete their evaluation.

This document outlines the expectations for several components of the accreditation process, including:

- Philosophical underpinnings of the accreditation visit process
- Privacy and confidentiality
- Technology requirements
- Interviews conducted by the visiting team
- Adjustment to the format and timing of the documentation normally provided on-site
- Tours of engineering facilities
- Addendum to the Questionnaire: Reporting on the program's response(s) to COVID-19
- Additional materials to submit as an addendum to the Questionnaire
- Visitor training
- Considerations for visit team chairs (*new*)

When scheduling the virtual visit, the visiting team chair and program designated official (or equivalent) should consult the example of a CEAB on-site visit schedule as a starting point as they plan their visit.

Philosophical underpinnings of the accreditation visit process

The accreditation visit is the heart of the CEAB accreditation process. The visit provides visitors with the opportunity to review and validate the information provided by the program in its self-study report (the Questionnaire). Site visits span several days and allow the visiting team to conduct interviews, review documents, and tour physical facilities. The visit is a fact-finding exercise to verify Questionnaire data.

Key objectives of the site visit:

- 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).

Traditionally, the accreditation visit has been an on-site exercise. As a result of the COVID-19 pandemic, visits to higher education institutions (HEIs) may not be possible for a variety of reasons (primary of which include travel restrictions and physical distancing limitations). Regardless of modality (i.e., in-person or virtual), the purpose and expectations of a visit remain unchanged. As such, the information provided in section 4 (Accreditation policies and procedures) of the Accreditation Criteria and Procedures Manual apply to both in-person and virtual visits.

The CEAB recognizes that this is an unprecedented time for the HEIs that offer engineering programs, and the Accreditation Board will be receptive to any reasonable and/or innovative measures that HEIs have

taken to satisfy the criteria. **Regardless of changes to program delivery or the method of accreditation evaluation, programs will be expected to meet the criteria in place at the time of the visit.** The CEAB and visit team members will receive additional training to help them understand the need for flexibility – in both how HEIs have had to adapt program delivery to the current realities of the pandemic and in how they undertake their assessments.

HEIs and visit team members are encouraged to view virtual visits in the same vein as a ‘flipped classroom,’ that is to say, the visit team will require all visit materials sufficiently in advance of the visit dates in order to prepare questions and discussion prompts to maximize their efficiency and time with representatives from the program(s).

While CEAB accreditation visits traditionally rely on one visit chair, CEAB members assigned to chair large visits (of multiple programs) may wish to consider splitting the visit amongst multiple chairs or arranging for additional vice-chairs with additional responsibilities. If a visit chair wishes to pursue this distribution of leadership and responsibility, a detailed plan will be required to ensure consistency across program report findings. Visit chairs are encouraged to speak with the CEAB Secretariat early in the scheduling process to determine what their needs are and what supports can be provided.

Privacy and confidentiality

Confidentiality. All visit team members are required to sign a confidentiality form before they participate in a CEAB accreditation visit; this applies for both in-person and virtual visits. Members of the CEAB who participate in visits are covered by the confidentiality agreement they signed when they join the Accreditation Board. Visit team members who are not also CEAB members are required to sign the Visiting Team Member Data Form; in addition to collecting personal and professional contact information, this form binds the signatory to:

- Respect the confidentiality of any materials and information that they obtain at all times before, during and after the accreditation and visit processes.
- Access confidential information provided by the HEI only as needed for the purposes of the accreditation review.
- To assume responsibility for disposing (i.e., shredding hard copies, deleting electronic versions) of any confidential materials once decisions have been made by the Accreditation Board.

Meetings. In order to ensure privacy during interviews, it is recommended that HEIs utilize a main room/breakout room structure available in most online meeting platforms. By assigning a staff person to manage participant admissions to the main meeting room, and then having that staff person move participants into breakout rooms for their interviews, the HEI can control access to interview spaces, adding an extra layer of security. This replicates the in-person experience of having ‘guides’ on-site to direct visitors and interview participants between meeting rooms.

Recording and screen captures. **Neither the team members nor the HEI representatives are permitted to record any of the group meetings or individual interviews that occur during the virtual visit.** Recording is not done during an in-person visit and should not be a feature in a virtual visit. The purpose of prohibiting recording is to ensure that individuals being interviewed may speak freely.

Screen captures of images of meeting participants, shared documents and/or presentations are not permitted. Should team members require access to information/a document discussed during an interview that is not already available to them, the team chair should make a request for the materials directly to the Dean or designated official.

Document retention. Documents should be posted to the file-sharing platform following the timelines identified by the CEAB Secretariat and should be available to all team members throughout the visit. Following the expiration of the appeal period (after the CEAB decision), visit team member access to the document sharing platform should be removed.

Visit team members are responsible for the erasure of all visit materials from their personal or work computer systems following the expiration of the appeal period (after the CEAB decision). Any materials that the visit team member printed must be destroyed in a confidential manner (i.e., shredding) or be shipped to the CEAB Secretariat for disposal.

Technology requirements

Document-sharing platforms. The Questionnaire (including the Questionnaire for Evaluation of an Engineering Program, Exhibit 1, excel spreadsheets 6A, 6B and 6C, the presentation on graduate attributes/continual improvement to the visiting team, and the pre-recorded tour of engineering facilities, as discussed below, with the relevant safety manuals and procedures) will be uploaded by the HEI to Engineers Canada's virtual collaboration space, OneHub. HEIs and team members will receive communications from the CEAB Secretariat that details log-in requirements, submission procedures and deadlines.

Access to HEI online platforms. For the materials traditionally made available to the visit team on-site on the Sunday preceding an in-person visit, the HEI must ensure visit team members have access to course materials and graduate attributes/continual improvement documentation, as described in the on-site materials section of the Questionnaire. These materials can be uploaded with the Questionnaire materials described above, or the HEI is welcome to post these materials on its own learning management system (LMS) if there are privacy and/or confidentiality concerns.

If the HEI decides to post course materials and graduate attributes/continual improvement documentation to its own online platform, the HEI will be responsible for ensuring all visit team members have access to the platform if personalized accounts (originating from the institution) are required. Visit team members are responsible for ensuring that they download any programs required to connect to the HEI's document-sharing platform. Time must be arranged for a training and trouble-shooting session between the HEI's IT representatives (or another appropriate staff person) and the members of the visiting team at least two weeks in advance of the document submission due date. HEIs are advised to have an IT representative on hand for the duration of the visit to address any questions or issues that arise.

Video conferencing. The HEI should identify their preferred platform for video conferencing. The CEAB Secretariat recommends that the HEI use the one currently in place at their institution. Ideally, the video conferencing platform being used will feature password and/or waiting rooms to access the virtual meeting space.

The HEI will be responsible for ensuring all visit team members have access to the platform if personalized accounts (originating from the institution) are required. Visit team members are responsible for ensuring that they download any programs required to connect to the HEI's video conferencing system. Time must be arranged for a training and trouble-shooting session between the HEI's IT representatives (or another appropriate staff person) and the members of the visiting team at least two weeks in advance of the start of the virtual visit. HEIs are advised to have an IT representative on hand for the duration of the visit to address any questions or issues that arise. The HEI's video conferencing platform will only be used for

meetings between the HEI and the visiting team; any meetings between team members, and between team members and the CEAB Secretariat, will be hosted on Engineers Canada's platform.

Should the HEI be unable to secure the use of video conferencing, the CEAB Secretariat will make arrangements to provide access to an Engineers Canada-supported platform.

The CEAB Secretariat support person will host a virtual meeting space for the team while they are conducting their interviews with institutional representatives. The virtual meeting space will be open all day to serve as a 'drop-in' room for visiting team members to collaborate, meet, or discuss issues that arise throughout the day. This mimics the in-person home-room approach that would normally be applied to in-person meetings.

Visit team members will be provided with Engineers Canada's digital backgrounds and are asked to use them when meeting with program representatives, faculty and students.

Internet connection. Both the HEI and visit team must ensure that they have a stable internet connection for the period of the virtual visit. Wired connections are recommended, but a stable Wi-Fi connection is also acceptable. High-speed networks (LTE or 4G+) should only be used if regular internet connections fail. Costs incurred by visit team members for data overages in situations where network connections were required (as confirmed by the visit team chair) will be reimbursed as a reasonable expense incurred in the process of undertaking the visit; an expense claim (using Engineers Canada policies) should be filed following the visit.

Testing. Both the HEI and the visiting team members should plan for testing periods for both the document-sharing platform and video conferencing platform that will be used throughout the visit. The HEI will provide training to visit team members for any platforms that are specific to their institutions and/or upon the request of the team members. CEAB Secretariat staff will attend training sessions in order to provide support to the team members throughout the visit. At least two weeks before the submission of visit documentation and before the start of the visit, a troubleshooting session will be arranged by the HEI to test the document-sharing platform and the video conference platform, respectively.

Contingency planning. All participants must recognize that connectivity issues are beyond the control of the HEI, visit team members and Engineers Canada. There is always a possibility that network disruptions will occur during a visit. To mitigate the impact of these interruptions, visit participants are asked to provide personal contact information (phone, cellular and email) where they can be reached during the dates of the visit; this information is included in the Visit Team List, which is circulated to all team members and the HEI in advance of the visit. Should a participant drop off a video conference unexpectedly, the visit team chair is responsible for ascertaining the cause and if/when the participant expects to rejoin the meeting. If the visit team chair loses connection, they are responsible for contacting the HEI's Dean or designated official and at least one member of the visit team to inform them of the cause and if/when they expect to rejoin the meeting.

In addition to network connection issues, hardware issues are always a possibility. It is recommended that participants in a virtual visit test all equipment in advance of the virtual visit dates and ensure that all programs are updated. When possible, back-up devices (such as wired earphones, second computers or tablets, and a hard-wired phone line) should be secured and tested in advance of the visit and be available to the visitor/program personnel throughout. All participants must recognize that there is always a possibility of equipment malfunctions that are beyond the control of participants.

If a visit team member is unable to rejoin the meeting due to network or equipment issues, the visit team chair is responsible for reassigning roles and responsibilities amongst the remaining team members. If connection issues are being experienced by the HEI, it is the responsibility of the visit team chair and Dean or designated official to develop a plan for the remainder of the virtual visit. The CEAB Secretariat must be informed as soon as possible of any technological issues that impact the virtual visit schedule.

Visit chairs and program designated accreditation officials will be provided with the direct contact information for the CEAB Secretariat staff assigned to support their visit in order to facilitate timely communication in urgent situations.

Interviews conducted by the visiting team

The following points should be considered when making arrangements for interviews with faculty, students, staff and stakeholders at the HEIs:

- Meetings involving representatives of the HEI will be hosted on the HEI's videoconferencing platform (unless other arrangements are required, as per the section above on video conferencing). Any meetings of just the visiting team will be hosted on Engineers Canada's platform.
- Recording by visit team member or the HEI of any meetings/interview is strictly prohibited; participants must feel free to speak to visit team members.
- The visiting team chair and designated official will collaborate to design the virtual visit schedule and therefore, to determine the group and individual interviews which will take place and the timing of these interviews.
- In order to reduce fatigue, large group meetings will be scheduled for early in a day and subsequent meetings will be progressively smaller to support the cognitive functions of the visit team members.
- Interview time throughout the day will be limited to five hours per day, with breaks of at least five minutes, and no more than 20 minutes, between each individual meeting to support the cognitive functions of the review team members. Consequently, the over-all length of the visit may be extended slightly. The visit team chair and Dean or designated official will discuss what is best for all participants before finalizing the visit schedule.
- A dedicated 45-minute 'lunch break' should be included in each day of the scheduled visit. Visit chairs are encouraged to not schedule team meetings during this time (if possible).
- The HEI will provide to the visiting team chair a list of individuals who will attend each meeting.
 - The list must include email and telephone contact information so that visitors can reach out to participants who are running late.
 - Visit team members will monitor the list of participants in the video conference and may ask people to identify themselves and to possibly leave the meeting (at the discretion of the team chair) if their participation is not required/appropriate.
- Five-minute grace-periods will be provided to interview participants; following the first five minutes of a scheduled interview block, the visitor leading the meeting will begin trying to contact the individual(s) who is late.
- In order to keep the visit schedule running on-time, meetings that begin 10 minutes or more after their scheduled start time will be rescheduled for the end of the day.
- Group interviews should be capped at 12 participants (in addition to visit team members); interviews with groups larger than this will need to be split into multiple meetings. For example, students can be interviewed by year (1st & 2nd and 3rd & 4th).
 - The CEAB Secretariat staff member supporting the visit can be utilized as a moderator or general breakout room support person (depending on the preferences of the visitor)

running the interview) in order to facilitate visitor participation and engagement with the interviewees.

- Visitors are encouraged to consider the following strategies for managing large group meetings:
 - Emphasize at the start of the meeting that the goal is to hear from everyone.
 - Instruct participants to put their name in the chat if they wish to speak or to use the system's raise hand function. Only one method should be used and clearly explained at the start of the meeting.
 - Develop questions in advance of the meeting and call on specific participants to answer (rather than ask for volunteers).
 - Have participants up-date their display name to show their full name and title/year/club or office affiliation, depending on the group; this allows the interviewer to knowledgeably call on specific people with a diversity of views.

Schedules must be finalized the week before the visit. As the CEAB Secretariat will be inserting links for visit team-meetings in the document, the program must provide the final schedule to the chair no later than the Thursday before the visit. Programs are asked to provide all virtual meeting room links (if they are hosting the meetings on their platform) for inclusion on the final schedule.

While programs are welcome to arrange their visit as works best for their individual context, the CEAB Secretariat recommends the following structure:

- One primary meeting room is established for each day of the visit or for the entire visit.
- An HEI representative is assigned to be the meeting host.
- Breakout rooms are utilized for the scheduled interviews; the HEI representative acting as host would be responsible for moving participants from the primary meeting room into the breakout rooms.

This approach has the benefits of reducing the number of meeting links required for team members to keep track of, replicates the on-site process of guiding visitors between meetings, and adds an extra layer of security to interviews as the HEI representative can control who enters interview (breakout) rooms and when.

All participants in virtual interviews are asked to be flexible and understanding of fellow participants who may be attending the meeting from their home; noise from family and pets may be unavoidable, though participants should make efforts to limit these instances.

Adjustment to the format and timing of the documentation normally provided on-site

In addition to the submission of the Questionnaire (due eight weeks before the visit), HEIs are required to make the following materials available virtually to the visiting team, as listed below. These materials are required to verify/assess compliance with the criteria relating to both curriculum and graduate attributes. While these materials would usually be made available on-site in hard copy and/or electronic copy, the 2020/2021 visits will be held virtually therefore requiring the materials be made available electronically and (possibly) earlier to the visiting team members.

The timelines provided below are intended to be a suggestion to facilitate the work of both the program(s) and the visiting team. Visiting team chairs are encouraged to work with the program(s) to determine a submission schedule that works for both groups. The visiting team chair and programs may wish to consider a 'staged' approach to document submissions, in which all the documents from one of the given categories described below are shared when they become available; programs are not required to wait to make a single document submission.

Additional material may be required to evaluate aspects specific to the program. The visiting team chair will contact you if that is the case.

MATERIAL	ON-SITE	VIRTUAL
A. Course Materials	<p>A1. For each learning activity in a program's curriculum, institutions are expected to maintain up-to-date documentation on content (on a week-by-week or similar basis and including laboratory and project work, if any), learning objectives and performance assessment methods. Such documentation would typically be distributed to students and should be available to the Accreditation Board visiting teams on site for every learning activity in the program.</p> <p>Assessment materials issued to students, including as may be applicable, homework assignments, laboratory instruction sheets, project instructions, quizzes, mid-term and final exam question papers should also be available on site for every learning activity in the program.</p>	<p>The materials for A1 remain a requirement.</p> <p>These should be made <u>available electronically six to four weeks ahead of the visit</u>.</p> <p>However, you are asked to reach out to your visiting team chair to determine the best approach that allows enough time for your institution to prepare and for the team to review the materials.</p> <p>The materials may be uploaded to the Engineers Canada collaboration space (the same platform to which the Questionnaire is uploaded) OR the materials may be made available on the institution's platform with login details/instructions provided to each visiting team member and the CEAB Secretariat.</p>
	<p>A2. In addition to the materials specified in A1, dossiers of the materials listed below should be available on site for a selection of 15 to 20 of the program's learning activities. The HEI should select the 15 to 20 learning activities from amongst those used by it to assess the levels of achievement for the graduate attributes. The selection should be such that assessment of each of the attributes is dealt with in at least one of the dossiers.</p> <ul style="list-style-type: none"> • Samples of graded student work and examinations for each assessment tool, so as to include a range of student performances including as may be appropriate: • Graded tests, problem sets and examinations 	<p>The materials for A2 remain a requirement.</p> <p>These should be made <u>available electronically six to four weeks ahead of the visit</u>.</p> <p>However, you are asked to reach out to your visiting team chair to determine the best approach that allows enough time for your institution to prepare and for the team to review the materials.</p> <p>The materials may be uploaded to the Engineers Canada collaboration space (the same platform to which the Questionnaire is uploaded) OR the materials may be made available on the institution's platform with login</p>

MATERIAL	ON-SITE	VIRTUAL
	<ul style="list-style-type: none"> Graded laboratory and design reports 	<p>details/instructions provided to each visiting team member and the CEAB Secretariat.</p>
<p>B. Graduate Attributes and Continual Improvement on-site documentation</p>	<p>Programs are expected to have processes in place that demonstrate that program outcomes are being assessed in the context of the graduate attributes, and that the assessment results inform further development of the program. Exhibit 1 asks programs to describe 3-5 actions that were driven by GA data analysis. (see “Continual Improvement, Improvement actions”).</p> <p>Onsite, the program will make available the evidence for three examples where change to a program was considered. The evidence should identify the threshold for change, whether the decision was to make a change to the program or that no change was required and illustrate the process that lead to the decision. Evidence could include (but is not limited to): relevant GA/CI curriculum meeting minutes, data, tools used to analyze the data, etc.)</p> <p>This is a collection of assessment data and processed results, presented in the format in which they were used to make decisions – additional formatting is not necessary.</p>	<p>The materials that demonstrate GA/CI processes remain a requirement.</p> <p>These should be made <u>available electronically six to four weeks ahead of the visit</u>.</p> <p>However, you are asked to reach out to your visiting team chair to determine the best approach that allows enough time for your institution to prepare and for the team to review the materials.</p> <p>The materials may be uploaded to the Engineers Canada collaboration space (the same platform to which the Questionnaire is uploaded) OR the materials may be made available on the institution’s platform with login details/instructions provided to each visiting team member and the CEAB Secretariat.</p>
<p>C. On-site HEI presentation on Graduate Attributes/Continual Improvement to the visiting team</p>	<p>At the beginning of the visit, the HEI will make a presentation to the visiting team on Graduate Attributes/Continual Improvement. This presentation shall describe the institution’s overall GA/CI process including the functions of the GA/CI committee (or equivalent), their interactions with internal and external stakeholders, and how the procedures and processes are implemented at an institutional level. The HEI is also</p>	<p>A presentation of the GA/CI remains a requirement.</p> <p>A pre-recorded PowerPoint or video presentation similar to what is normally presented on Sunday morning should be made available. The team chair may request that specific subject matter be covered in the Power Point or video. Staff should be available for questions on this video on the first day of virtual visit.</p>

MATERIAL	ON-SITE	VIRTUAL
	<p>asked to reflect on the overall GA/CI process, discuss what is working and what is not working and whether any improvements have been identified and (if applicable) have been implemented.</p> <p>The visiting team may also request that the HEI set aside some time to respond to questions about the GA/CI information provided in Exhibit 1.</p>	<p>It should be made <u>available electronically six to four weeks ahead of the visit</u>.</p> <p>However, you are asked to reach out to your visiting team chair to determine the best approach that allows enough time for your institution to prepare and for the team to review the materials.</p> <p>The materials may be uploaded to the Engineers Canada collaboration space (the same platform to which the Questionnaire is uploaded) OR the materials may be made available on the institution's platform with login details/instructions provided to each visiting team member and the CEAB Secretariat.</p>
<p>D. Safety Manuals and Procedures</p>	<p>Please provide copies of any manuals and/or policies and procedures documentation that relate to health and safety practices in the unit.</p>	<p>Copies of safety manuals and procedures remain a requirement.</p> <p>These should be made <u>available electronically six to four weeks ahead of the visit</u>.</p> <p>However, you are asked to reach out to your visiting team chair to determine the best approach that allows enough time for your institution to prepare and for the team to review the materials.</p> <p>The materials may be uploaded to the Engineers Canada collaboration space (the same platform to which the Questionnaire is uploaded) OR the materials may be made available on the institution's platform with login details/instructions provided to each visiting team member and the CEAB Secretariat.</p>

Paper copies shipped to visit team members and the CEAB Secretariat will not be accepted. If you have difficulties digitizing any of these materials, please contact your visit team chair.

Visit team members are reminded that the COVID-19 pandemic may have had an impact on the programs' ability to collect data and, as such, anomalous data may be evident in the materials submitted. The CEAB has previously indicated that it will be flexible with regards to the 'snapshot year' being used. Visitors will receive information on this possibility, and the need for sensitivity and flexibility when addressing this issue in their review of the materials.

Tours of engineering facilities

In order to assess the program's compliance with all CEAB accreditation criteria, the visiting team will require an overall tour of engineering facilities. Facilities tours will take place in a two-staged format.

For the first stage, the program is requested to provide a recorded virtual tour of the facilities in advance of the visit date. The video tours should be submitted along with the Questionnaire, but no later than four weeks before the visit; final due dates should be discussed with the visit chair. The table below provides guidelines for these pre-recorded videos and additional documentation requirements.

SPACE	ON-SITE DETAILS
Laboratories relevant to the program being assessed	<ul style="list-style-type: none"> • A campus map identifying the location of each laboratory space relevant to the program being assessed • A map of location of emergency showers and eye wash stations in each lab • A record of when they were last inspected and tested (for example, a photo of the certificate or other documentation) • If applicable, copies or links to any training given to TA's prior to their assisting in labs • A pre-recorded video walkthrough of all labs (including computer labs) with commentary. This does not need to be professionally edited. A simple walkthrough using a smartphone is sufficient. The video should showcase and describes: types of experiments, occupational health and safety instructions to students and enforcement, accessibility, supervision, space limitations etc.
Study spaces	<ul style="list-style-type: none"> • A campus map identifying the location of each study space relevant to the program being assessed • A pre-recorded video walkthrough of all study spaces with commentary. This does not need to be professionally edited. A simple walkthrough using a smartphone is sufficient. The video should showcase and comment on: how the space is used, any plans for future space, etc.
Club spaces	<ul style="list-style-type: none"> • A campus map identifying the location of each club space relevant to the program being assessed • A pre-recorded video walkthrough of all club spaces with commentary. This does not need to be professionally edited. A simple walkthrough using a smartphone is sufficient. The video should showcase and comment on: how the space is used, any plans for future space, etc.

SPACE	ON-SITE DETAILS
Teaching facilities	<ul style="list-style-type: none"> • A campus map identifying the location of each teaching space relevant to the program being assessed • A pre-recorded video walkthrough of selected spaces with commentary. This does not need to be professionally edited. A simple walkthrough using a smartphone is sufficient. The video should showcase and comment on: how the space is used, any plans for future space, etc.

The second stage will be a live walk-through of the space(s) identified to the Dean or designated official by the visit team chair. No more than one hour of the visit schedule should be dedicated to this exercise. The purpose of this second stage is to allow visitors to focus on specific aspects of the program's delivery site(s) and ask questions about the facilities that may have arisen from their review of the pre-recorded tour discussed in stage one.

Addendum to the Questionnaire: Reporting on the program's response(s) to COVID-19

To better understand the impact that the COVID-19 pandemic has on undergraduate engineering education programs in Canada, HEIs are asked to respond to the following questions. These questions will give the visiting team and the CEAB itself a greater appreciation for how programs across Canada have responded to the COVID-19 pandemic.

1. Which courses, if any, will be delivered online, in class, or in combination and how will Accreditation Units (AUs) be calculated?
2. For courses being held in-class, what measures are being taken to ensure the safety of students and faculty?
3. How will classes with either a lab component or field exercises be handled?
4. Are there any significant changes to the delivery of capstone design projects? If so, please describe.
5. How have your plans for the final year of the program changed due to measures taken in response to the pandemic? What were you planning to do vs. what has been implemented?
6. What, if any, attrition do you expect?
7. How will GA/CI processes be affected by changes to course and lab instruction implemented to address pandemic concerns?

Answers should be succinct and not exceed five pages.

Additional materials to submit as an addendum to the Questionnaire

All required materials, as laid out in the Questionnaire, will still be required as part of the accreditation visit. In order to accommodate the change in modality from in-person to virtual visits, HEIs are asked to provide three additional sets of documents in advance of the visit:

1. *Presentation on Graduate Attributes and Continual Improvement*

In order to be as efficient as possible, the presentation usually made by the HEI to the visit team on the Sunday before the visit should be recorded in advance of the virtual visit and submitted with the materials described above in the section *Document-sharing platform*.

2. *Tours of engineering facilities*

HEIs are asked to prepare a recorded tour of the engineering facilities (as described in the section of the same title, above) as well as annotated photographs of space and equipment for the visit team to review. These materials should be submitted along with the Questionnaire, but no later than four weeks before the visit; final due dates should be discussed with the visit chair. For an example of these materials, the HEIs are invited to review samples prepared by ABET:

- Annotated photos: <https://www.abet.org/wp-content/uploads/2020/07/Facilities-Annotated-Photos-of-Equipment-in-a-Thermo-Fluids-Lab-6-3-20.pdf>
- Virtual lab tour: <https://vimeo.com/440364471/58abea12e4> (This is an example of the second stage of the virtual lab tour as described below, but is helpful to illustrate the expectations for production quality and general content for the pre-visit tour.)

3. *Addendum to the Questionnaire: COVID-19 questions*

To help the visit team members assess what impact the COVID-19 pandemic has had on program delivery, a series of questions have been developed that touch on a variety of issues related to planning and delivery. These questions can be found in the section above.

Visitor training

Additional training for visit team members will be provided in advance of the virtual visits. This training will complement the already-existing training team members receive.

Training for virtual visits will address:

- Technological requirements (provided by the HEI, as described in the technology section above, unless the platforms for use will be hosted by Engineers Canada, in which case Engineers Canada will provide the necessary training).
- Best practices related to communication via videoconferencing.
- An overview of the current engineering education landscape in Canada as a result of COVID-19.
- Virtual visit timelines.
- The need for flexibility to assess a program by distance.
 - Visitors should be prepared to be flexible in how they collect/assess information, but not in how the criteria are understood.
 - The need for flexibility around the 'snapshot' year.
- Changes to data collection methods during a virtual visit.
 - The need to limit requests for supplemental materials to that which would only be asked for when on-site.
- What to expect for virtual tours of facilities.
- The need to assess the program, rather than changes of modality caused by COVID-19.
 - How to assess planned learning activities against delivered activities.
- Criteria that take on different meanings in light of changes of program delivery modality.
- The impact of unexpected closures on AU counts. Visitors are only to report on AU totals, not to assess what impact, if any, changes in AU delivery will have on the programs' accreditation status.
- Recent changes to criteria (specifically the minimum number of AUs required).
- Potential regulatory delays in issuing licenses, which may impact faculty.
- The possibility of variations in health unit regulations across the country which may be different from their own regulations.
- The possibility that grade inflation is not a result of cheating, but possibly changes in evaluation methods by faculty and amount of time students are dedicating to assignments.
- Logistical considerations (i.e., expense claim policy application, etc.).

- How to provide feedback to the CEAB on their experiences with virtual visits.

In addition, additional training specific to visiting team chairs on the following aspects will be developed over the summer of 2021:

- Basic Teams technical training
- Basic Zoom technical training
- Virtual facilitation with emphasis on building a virtual team, building consensus, virtual interview skills, managing challenging behaviour, and virtual facilitation skills to engage meeting participants.

Considerations for Visit Chairs (new)

Before the visit, chairs are encouraged to host at least one ‘social’ meeting for the visit team members between team formation and the start of document review to begin the process of building team cohesion. In addition, Visit Chairs are encouraged to develop a pre-visit schedule of meetings beginning one week after the first documents have been received from the program. The purpose of these meetings would be to a) discuss findings, b) begin filling in the tracking of issues sheet, c) identifying any additional documents that are required from the program, and d) planning interview questions. Finally, Visit Chairs are encouraged to establish regular pre-visit communications with the dean and/or designated officials of the program(s) being reviewed. The purpose would be to discuss visit logistics, document review, and to identify any gaps in the process that could be addressed as part of the visit planning activities.

Visitors should be instructed to start reviewing documents as soon as they become available. It has been noted in the past that visitors often wait until shortly before the on-site visit to begin reviewing materials; in a digital world, it is likely that the HEIs will be able to determine when documents are accessed by visiting team members, so asking for materials on a set schedule, and not reviewing them promptly, has the potential to cause issues between the visiting team and the program(s).

Following the visit, chairs should plan for a debrief/wrap up meeting with their visit teams to discuss the process and to thank them for their work.

Follow-up

Should the HEI or members of the visit team have any questions about this document, the process of virtual visits and/or specifics about their virtual visit, they are invited to contact their visit team chair and the CEAB Secretariat. The CEAB recognizes that this is a new process for all stakeholders in the accreditation system, so collaboration and flexibility will be important to ensure successful visits occur.