Suggested interview questions for the
Canadian Engineering Accreditation Board
Onsite Visits
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About this document

The on-site visit is the heart of the CEAB accreditation process. The visit is to allow visitors 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 on-site 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 evidence of compliance with criteria.
• Evaluate the measures taken to resolve issues raised previously by the Accreditation Board regarding the program (if applicable).

A note for program visitors

The primary objective of the visit is to validate and seek clarification of program details based on the team’s review of the institution’s Questionnaire. The team members should reflect on information they need from any individual to perform their assessment of the evidence of the institution’s compliance with the CEAB criteria and consider the questions they might asked once they arrive at the on-site visit. As is the case with the sample site visit schedule, the visiting team may not need to meet with every individual listed in this document. Program visitors are not expected to ask each question verbatim. This document is not designed to serve as a checklist, it is a tool to help program visitors triangulate data.

A note for programs receiving visits

Programs may wish to share this document with individuals who will be interviewed during the visit so that they may anticipate the types of questions they may be asked. It is very important to remember, however, that this document is not designed to serve as a checklist, it is a tool to help program visitors triangulate data. The program visitor may ask questions that do not appear in this document and it is likely that not all questions will be asked of any individual. If a program visitor chooses not to interview an individual responsible for a specific portfolio, this is not a reflection of the importance of the portfolio. It could simply mean that there are no outstanding questions to be asked and the program visitor does not need additional information to complete their task.
Suggested Question Areas for DEAN, ASSOCIATE DEANS, DEPARTMENT CHAIRS

- General relations between Engineering Faculty and the rest (other faculties) of the institution
- Finances: Problems? Opportunities?
- Prospects for enrolments, budgets
- Commitments re: budgets, personnel, space, equipment
- Faculty hiring policy –distribution among departments
- Funds for equipment acquisition, renewal
- Policy re professional registration of professors
- Relative roles of teaching and research
- Policy re evaluation of teaching
- Sabbatical policy
- Relationship with student organizations
- Relationship with other departments (humanities, science and math, computing):
  - Collaboration between relevant Faculties in developing content for courses given to engineering students?
  - Are there special sections for engineering students, or are they mixed with other students?
  - Performance of engineering students relative to the other students taking the same courses?
  - Any collaboration between Faculties’ Members (e.g. research)? Curriculum.
- How is department being treated, in comparison with other departments (both engineering and other)
- General attitude of engineering students to course/program content
- Suggestions for improvements in courses (are they being received, how/by what channel are they being received, are they welcome, are they encouraged, who do they come from, what types of things do they typically involve, how are they handled)
- How is the faculty of Engineering seen by other faculties? Insular? (“it is seen as...”)
- Outline the requirements/criteria for complimentary studies
- What is the level of input from other faculties to the deliberations of the Engineering Faculty Council?
- What are the qualifications required for Adjuncts?
- How do you prevent loss of staff?
- How do you address issues of professionalism, ethics, academic integrity, and plagiarism?
- What is your vision for the unit/department? (facility, students, professors, multi-disciplinary)
- Where are the strengths and weaknesses of this unit/department?
- Quality/quantity of office support staff and technical staff
- Plans for hiring and renewal of facility, supplies, labs, equipment
- How is development of curriculum being done in later years? (evolving or static, updated and monitored?)
- How often is self-assessment of program done? Evolve, renew, refresh, cycle of research, rate of change?
- How are changes implemented? How are courses modernized? What is procedure?
- Are you following where graduates end up? (work, contribution to society?)
- Is there a course that focuses on financial issues?
  - Engineering economics
  - Objectives: overview of all sorts of financial comprehension
  - Macro/micro. Theory of production
  - Accounting principles. Analysis/ratios
  - Techniques of project evaluation (taxes, budgets, cash flow)
  - Any project/ activity that reinforce?
  - What semester? Should be early on (1st or 2nd year)
  - Effects of inflation
  - Risk analysis (estimations, uncertainties, base techniques)
  - Equipment replacement strategies
  - Usage of financial calculators
Suggested Question Areas for SENIOR ADMINISTRATION

- How does the institution fit into community? Association with other universities in area?
- Relations between Engineering Faculty and the rest of the institution?
- Financial:
  - Finances – problems? Opportunities?
  - Propects for enrolments, budgets (any debt/mortgages; sources of students for expansion)
  - Commitments re space, personnel, budgets
  - What is the budget allocation process?
- Research and teaching – how does the Engineering Faculty rate compare to other faculties?
- Relations between Engineering and “support” departments?
- What particular niche does the University aspire to address?
- How well does Engineering support the University in addressing the niche?
- What are dominant external influences on the university and where are they leading you?
- What is the major challenge facing the University?
- From your perspective, what special problems lie ahead for Engineering?
- Are there any opportunities that Engineering is overlooking?
- Does the University have an (Industrial) Advisory Board?
- Are there any approved design and/or budget improvements for engineering on the horizon?

Vice-President (Finance and Administration)

Vice-President (Assoc.) – Operations & Physical Resources

- General financial status of the university?
- Annual Budget?
- Restricted Funds?
- % allocated to Engineering?
- Debt?
- Plan for retirement?
- Revenue Trends?
- Copy of annual report with financials?
- License/Royalty Income (Engineering)?
- Disposition?
- Student levies for equipment (or other fund raising)?
- Early retirements (financial? how managed?)
- New facilities for Engineering: (needs? Program)?
- Prime financial concern ahead?

Vice-President Academic & Provost

- From an academic perspective, how does Engineering fit at the institution?
  - impact on goals
  - attraction for students
  - intellectual output
  - how does mandate / mission fit into engineering
- Does Engineering draw heavily on sister faculties or tend toward self-sufficiency?
  - collaborations
  - student mixing
- What is driving engineering enrolments? Common to whole university?
  - projections enrolments realistic?
  - proportion capital expansion?
  - projection for entrance requirements?
- What is the process for determining priorities on new hires?
• Reduced teaching loads for new hires?
• Building a volume problem for sabbatical entitlements within new hires?
• Collective Agreement – outstanding or hot issues?
• Curriculum Control
• Academic Appeal structure
• Engineering participation in research?
• What are plans for hiring / budget as it relates to engineering
• What is salary policy / regulations, etc
• Do you see any financial problems in the future?
• What is prediction for student intake (recruitment, retention)?
• Historical background of policy statements (plagiarism)
• Proportion of university budget and fundraising campaigns?
• Budget trends for faculty?

V-P (Research & External Affairs)

• How does Engineering rank comparatively in research at this institution?
• Is there an institutional research plan and where does Engineering fit?
• Within Engineering, what is the rough split between fundamental and applied research?
• Is equal credit given in promotions and tenure processes to fundamental and applied research?
• Are undergraduate students in engineering given opportunities to work in summer at research?
  o aware of research and its role in innovation
• How many technology licenses and spinouts funds (>1-2 people) issued from engineering?
• Fundamental research in research centres?
  o use of grad students in centres – development work?
• What is the flagship area in Engineering?

Graduate Studies

• Relative to the entire university, what is participation rate in graduate studies by engineering?
• To what extent are graduate students involved with the various Research Centres/Chairs and in research contracts, in Engineering?
• Proportion of graduate students (engineering) funded via NSERC and industry contracts
  o Can undergraduate engineering students take graduate level courses?
• Engineering graduate students show preference – M.Sc. Versus M.Eng. Degrees?
  o Scope of work assigned to engineering graduate students as Teaching Assistants?
Suggested Question Areas for SENIOR ENGINEERING ADMINISTRATION

• Planning for replacement of equipment?
• Improve / maintain accountability (esp. with research funds)?
• Services offered to researchers and chairs for planning and controlling budgets to allow for good management and to stay on budget?
• Help offered to produce reports to granting agencies?
• Service to dean to keep on track with budgets?
• Ensure good departmental budget (operating, support, and staff)?
• Process to negotiate new hirings and budget approval with university?
• Strategic plan?
• How are things going? What would you change?

Engineering Faculty Advisory Board Chair

• General Format of meetings
• Record of Advice followed
• Significant Issues from Board’s perspective
• Suggestions for improvements
• Sense of faculty “plug-in” to the community and the profession
• Who do you report to?
Suggested Question Areas for INDIVIDUAL FACULTY MEMBERS

- Are you registered as a P.Eng.?
- If you had a wish list for changes, what would be on it?
- Where would you like to see things going?
- What do you feel are strengths of the program?
- Do exams focus on law and ethics?
- What is your opinion on space, class sizes, and lab staff?
- How is reaction from students in your classes?
- How do students feel with workload?
- What sort of project (design components integrated) / responses / engagements / exposure do you require from students?
- How long have you been teaching here?
- Have you made any changes to course, notes, curriculum? (re-modeled)
- Do you feel there is room for you to improve courses? And add a personal touch?
- What sort of impact to Profs. have on curriculum? Represent industry?
- How are class sizes? Hinder teaching load?
- Appropriate TAs?
- Is admin easy to work with?
- How many courses taught per term? Affect time for research?
- How is balance between research and teaching? Able to balance/integrate?
- What courses are you currently teaching? What are favourite courses to teach?
- Rapport with other staff? Able to speak freely with chair and dean?
- Able to get the supplies/resources needed?
- What is teaching method to keep class engaged?
- Do you/how do you integrate elements from industry and the “real world”?
- Do students have access to advice (career and course choice, academic)?
- Is there sufficient resource for funding? Is this dependant on students?
- Is lab equipment current, reflects relevant/current industry needs?
- Is there a good balance between theory and design? (where is application)
- What are efforts made toward encouraging/enlarging involvement?
- What do you think attracts students to come here? What is the “edge” of this university?
- How often are self-assessments conducted? Does change result?
- Are students generally employed upon graduation?
Suggested Question Areas for LAB TECHNICIANS

- Is there enough money? (funding to support good lab)
- Are students getting enough experience?
- How old is the equipment? Is it sufficiently current?
- What is the cycle for replacement?
- Do students have an equipment fund to help?
- What are safety procedures?
- Are students properly prepared when entering labs?
  - Are there protocols (glasses, footwear, outfit)
  - Are guidelines taught and posted
  - Do they get surveillance and guidance from technical staff
  - What safety routines do the students learn in the labs?
- When are rooms accessible to students?
- Access to labs after hours? Particular permission involved?
- How many students per lab?
- Are labs for research and undergrads together? Is there enough space?
- Who supervises the labs? (techs and/or TA?)
- Are techs capable / knowledgeable enough to oversee a lab supervisor is absent?
- Do the Profs. participate in labs?
- What are your thoughts on whether students are getting proper practical experience (not all virtual / video)
- Are the students prepared to do the labs? (are they getting proper theory?)
- Would you work for these students when they graduate? Would you feel safe working for these students?
- What is the average length of employment for technical staff at the institution?
- What is the labour climate?
- What would you change about the labs?
- How often are fume hoods checked?
- Are there enough eyewash stations (test each one). How often are they tested?
- Any accidents? Average number and nature of accidents?
- Are safety posters and exit signs mounted and visible?
- What do you do with waste oil and metal chips?
Suggested Question Areas for ADMINISTRATIVE SUPPORT STAFF

- Do you feel prepared / educated to do your job?
- Do you have support and materials?
- Are you overloaded / stressed / underworked?
- Are you burdened with too many tasks? Would an additional support staff help?
- Clarify roles of people in department
- Do you think the university works well? Are there enough staff?
- Are students being well-served? Do they complain?
- What type of support do you provide to students?
- Hours of operation – do they serve the students well?
- Do the students take advantage of your resources (supplies, keys, photocopies, assignments, staplers, etc.)?
- How much do you have to work with faculty (interface time)?
- How do you find working with faculty? What are interactions like?
- What sort of support do you provide to professors?
- How is relationship between staff and Profs? What kind of support do they normally ask for?
- Do you have much interaction with faculty level admin staff?
- What student opportunities are set up (scholarships, TA positions)?
- How long are exams stored for?
- Who handles records (transcripts, files, records)?
- How do you keep them private/confidential? PIPEDA
- Is there a departmental website, who works it? (translation to electronic media)?
  - How is it kept up to date?
  - Is it policy to put course materials on site?
  - Are policies/manuals, etc. available online?
  - Does this increase workload?
- How do you communicate with central admin.?
- What system is in place for accessing student records? Is this upgraded periodically?
- Do you get training when it is needed? Is there an avenue through which to receive professional training?
- What is the process of implementing change?
- Who prepares documents for calendar changes?
- What is the most challenging aspect of your job?
- Is office space appropriate/useable?
- When is the busiest time of year?
- What is process if a student misses an exam due to medical problems?
- Who handles student appeals? What is the process?
- Are you involved with any faculty committees/departmental meetings?
- Are you an independent department, or are there common operations between other engineering departments or the dean’s office?
- How long have you worked here? How many years of combined experience?
- What is your perception of students? Are they happy/satisfied? Do they appreciate the services offered?
- Labs: who has access to entry? Is the entry logged? Equipment monitored for theft and vandalism?
Suggested Question Areas for STUDENTS

- General Experience:
  - Tell us about your educational experience
  - Do you think you’re getting good education? Why?
  - Is the program excessively difficult?
  - What is the hardest course? What is the easiest course?
  - What do you like most/least about being in this faculty?
  - Does the load (credit) weighting of your courses correspond to the amount of work required?
  - What type of learning is it?
    - Ability to think/logic, or how to get employed?
    - Time management. Group and teamwork.
  - What do you like/don’t like about being associated with engineering?
  - How is life outside class? How does the university treat you?
  - Are there opportunities to compete against other universities?
  - What would you improve about your program?

- Professors/Other staff:
  - Do your Profs really show enthusiasm?
  - Are you satisfied with the quality of teaching?
  - Do you feel prepared for final exams? Do they test on class-learned knowledge?
  - Do you get feedback on assignments and exams? Is it timely?
  - What do you think of faculty and staff? (Availability? Good teachers? Can present materials well? Are they too focused on research?)
  - How would you rate your lab instructors, TA’s?
  - What do you think of faculty and staff? (Availability / helpfulness?)
  - How do you promote services to students?

- Design Experience:
  - What do you think is the “mark” of an engineer (design)?
  - What kind of exposure to engineering design?
  - What is your impression of the design experience component of your program?
  - Are there peer review / ratings of design project?
  - Do you feel prepared for design projects? Do they build on knowledge?

- Laboratory Experience:
  - Is it hands on and practical?
  - Exposure to industry / working force?
  - Is it a good balance between lecture and hands on?
  - Is there adequate modernized equipment?
  - Are labs better attached to courses, or lab courses are like a review?

- Facilities:
  - Do you have adequate access to computing facilities and needs (software, terminals?)
  - Are the laboratories well equipped and maintained, up-to-date?
  - Resources – access to books and library? Online resources

- Student Input/Student Society:
  - Do you have input into the development and evaluation of the teaching program?
  - Are there formal course evaluations – do the departments take them seriously?
  - How do students regard the course evaluation process? (does everyone participate (%rate))
  - Do you have suggestions for change?
  - How do students (formally as a group) communicate with the Faculty if there are concerns; and has there been a good record of results?
  - Are students well-represented by departmental / faculty committees
  - Are there student representatives at faculty / departmental meetings?
- Is the student society active?

- **Student Counselling/Advising:**
  - How does student counselling and advising take place?
  - Are there tutorial services available?
  - Is there a student’s association? Student committees?
  - Does the association discuss student issues with faculty?
  - Do you get advice/ support? What do I need to graduate?
  - What knowledge do you have of the availability of mental health services for students?
  - If you were in distress, where would you go? Who would you talk to?
  - If a fellow student approached you in distress, what would you do?

- **Complementary Studies:**
  - What is your impression of your humanities courses?
  - Are the physics, chemistry, math, and economics courses relevant, interesting?
  - Do you get opportunities to develop and practice communication skills – oral and written?
  - Do you have courses to teach how to write/present reports, not just the design?
  - Are you able to do minors in other disciplines (business)
  - How much contact is there between non-engineering & engineering students? (mixed classes, or segregated/separate)

- **Electives:**
  - What knowledge are you given on the business side of engineering practice? (charge-out rates, billable hours, proposal writing, continuing education)
  - Do you get exposure to other engineering disciplines and other fields?
  - What do students know about faculty research programs and other engineering disciplines?
  - Is there a good choice selection for elective courses? Is there ability to focus on an area/specialization?
  - How do you get counselling for electives to choose?

- **OS & H:**
  - To what aspects of laboratory safety and occupational safety and health have you been exposed?
  - Is health and safety taught? When?
  - How much preparation is given to ethical issues and harassment in work term briefings?

- **Professional Engineering:**
  - Have you had exposure to the provincial (territorial) professional engineering association – how did you get to know about it – what do you know about it?
  - Do you believe the program is educating you to be an engineer?
  - Do you see value in becoming a professional engineer? Do you plan to become one?
  - Are you aware of the impact of your profession (safety, ethics, professional practice)?
  - How much are you exposed to activities/life of professionals?
  - How much do you understand the importance?
  - How is work learned in school related to real world?
  - Do you feel prepared? Problem-solving, judgements.

- **Co-op:**
  - Is the co-op program administered well? Can you find placements easily?
  - Does the university help out? Guarantee placement?
  - Do you find the placements help? Are they useful?
Suggested Question Areas for STUDENT SERVICES

- What services are offered? (student exchange, admissions, scholarships, peer tutoring, academic advice, how to deal with problem students, appeals)
- Responsibilities of staff?
- Appeal procedures?
- Putting students in touch with proper people/systems?
- Student service resources (counsellors, medical advice, et)?
- Describe the mental health services available to students. Do you get the feeling that students are aware of these services? Do students access them?
- What proactive steps are taken to monitor student mental health?
- What services are available within the engineering faculty, specifically?
- If a student appeared to be in distress, what actions would you take? What are the organizational procedures in such a scenario?
- How are student mental health services promoted to students? To faculty? To other support staff?
- Who deals with students with special learning / physical conditions? Special treatment regarding examinations?
- What are policies on academic standing / transfer credits?
- How are pre-requisites tracked?
- Registration issues?
- What are the controls on credits, continuing education, etc?
- Exchange regulations, bilateral agreement details. Limit to number of terms away?
- Minimum GPA to apply?
- Is industry experience encouraged? (internship, co-op)
- What resources devoted to career centre?
- Is participation encouraged in student engineering competitions?
Suggested Question Areas for OCCUPATIONAL HEALTH AND SAFETY

- Professional practice and engineering economy
- Is content discussed with CM for feedback and participation (reviewed and approved)?
- Taught by credible, experienced and expert Profs.?
- How do you keep students interested?
- Are they looking externally to compare with what is going on in industry and other institutions?
- Awareness and what's important (not prescriptive)?
- Include topic on CEAB = “professional and ethical responsibility”
- Comprehension of CM role, structure, obligation, procedures?
- CM specific responsibilities: ethics, criminal, due diligence?
- Case studies to discuss impact and examination? Approach case from different angles?
- Do case studies cover all disciplines?
- Is course evolving and changing. Keeping up with trends?
- What year is the course(s) offered
- Relevant topics:
  - Whistle blowing
  - International collaboration
  - Intellectual property (IP)
  - Impact of engineers and technology on people
  - Health and safety issues, environmental impact, responsibility of the engineers
  - Workplace responsibility and rights, teamwork, confidentiality
  - Safety of public
  - Social and environmental impact
  - Privacy
  - Discrimination (age/race/sexual)
  - Bribes, kickbacks
  - Conflict of interest
  - Criminal code and due diligence
  - Principles of fire prevention
  - Accident prevention
- How is health and safety treated?
- Overview of hazards + evaluation of hazards (what measures are used?)
- How to control – quality control hierarchy?
- Where is OH&S legislation?
- What resource materials are used (web or text)?
- How are materials tested?
Suggested Question Areas for LIBRARY STAFF

- To what extent do engineering faculty members include library research in student course assignments?
- To what extent do engineering students receive briefings on library usage?
- What is actual usage of facilities by undergraduate engineering students?
  - Reference
  - Interlibrary loans
- What is actual usage of facilities by Engineering faculty?
- Has the Internet impacted upon any of the above?
- Student’s knowledge of copyright?
- What involvement does library have with industry?
  - electronic searches
  - value adding
  - extension to private collections
- What is library doing to offset declining budgets?
Suggested Question Areas for HEADS OF OTHER RELATED DEPARTMENTS
(ex: Chemistry, Science or Mathematics)

- Do you have sections that are only for engineering students?
- What is overall impression of engineering students, as compared to science or mathematics students?
- Do engineering students come with good outlook?
- What are similarities/differences between main stream courses, and those designed for engineering students?
- Are texts used slanted more towards engineering, or same texts as other students?
- Do engineering students bring interesting change to courses where they are integrated with regular chemistry/science/math students?
- What is quality of exposure to non-engineering material?
- Do you try to bring everyone to the same level upon completion (engineering students, and other students)?
- Is there any feedback from engineering faculty (ie: knowledge isn’t strong enough in students)?
- How is cooperation with engineering faculty (ie: do you follow CEAB guidelines)?
- Do you get input from engineering faculty when designing curriculum? What is content? Applied to engineering type problems?
- What is ratio of 1st year students in engineering compared to other disciplines?
- How many students per session?
- What texts are used? North American standard?
- Does text have a practical aspect to it? (rather than theoretical)
- What is weight of applied versus basic science?
- What is the pass rate?
- Is course pretty high for attrition?
- Lab space: size, equipment, ratio of students to TAs?
- Do you try to put best Profs. to teach 1st year courses?
- What are the qualifications of Profs?
- Where are TAs from (graduates, Master’s, Ph.D.)? Do you employ undergrads?
- Has quality of students been going up or down?
- What do you wish to change?