

Engineering teaching FAQ

How are teaching duties assigned?

Ultimately the chair or director of each academic unit is responsible for assigning teaching duties. In most units, this task is delegated. There is considerable variation in how these duties are assigned even within individual units. Within Engineering, there is consideration given to ensuring that both the teaching needs for each program and individual instructor preferences are considered

What courses should I have taught by the end of my probationary period?

For tenure and promotion consideration, you want to demonstrate both breadth of and growth in teaching capabilities.

Breadth of teaching capability can be demonstrated by teaching courses at various levels (first-year undergraduate, core undergraduate, fourth-year undergraduate elective, graduate core, and graduate elective) and/or by teaching courses of various types (core lecture, project).

Growth in teaching capability is usually demonstrated through improvements made over repeated teachings of the same (or very similar) course.

Do other activities besides teaching assigned courses contribute to my teaching contributions?

Yes! Besides teaching assigned courses, the following additional activities are expected of all faculty members, and inform the assessment of teaching contributions:

- graduate student supervision
- hiring and supervising undergraduate co-op students
- undergraduate project supervision
- design team supervision
- mentoring

New course development and major course revisions are also considered teaching contributions.

How is teaching assessed for Annual Performance Evaluations and for Tenure and Promotion considerations?

The teaching of undergraduate and graduate courses is given the most significant weight in assessing teaching contributions. Results from student course evaluations (AKA Course Critiques) are currently the primary measure of student perceptions of teaching effectiveness. In 2013, Engineering established the standards below for reporting student course evaluation data.

- For each individual course, the primary data from the student evaluation should be the score of the summative question:

- For undergraduate courses, this is Question 10: What is your overall appraisal of the quality of teaching in this course? Very low ... Very high
- For graduate courses, this is Question 9: Overall, I would rate this course as: Poor ... Excellent
- Individual course student evaluation scores should be compared to historical aggregate properties of all courses delivered by the instructor's academic unit, and these properties should be reported. The recommended comparison properties are
 - the historical mean score for the summative question;
 - the historical 85th percentile score for the summative question; and
 - the historical 15th percentile score for the summative question.

Other measures such as [peer evaluation](#) may be used in some units, especially for Tenure and Promotion considerations. Consider [creating a teaching dossier](#), as it can be a way to reflect on and articulate your own development as a teacher.

Who runs the student course evaluations?

With support from the [Engineering Student Society \(EngSoc\)](#), course instructors, and [undergraduate](#) and [graduate](#) administrators within academic units, the [Teaching Portfolio](#) runs the student course evaluations.

How are course evaluations administered?

The vast majority of course evaluations (over 97%) are administered online. The process for online course evaluations is outlined in the [Student Course Evaluations Instructor Guidelines](#) and summarized below:

- Around week eight of the term, you will receive an email notification of the two-week period that the online evaluation will be available to your students.
- Let your students know in advance the class in which you're planning to set aside time for evaluations and ask them to bring their internet-enabled phone, tablet, or laptop that day.
- Give students time the beginning of the class to complete the evaluations. This will maximize response rates.
- Let students know that both the faculty and you rely on their feedback on course offerings and teaching. Research shows that impact of feedback is a strong motivator for students to complete evaluations; if you can, let students know about any changes you have made based on past student feedback.
- Put the web address of the evaluations on the board: <https://evaluate.uwaterloo.ca> (*note: no "www"*) and ask students to navigate to the web page and login using the same credentials as they use to access LEARN or Quest. A [PowerPoint slide](#) is also available.

- Let students know that the evaluation must be completed in one sitting; if the session is closed without hitting the “Submit” button, any responses they may have entered will not be saved, and they will have to start over.
- Leave the room for 10-15 minutes while students complete the evaluation.
- Advise students that they can contact Kathy Becker in the event of technical difficulties.

How do I select a good time for administering the student course evaluations?

Choose a class that is typical for your course, does not have any unusual activities (such as handing back midterm exams or assigning a large complex project), and is apt to have good attendance. Attendance and participation are generally better if you let your students know one or two classes in advance which day you will give time in class for the course evaluation. Participation also tends to be highest when the course evaluation is administered at the beginning of class rather than the end. If the evaluation is to be administered at the end of class, be sure to wrap up class activities well before the class is scheduled to end.

What are the questions in the Course Evaluation Questionnaire?

See the samples of the [undergraduate course evaluation questionnaire \(PDF\)](#) and [graduate course evaluation questionnaire \(PDF\)](#) for question text.

When and how will I get the results of the student course evaluation for my course?

After the final date for submission of course grades (**usually during the first week of the next academic term**), course evaluation results data are released on the official Faculty of Engineering results interface at <https://engevals.uwaterloo.ca> (login required). Teaching members can also review student responses to open-ended questions for their own courses on the Evaluate course evaluation platform, <https://evaluate.uwaterloo.ca>.

Where can I get help and guidance in interpreting the results of the student course evaluations?

It's easy to take student feedback personally. To help ensure that you do not over-react to particular aspects of the results, and to maximize the value of student feedback, it is worthwhile to follow a structured process in reviewing your first sets of student course evaluations. See this [related discussion post](#) for links to resources and a suggested process.

It can also be quite helpful to have some guidance and an extra set of eyes when reviewing your first sets of student course evaluations. You can contact a mentor from within your academic unit, [Trevor Holmes, Centre for Teaching Excellence](#), or Engineering's [Associate Dean, Teaching and/or the Teaching Development Associate](#) to arrange support for reviewing student course evaluation results.

How are the results of the student course evaluations distributed?

Student course evaluation results are made available to different groups via the interfaces listed below.

- [undergraduate Course Critiques site](#) and [graduate Course Critiques site](#)
 - Engineering students, staff and faculty can access numerical data (*login required*)
- <https://evaluate.uwaterloo.ca>
 - instructors can access their own course evaluation results **including** students' written comments (*login required*)
- <https://engevals.uwaterloo.ca>
 - instructors can access their own numerical data from all time (*login required*)
 - department chairs and directors can access all numerical data (*login required*)

In addition, annual aggregate results data are reported to academic unit heads for use in merit, tenure and promotion decisions.

How can I get student feedback during the term?

There are many strategies for obtaining student feedback during the term (i.e. see the Centre for Teaching Excellence's Tip on [using mid-term student feedback](#)). Feedback from students during the term will help you discover how your students perceive the course and your teaching. Some Engineering instructors ask their students a small number of questions with multiple-choice answers (ie The lecture pace is: too slow, just right, or too fast). Others ask two short-answer questions (i.e. What is helping your learning in this course? What would improve your learning in this course?). Responses to these informal midterm feedback questions can be gathered through paper-based or electronic means, such as [Clickers](#) or [LEARN](#) surveys.

Whichever method you adopt, it is important to provide students with a brief report of your review of their feedback as soon as possible after collecting it. In your report you should summarize what they told you either in numerical terms (i.e. for lecture pace: too slow 20%, just right 45%, and too fast 35%) or by sharing common themes (ie What is helping your learning: weekly summary points posted online (25%), clear blackboard notes (15%)...). Discuss the adjustments you plan to make as a result of the feedback, and make sure you follow through.

Note that in some cases, student feedback may reveal to you that students don't have a clear understanding of a particular approach or strategy; in such cases, it may be sufficient to provide a better explanation of your rationale or goals for a particular strategy or approach rather than changing the approach.

What is the role of student academic reps?

In most units, there is a process for selecting a small number of students from each undergraduate class (or cohort) to act as representatives for the class on academic matters. These students may also play roles as representatives for the [Engineering student society, EngSoc](#). In many units, these students will

meet throughout the term with some of the unit administration (i.e. associate chair undergraduate studies, etc.) to discuss any issues that may have arisen during the term.

The student academic representatives can provide you with useful feedback on a variety of issues, such as the impact of major course deadlines on their overall academic workload and establishing groups for lab projects. To find the academic rep in your class, just ask the students after the first week of class if they have an academic rep, as the academic reps are generally selected early in the term.

How are Teaching Assistants (TAs) assigned?

Each academic unit has slightly different processes for assigning Teaching Assistants (TAs). The number of TAs assigned to a particular course is generally based upon historical enrolment plus the expected TA workload due to activities like labs, design projects, etc. The actual process for assigning particular TAs to courses is done in either the [Graduate Studies Office](#) or [Undergraduate Studies Office](#), and will often provide the opportunity for course instructors to identify preferred TAs. It is usual for graduate students to approach instructors to solicit TA positions.

What training do TAs receive before being assigned to courses?

All Engineering graduate students holding TA positions are expected to have completed the [ExpectATIONS workshop](#). This two-day workshop includes the following components:

- Roles and qualities of effective TAs
- Working relations with instructors and students
- Oral presentation skills
- Basics of marking
- Academic integrity (AI)
- Workplace issues of safety, harassment and discrimination

Even with this requirement, there will be considerable variation in the skills and attitudes of graduate students pursuing TA positions. Course instructors can serve a mentorship role in helping TAs develop teaching skills. See the Centre for Teaching Excellence's [TA manual \(PDF\)](#) for suggested useful information for TAs.

What resources, such as data projectors, computers, etc., will be in my classroom?

Classrooms are controlled by either the Registrar's Office or individual academic units.

Most classrooms controlled by the Registrar's Office have a data projector with computer and audio-visual equipment. Note that you will have to contact [Instructional Technologies and Media Services \(ITMS\)](#) to arrange for a key or fob to open the control podium in these rooms.

In rooms controlled by academic units, there will be similar setups. Podiums in classrooms controlled by your academic unit may be keyed the same as your office key, or you may need to obtain a key; contact an administrative or Information Technology (IT) person in your unit to find out about podium keys.

Because the layout and precise setup of equipment varies between classrooms, it is worthwhile to visit your classroom before the first class to familiarize yourself with equipment usage, lighting control, blackboard or whiteboard layouts, etc.

What is a course management system and how do I set one up for my course?

The University of Waterloo uses the [Desire2Learn](#) learning management system, [Waterloo LEARN](#), to provide a controlled access point to course materials and online activities you may wish to associate with your course. The CTE Liaison for Engineering, [Richard Li](#), is available to assist you in setting up your course LEARN site, provide you with a brief introduction to using LEARN for your course, and connect you with additional [LEARN training](#) opportunities available through the Centre for Teaching Excellence.

Can I use clickers?

Yes, the University is setup for Clickers, and all Registrar-controlled classrooms with computers allow the use of these devices. Students can purchase Clickers from the Bookstore (the September 2018 price is \$42 with a trade-in value of \$20). You can require students use Clickers in your course or can make it optional.

For information on using clickers see the [Centre for Teaching Excellence \(CTE\) Clickers page](#). The [Faculty of Mathematics' clicker page](#) is also informative.

Are there alternatives to clickers?

Yes, there are software and cell phone text solutions (see the [Centre for Teaching Excellence \(CTE\) Clickers page](#)).

What software is available for doing plagiarism checks?

The University subscribes to [Turnitin](#), a service that allows students to compare their submitted work to a database of past submissions maintained by the service. See the [Academic Integrity Turnitin](#) page for full information on the following topics:

- Using Turnitin within LEARN
- Standard statements to put on your course outlines if you are planning on using Turnitin*
- Submitted work is stored on servers located in Canada and subject to Canadian law
- Options for getting a course set up and for training of instructors and TA's

*Note that due to privacy and ownership of IP issues, students have the right to use alternative approaches to demonstrate the integrity and originality of their submitted work.

What are copyright restrictions for presenting material in lectures and for posting material online?

Canadian copyright laws are going through a transition to ensure that they are consistent across all media including computer media and networks. The Library has created a [guide for instructors](#) on the [fair dealing](#) use of copyrighted material, which doesn't require explicit permission from the copyright owners. These guidelines explicitly describe what may be copied (up to single chapters from texts), the circumstances under which they may be copied (includes education), and the allowed media (includes posting on protected LEARN course pages).

How will students know the expectations for my course?

All courses are expected to have a course syllabus or course outline that identifies the course objectives and operational policies. CTE provides a [course outline specification \(PDF\)](#) that can be downloaded to use as a check list in preparing a course outline. Note that [Senate policy](#) requires that several standard statements be included in all course outlines.

What if I need to make a change to course policy or operation during the term?

While it is preferable that changes not be made to course policies or procedures during the term, sometimes changes will be unavoidable. In such cases, be sure to clearly communicate to students the nature of the change along with the motivation for making the change. It is a good habit to maintain clear documentation of all changes in a “live” course outline. For example, all deletions to the original course outline might be marked in ~~blue strikethrough~~ font while all additions to the original course outline might be marked in **red font**.

What are the required teaching development workshops for new Engineering faculty members?

Within the first year of beginning their appointment, new Engineering faculty are expected to complete the following four Centre for Teaching Excellence workshops :

- Who are our learners [1.5 hours]
- Classroom dynamics and engagement [1.5 hours]
- Assessment for learning [2 hours]
- Course design fundamentals [5 hours]

These workshops are offered three times per year including a two-day intensive version in early August. For more information, visit [CTE's Support for New Faculty page](#).

Do I have to take the required teaching development workshops?

You will meet with the [Associate Dean, Teaching](#) within your first two months on campus. During this meeting, you can discuss your previous teaching experience and/or training in post-secondary teaching.

If you have experience or training equivalent to the workshops, then you may be excused from this requirement.

How do I document my attendance in teaching development workshops?

When you participate in a teaching development workshop, conference, or other activity, it's a good practice to document the date, topic, and name of facilitator. Your [teaching dossier](#) is a good place to record these details. When it comes time to prepare your activity submission for the faculty annual performance evaluation process, you will be well-prepared to report on your teaching development efforts. The [Associate Dean, Teaching and/or the Teaching Development Associate](#) can assist you and your unit head in monitoring this activity.

What other on-campus opportunities do I have to develop my teaching?

The [Centre for Teaching Excellence \(CTE\)](#) hosts a wide range of workshops throughout the year. These are announced through a monthly email broadcasted to all faculty members. You can also check the [Engineering Teaching events listing](#) for teaching development opportunities. Some particularly noteworthy opportunities include the following:

- [Instructional Skills Workshop \(ISW\)](#) - A 24-hour workshop held over three or four days that emphasizes skill development in lecture planning and delivery based upon accurate assessment of student feedback. This workshop can be taken at any stage of your career and can be taken multiple times. The Teaching Portfolio coordinates an Engineering-only ISW once or twice per year. CTE also delivers the ISW three or more times per year.
- [Teaching Excellence Academy \(TEA\)](#) - A four-day course redesign workshop that helps you redevelop a course you have taught a few times. The focus of this workshop is ensuring that your course activities and assessments are well aligned with the course outcomes and your vision for the course.
- [Annual Teaching and Learning Conference](#) - Each year in early spring, Waterloo hosts a one-day teaching and learning conference. This conference offers a selection of presentations on teaching theory, research, and best practices alongside good food and companionship and provides a nice recharge before the spring term.

What do I have to cover in my course?

The minimal description of courses is kept in the [undergraduate studies academic calendar](#) or the [graduate studies academic calendar](#). Most units also keep past course outlines that include more detail. When teaching a course for the first time, it may be useful to consult colleagues who are teaching follow-on courses so that you can ensure that your students have the full potential to be prepared for future courses.

Are there course materials available that I can use in my planning and preparation?

Your colleagues with experience in teaching the course(s) you have been assigned will typically be willing to share with you their course notes, previous exams, assignments and other materials. This information will be helpful in giving you a sense of a viable route through your course material. It is important for your own credibility with your students that you make sure that your teaching is consistent with your personality and your preferred approaches.

In addition, it is typical for academic units to maintain shared resource materials for larger activities like design projects and laboratory exercises. You may access these resources in preparing for your course, and you will have the opportunity to contribute and update them.

What do I do with graded student work?

Graded student work is an official record governed by [WatClass Records Classification and Retention Schedules](#). Work submitted by students for evaluation in a course, including examination papers and course assignments, falls under [WatClass TL55](#). Other course records, such as class lists, marks assigned for individual tests, final grades, and related correspondence, fall under [WatClass TL60 - Instructors' Grade Records](#).

Faculty teaching members should review the [WatClass Teaching and Learning Records](#) type for direction on the retention and disposal of these and other teaching records.

Where can I get advice or information on teaching?

There is a lot of available information and many people willing to share with you!

Each unit has a [Teaching Champion](#) designated to provide a focal point for teaching within their unit. You may also find support from the following individuals and resources:

- [Centre for Teaching Excellence \(CTE\)](#)
- [Associate Dean, Teaching and/or the Teaching Development Associate](#)
- [Engineering Undergraduate Office information for instructors](#)
- [Academic Integrity \(AI\) information for instructors and TAs](#)
- The Math Faculty [guidelines for instructors](#) has some useful links for logistics like class lists, mark submission, etc.