



Tandem User Guide

Intended for

Canadian Engineering Programs that are Seeking CEAB Accreditation



Engineers Canada CEAB Accreditation

For questions, please contact visits@engineerscanada.ca

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About Engineers Canada's accreditation process

In 1965, Engineers Canada established the Canadian Engineering Accreditation Board (CEAB) to accredit Canadian undergraduate engineering programs. The purpose of accreditation is to identify to the member engineering regulators of Engineers Canada those engineering programs whose graduates are academically qualified to begin the process to be licensed as professional engineers in Canada.

An accreditation visit is undertaken at the invitation of a particular institution and with the concurrence of the association having jurisdiction. A team of engineers is assembled under the direction of a current or recent Accreditation Board member. A detailed Questionnaire is completed by the institution and shared with the visiting team prior to the visit. During the visit, the team examines the quality of the students, the academic support and staff, the curriculum, and the educational facilities. The visiting team reports its findings to the Accreditation Board which then makes an accreditation decision. It may grant (or extend) accreditation of a program for a period of up to s ix years or it may deny accreditation altogether.

About Tandem

Welcome to Tandem, Engineers Canada's new data management system, which supports engineering education program accreditation and the annual Enrolment and Degrees Awarded Survey. Tandem is a key element of the <u>Accreditation Improvement Program (AIP)</u>, a coordinated effort to improve stakeholder consultation, communication, training, improvement processes, and the technical platforms involved with the accreditation system and the Enrolment and Degrees Awarded Survey.

Tandem has been developed to support the work of stakeholders within the accreditation system to facilitate document submission, review, and record-keeping of the materials required to complete an accreditation visit.

About this User Guide

This User Guide is intended for Higher Education Institution (HEI) representatives who are involved in the preparation and submission of materials for a CEAB accreditation visit.

About accessibility

Engineers Canada is committed to ensuring equal access and participation for all people. We are committed to treating people with disabilities in a way that ensures their dignity and independence. We believe in integration, and we are committed to meeting the needs of people with disabilities in

a timely manner. We will do so by removing and preventing barriers to accessibility and by meeting or exceeding the accessibility requirements established under Ontario's accessibility laws.

If you have any questions, comments, or feedback regarding the accessibility or usability of Tandem, or need help accessing Tandem, please contact the Tandem system administrator at: accreditation@engineerscanada.ca.

About data storage and encryption

Data entered in Tandem is stored in an Amazon Web Services (AWS) data center located in Canada and is securely encrypted at rest.

Timeout of the system

For security purposes, the system will automatically log out users after a period of three days.

Glossary of terms

This glossary defines important terms that are used within Tandem.

Application

Once an institution has submitted a Request for Accreditation (RFA) to the CEAB Secretariat, the system administrator opens an "application" in Tandem. An application contains all program(s) and program option(s) for which an institution is requesting accreditation in relation to a specific visit cycle. An application is closed when the final accreditation decision has been made, and the institution has been notified.

Assignee

Only <u>trusted contacts</u> of the institution have permission to assign the completion of an <u>instrument</u> to individuals within Tandem. The assignee will be able to access the instrument (e.g., the Questionnaire) under their "My Items" <u>persona</u>.

Certificate number (C/N)

A certificate number (C/N) serves as a tracking identifier for a program accreditation decision at the institutional level within Tandem. This will be primarily used by the CEAB Secretariat for tracking purposes.

Generic course information

Generic course information refers to basic information about a course that should be applicable to that course regardless of the program(s) offering it. This enhancement to the accreditation process is designed to minimize redundant data entry by enabling the input of generic course information only once. Within Tandem, this information is entered into the "Course information" form.

Instrument

In Tandem, a tool that collects data from institutions is referred to as an "instrument". The *Questionnaire for the Evaluation of an Engineering Program* is one such instrument. Once the CEAB Secretariat receives a Request for Accreditation on behalf of an institution, a Questionnaire will be accessible in Tandem for each program seeking accreditation.

Length of term factors

The "length of term factors" refers to the calculation that provides the average length of the academic term in weeks that is utilized by Tandem to calculate a course's AUs per term.

Persona

Tandem uses two personae, "Organization Representative" and "My Items," to filter the user experience within the system.

The persona "Organization Representative" is intended for HEI representatives who are involved in the preparation and submission of materials for an accreditation visit. Through the "Organization Representative" persona, these administrative users, referred to as "<u>trusted contacts</u>" in the system, will be able to enter course information, complete faculty members' profiles, and submit the Questionnaire.

When applicable, by entering Tandem under "My Items", users will be able to access the functions that have been specifically assigned to them. That is, if the completion of the Questionnaire has been assigned to you directly by a <u>trusted contact</u>, you will gain direct access to it via your "My Items" persona.

Primary contact

A "primary contact" is a member of the program's administrative team that acts as the main contact between the CEAB Secretariat and the program(s) during the accreditation visit process. When submitting a Request for Accreditation, HEIs are required to specify on the form the name of the designated official who will be the point of contact for the CEAB Secretariat. The <u>system administrator</u> at Engineers Canada, when preparing the <u>application</u> within Tandem, will assign the status of "primary contact" to this individual. The system allows **only one** "primary contact" per institution. If an institution has identified multiple designated officials on their RFA, the main contact must be specified. The name and email address of this contact will be displayed on the Tandem homepage as the organization's "primary contact". This status does not grant access to the system. If the "primary contact" requires access to Tandem, this contact can also be made a trusted contact.

Program artifacts

"Program artifacts" are summary views of different components of evidence from the program. These artifacts can be utilized by institutions as visual tools to get a comprehensive overview of the program once all generic course and program-specific information have been entered in the corresponding forms.

Program dashboard

The "Program dashboard" is built from the information entered in the "Course information" form and the "Program-specific information" form. This dashboard gives a summary view of the main components of your program such as the list of courses attached to the program and the program's AU count. You can use this dashboard and the "Program artifacts" section to review the content of the accreditation materials your institution is submitting for the visit.

Program-specific information

This is information specific to a course offered in a specific program. For each course in a program, the HEI must fill out the "Program-specific information" form as it complements the information previously entered in the "Course information" form.

System administrator

Tandem's "system administrator" refers to the individual at Engineers Canada responsible for managing user access, configuring the system, and troubleshooting technical issues.

Trusted contact

A "trusted contact" is the main administrative user of the system that will act on behalf of the organization (i.e. submit visit materials) within Tandem. Institutions, when submitting their Request for Accreditation, must also specify which individual(s) from their program(s) should have access to the system. Institutions may have one or more trusted contact. A trusted contact can create,

update, and delete contacts in Tandem, who may also be assigned the status of trusted contacts, if applicable. This status can be added and removed at any time during the accreditation process.

Getting started

This section provides instructions about password management and access to Tandem.

Access to the system

Tandem training environment

This environment acts as a controlled and safe space where users can learn, experiment, and prepare themselves for the actual use of Tandem (known as "the production environment") for the submission of accreditation materials. All data entered in Tandem's training environment **cannot be transferred** to the production environment. If you would like to get a user account for this environment, please contact <u>visits@engineerscanada.ca</u>. To access the training environment, <u>click here</u>.

Tandem production environment

In this environment, users submit their accreditation materials. Unlike the training environment, the production environment is the authentic space where finalized and validated data and submissions are processed for official use. To access the production environment, <u>click here</u>.

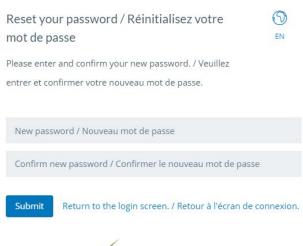
What you need

Tandem is a web-based tool. If you have an internet connection and a web browser (for optimal results, we recommend using Google Chrome), you can access the system.

Set your password

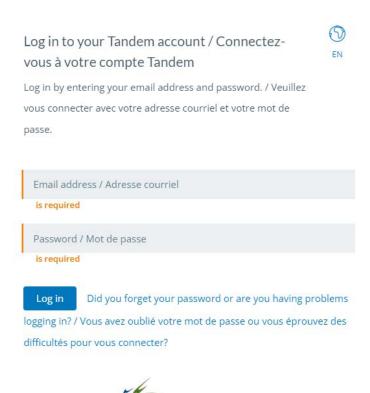
You have received an email from accreditation@engineerscanada.ca confirming that a Tandem user account has been established with your email address. To set your password and access the system:

- 1. Open the email. If the email does not appear in your inbox, check your junk mail folder.
- 2. Click the link to set your initial password and access the system. You will then be redirected to the Tandem reset password screen. This link expires 30 days from the issue date.
- 3. Enter your password in the box "New password." Your password must be at least 8 characters long and contain at least one lower case character, one upper case character, one number, and one symbol.
- 4. Enter your password in the box "Confirm new password".
- 5. Click "Submit".
- 6. Click "Return to the login screen" to log in for the first time.





- 7. After you are redirected to the Tandem login screen, enter the email address associated with your account.
- 8. Enter the password associated with your account.
- 9. Click on "Log in".





Password rules

Your password must be at least 8 characters long and contain at least one lower case character, one upper case character, one number, and one symbol.

End-user license agreement

The first time you log in to Tandem you will be asked to read and agree to the End-User License Agreement (EULA). Accepting the EULA is a one-time requirement unless the agreement changes. If the EULA changes, you will be asked to read and agree to the updated terms. If you do not agree to the terms of the EULA, you will not be granted access to Tandem.

- 1. Read the EULA.
- 2. If you agree to the terms of the EULA, click "I AGREE". You will then be redirected to your Tandem dashboard.
- 3. If you do not agree to the terms of the EULA, click "I do not agree and wish to log out".

Log in to Tandem

Once you have set your password:

- 1. Go to Tandem.
- 2. Enter the email address associated with your account.
- 3. Enter the password associated with your account.
- 4. Click "Login".

Log out of Tandem

- 1. Click the "Me" icon in the top, right-hand corner of your screen.
- 2. Select "Logout" from the dropdown list. You will then be redirected to the Tandem login screen.

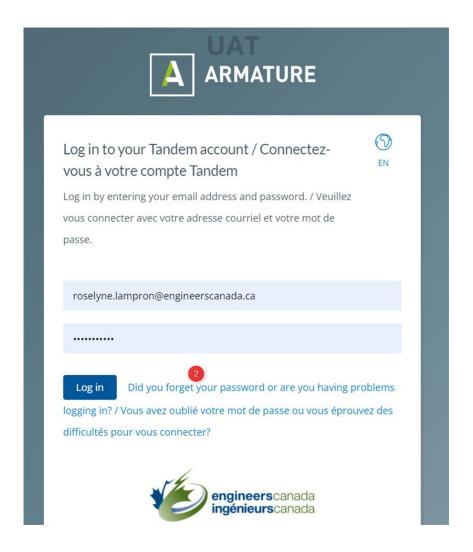


Reset your password

There are two areas where users can reset their password. Refer to the Tandem <u>password rules</u> to ensure your password complies with the security requirements.

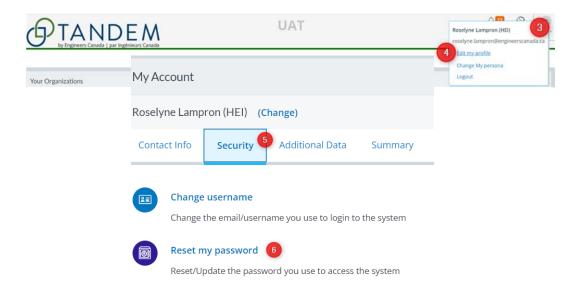
Before logging into Tandem

- 1. Go to Tandem.
- 2. Click "Did you forget your password or are you having trouble logging in?"
- 3. Enter your email address and you will receive a "password reset confirmation" email with instructions to log into your account. If the email does not appear in your inbox, check your junk mail.
- 4. Click the link to reset your password. You will then be redirected to the Tandem reset password screen. This link expires 30 days from the issue date.
- 5. Enter a new password.



After logging into Tandem

- 1. Go to Tandem.
- 2. Log in to Tandem.
- 3. Click the "Me" icon from the top, right-hand corner of your screen.
- 4. Click "Edit my profile".
- 5. Click "Security".
- 6. Click "Reset My Password".
- 7. Enter your current password and your new password, and then confirm your new password.



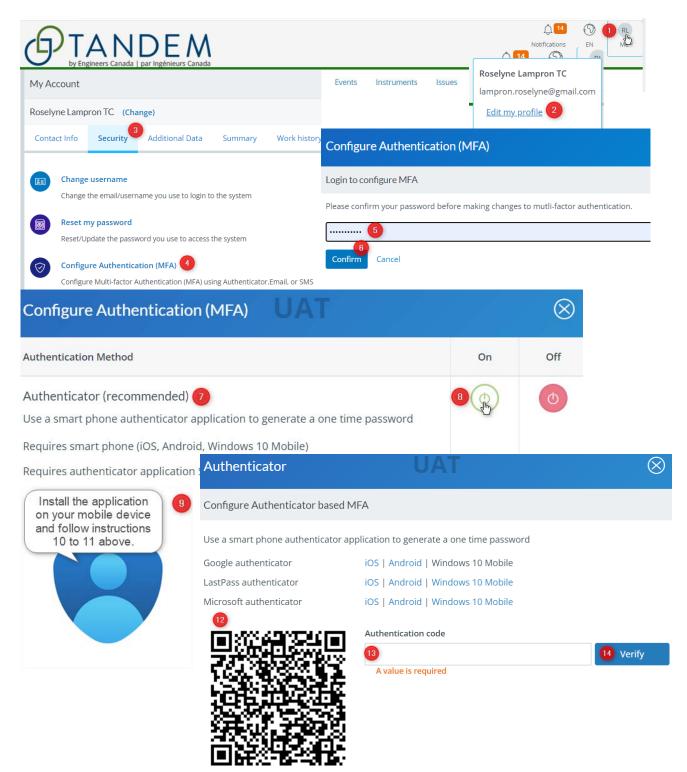
Enable multi-factor authentication

For enhanced security of your account, we recommend enabling the multi-factor authentication (MFA).

To enable the MFA:

- 1. Click the "Me" icon from the top, right-hand corner of your screen.
- 2. Click "Edit my profile".
- 3. Click "Security".
- 4. Click "Configure Authentication".
- 5. Confirm your password.
- 6. Click "Confirm".
- 7. The preferred method is the "Authenticator".
- 8. Select "On".
- 9. We recommend that you install the "Microsoft Authenticator" application on your mobile device.
- 10. Open your application on your device.
- 11. Click on the "plus" icon to add an account.
- 12. From Tandem, scan the QR code with your mobile device.

- 13. In Tandem, enter the authentication code generated by the "Microsoft Authenticator" application on your mobile device.
- 14. Click on "Verify".
- 15. Close the configuration window.
- 16. From now on, every time you connect to Tandem, you'll need to enter a unique code generated by the application installed on your mobile device.



Access to Tandem training materials

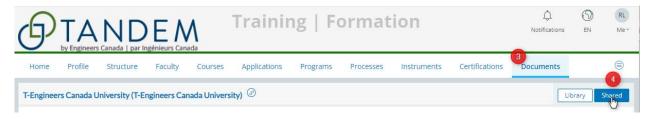
To assist users in becoming familiar with Tandem, we have developed training materials, such as tutorials and training scenarios. The tutorials cover themes aligned with the principal sections of the User Guide:

- How to create a trusted contact.
- How to enter faculty members' information.
- How to set the length of term factors.
- How to enter generic course information.
- How to assign courses to a program.
- How to enter program-specific information.
- How to review a program dashboard.
- How to complete and submit a Questionnaire.

To access the playlist of these tutorials on YouTube, click here.

All training materials are available in the shared folder on Tandem, accessible in both the training and production environments. To access the training materials on Tandem:

- 1. Go to Tandem (training or production environment).
- 2. Log in to Tandem.
- 3. Click on the "Documents" tab.
- 4. Click on "Shared".



Tandem tips

- Tandem is compatible with all major web browsers, but for optimal performance we recommend using Google Chrome.
- Tandem relies on pop-up windows; be sure that pop-ups are enabled in your web browser.
- To facilitate navigation, it may help to have multiple tabs open and logged into Tandem.
 - Logging in on a second tab using "incognito mode" will allow you to navigate around Tandem without impacting your work on your primary tab. When you use incognito mode, your browser won't save your browsing history, cookies, site data, or any information entered in the forms.
 - To activate incognito mode with Google Chrome: click on the three-dot menu icon in the top-right corner and select "New Incognito Window" or use the keyboard shortcut Ctrl+Shift+N.

- If the email address associated with your Tandem account changes, provide your new email address to the Tandem system administrator at accreditation@engineerscanada.ca. You will be required to set your password for a new email address.
- If you experience difficulties accessing your account, contact the Tandem system administrator at accessing your account, contact the Tandem system administrator at accessing your account, contact the Tandem system

Entering Tandem

This section provides information about the Tandem's personae, the system's main dashboard, language preferences, and the general menu.

Persona

One or two personae, "My Items" or "Organization Representative", have been assigned to your account. The persona(e) available to you depends on your role in Tandem and on the type of activities you need to execute. These two personae help filter and personalize your Tandem experience.



My Items

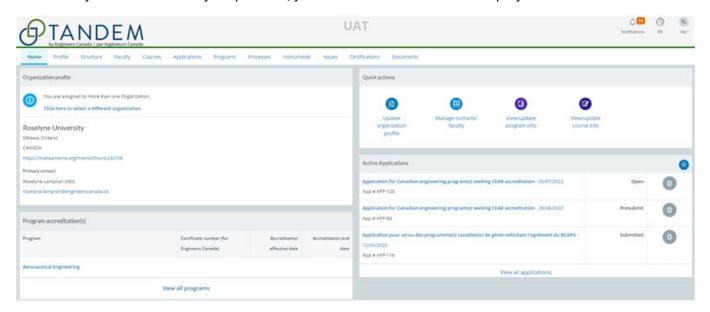
By entering Tandem under "My Items", users will be able to access the functions that have been specifically assigned to them, when applicable. For example, if the completion of the Questionnaire has been assigned to a staff member directly, they will gain direct access to it via their "My Items" persona. As part of a visiting team, under "My Items" persona, a visitor will gain access to accreditation materials submitted by the HEI and made available by the CEAB Secretariat to review.

Organization Representative

By entering Tandem under the "Organization Representative" persona, user experience depends on the access level they have been granted. Some users may have limited access to view the read-only mode. Others may have more extensive access and act on behalf of the organization (i.e. submit visit materials) within Tandem. In the system, these users are referred to as "trusted contacts".

Tandem dashboard

After you have selected your persona, your Tandem dashboard will display as below.



Language preferences

Tandem is a bilingual platform accessible in both English and French. Users have two options to select their preferred language—before entering Tandem or after accessing the platform.

• **Before entering Tandem**, when choosing your persona, you can select your preferred language.



- After entering Tandem:
 - 1. Navigate to the top, right-hand corner of your screen.
 - 2. Select your preferred language setting from the dropdown menu (English or French).



My Account

On the top, right-hand corner of your screen, click on the "Me" icon to edit your profile, change your persona (if applicable), or log out. If you click on "Edit my profile", the "My Account" general menu will open. You may view your individual contact information (address, phone number, email) as well as other information.



Tandem overview - Organization Representative

This section offers an initial overview of Tandem's primary tabs for the "Organization Representative" persona. It defines only the tabs relevant to, and utilized during, the accreditation visit process. These tabs include home, profile, faculty, courses, programs, instruments, certifications and documents.

Home tab

The "Home" tab is the dashboard of your chosen persona and the default landing page when you log in to Tandem. Whenever you want to go back to the "Home" tab, you can click on the logo "Tandem" in the top left corner.

Profile tab

From the "Profile" tab, you can view the contact information (phone, email, address) of your HEI. The "Additional Info" link is where the HEI enters the information that will generate the calculation of the <u>length of term factors</u>.

Faculty tab

The "Faculty" tab contains the HEI's staff directory of faculty members and administrative users for accreditation purposes.

Courses tab

The "Courses" tab contains the list of all the courses offered by engineering programs at your HEI.

Programs tab

The program(s) and program option(s) for which your HEI is requesting accreditation are listed under the "Programs" tab. You can access the dashboard of a program and its artifacts from this tab.

Instruments tab

The "Instruments tab" contains the list of all instruments made available to your HEI within Tandem. In Tandem, a tool that collects data from institutions is called an "instrument". The *Questionnaire for the Evaluation of an Engineering Program* is one such instrument. Once the CEAB Secretariat receives a Request for Accreditation on behalf of an institution, a Questionnaire will be made accessible in Tandem for each program seeking accreditation.

Certifications tab

This tab serves as a historical record documenting accreditation decisions granted to a program. Only the institution's dean has access to view the decision letters.

Documents tab

The "Documents" tab is a repository of documents. The "Shared" button gives access to Tandem training materials intended for HEI users.

Determining contact status

Within Tandem, there are two contact statuses: "primary contact" and "trusted contact". When creating a Tandem user account, the Engineers Canada's <u>system administrator</u> must determine which individual will be designated as the primary contact for the institution and which accounts will have access to the system's features.

When submitting their Request for Accreditation, institutions are required to specify on the form the name of the designated representative who will be the point of contact for the CEAB Secretariat. The <u>system administrator</u> at Engineers Canada, when preparing the <u>application</u> within Tandem, will assign the status of primary contact to this designated official. The system allows **only one** "primary contact" per institution. If an institution has identified multiple designated officials on their Request for Accreditation form, the main contact must be specified. The name and email address of that contact will be displayed on the Tandem homepage as the "primary contact". This status does not grant access to the system.

Institutions, when submitting their Request for Accreditation, must also specify which individuals from their program(s) should have access to the system. Users who are granted access to the system's features will be designated as trusted contacts. A trusted contact is the main administrative user of the system that will interact with Tandem at the different stages of the accreditation process and act on behalf of the organization (i.e. submit visit materials). Institutions may have one or more trusted contact. A trusted contact can create, update, and delete contacts in Tandem, and they can assign the status of trusted contacts to others. This status can be added and removed at any point during the accreditation process. If the primary contact requires access to Tandem, this contact can also be granted the trusted contact status.

Create a trusted contact

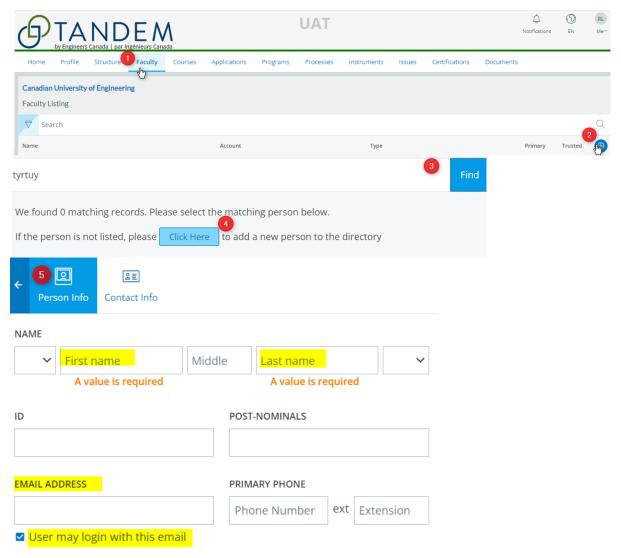
This section provides information on how to create a trusted contact user. This user can either be a faculty member or a support staff member.

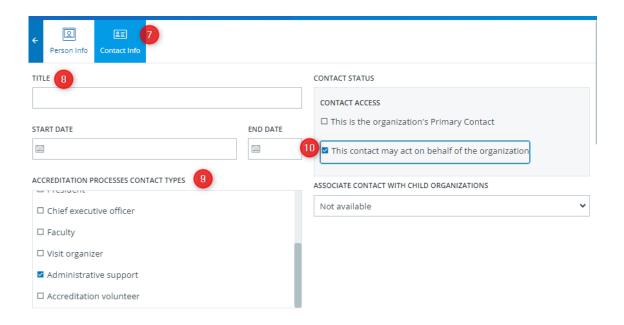
To create a trusted contact in Tandem:

- 1. Click on the "Faculty" tab.
- 2. Click on the "Plus" button located on the right of the screen.
- 3. To create a new entry, type any characters into the search bar and click "Find".
 - If you are updating an existing contact, use the search bar to find them, or click on the contact's name on the "Faculty" page. Then, simply update the contact profile.
- 4. Click on "Click here". An empty form will appear in a new window.
- 5. Select "Person info".
- 6. Only provide the first name, last name and email address of the contact. Select "User my login with this email". This will grant the contact access to the system.
- 7. Select "Contact info".

- 8. If applicable, provide the title of the individual.
- 9. Select the appropriate contact type(s) from the list.
- 10. Select "This contact may act on behalf of the organization". This is how the system assigns trusted contact permissions. You can revoke this status by simply unchecking this box at any point during the visit cycle.
- 11. Click "Save". A "New User Email Message" will be automatically generated.
- 12. Depending on the institution's language, keep only the French or English version of the email.
- 13. Click "Send Email".

This new contact will receive an email informing them that a Tandem user account has been created with their email address. They will need to click on the link provided in the email to set their initial password and access the system. Instructions about Tandem password rules are provided in the section "Password rules" of the User Guide. All trusted contacts on the "Faculty" page are identified by a green shield icon next to their names. Updated contacts will have this icon displayed beside their names, but no system notifications will be sent to them.



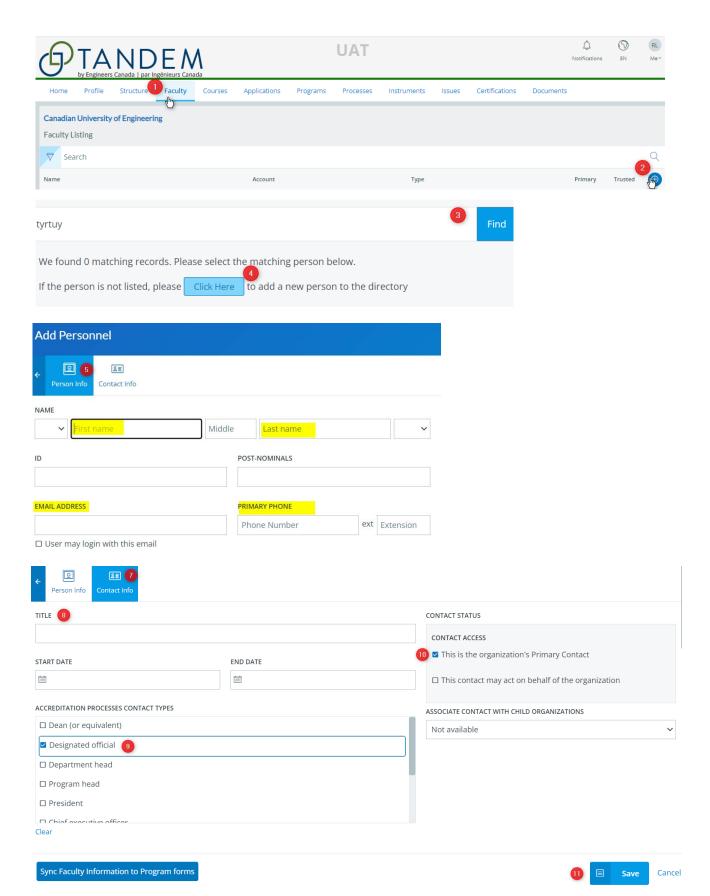


Assign the primary contact status

This section provides information on how to assign the primary contact status.

To assign the primary contact status in Tandem:

- 1. Click on the "Faculty" tab.
- 2. Click on the "Plus" button located on the right of the screen.
- 3. To create a new entry, type any characters into the search bar and click "Find".
 - If you are updating an existing contact, use the search bar to find them, or click on the contact's name on the "Faculty" page. Then, simply update the contact profile.
- 4. Click on "Click here". An empty form will appear in a new window.
- 5. Select "Person info".
- 6. Only provide the first name, last name, email address and phone number of the contact. If this individual does not require access the system, do not select "User my login with this email".
- 7. Select "Contact info".
- 8. If applicable, provide the title of the individual.
- 9. Select the appropriate contact type(s) from the list.
- 10. Select "This is the organization's Primary Contact".
- 11. Click "Save".



Tandem tips

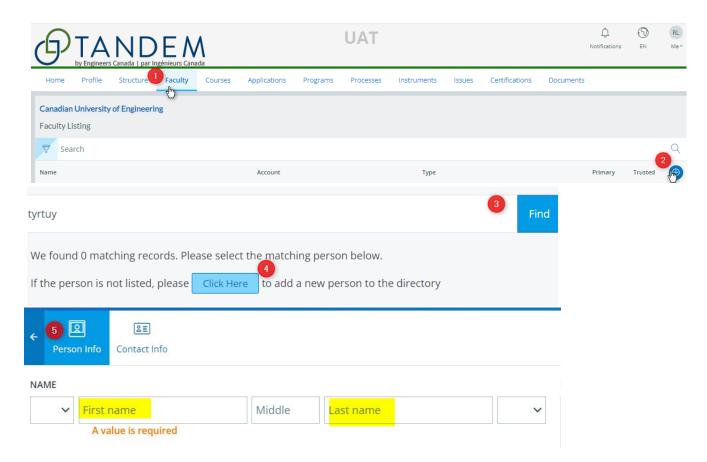
- When submitting their Request for Accreditation, institutions are required to specify on the form the name of the designated representative who will be the point of contact for the CEAB Secretariat. This designated official will be granted the "primary contact" status.
- The "primary contact" status does not grant access to the system.
- Only one person per institution can be listed as primary contact. If there is a change at the institution, it is possible to assign this status to another contact.
- Institutions, when submitting their Request for Accreditation, must also specify which individuals from their program(s) should have access to the system. Users who are granted access to the system's features will be designated as trusted contacts.
- Institutions may have one or more trusted contact.
- The system designates trusted contact as "This contact may act on behalf of the organization".
- After creating a contact, if any updates to their names or email address are needed, please send an email to Engineers Canada staff at <u>visits@engineerscanada.ca</u>.
- To learn how to create a trusted contact, you can watch the tutorial.

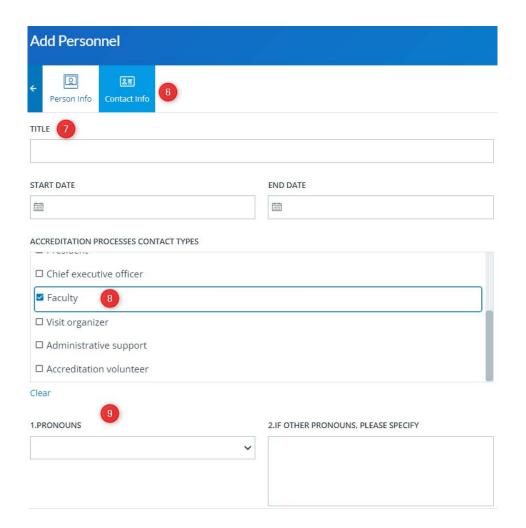
Entering faculty members' information

This section provides instruction on how to enter and update faculty members' information in Tandem.

To enter or update faculty members' information:

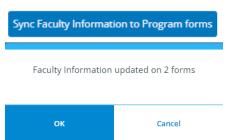
- 1. Click on the "Faculty" tab.
- 2. Click on the "Plus" button located on the right of the screen.
- 3. To create a new entry, type any characters into the search bar and click "Find".
 - If you are updating an existing contact, use the search bar to find them, or click on the contact's name on the "Faculty" page. Then update the contact profile as required.
- 4. Click on "Click here". An empty form will appear in a new window.
- 5. Select "Person info". Only provide the first name and last name of the faculty member.
- 6. Select "Contact info".
- 7. If applicable, provide the title of the individual.
- 8. Select the appropriate contact type(s) from the list.
- 9. Provide information in all relevant fields numbered 1 to 19 of the contact's info.
- 10. Click "Save".





Synchronise faculty members' information to program-specific information forms

Use the button "Sync Faculty Information to Program Forms" when you have already linked a faculty member to program-specific information forms, and you need to update details. By clicking the synchronization button, the faculty member's information will be updated in all the courses associated with them.



- After clicking on the "Sync" button, a confirmation window will appear, displaying the number of forms updated with the new information.
- If you have edited the "hire date", "licensure status", "highest degree awarded", or "academic rank" fields, make sure to update all program-specific information forms the faculty member has been assigned to.

o To do so, you must open the relevant program-specific information forms that were updated and save them again. Instructions for accessing these forms are provided in the section called "Entering program-specific information" of the User Guide.

Tandem tips

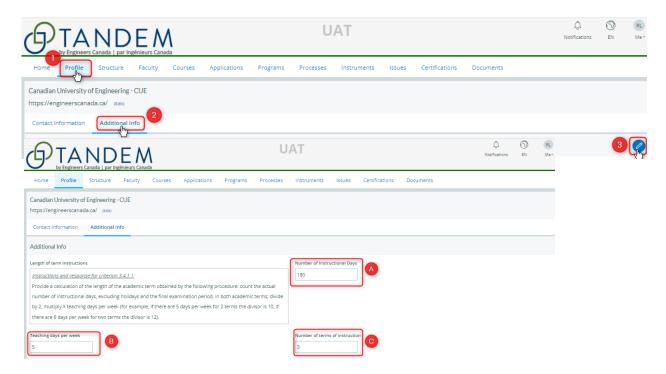
- When adding a new faculty member, ensure to avoid creating duplicates, as the system does not detect them.
- When completing a faculty member's profile, do not forget to indicate the licensure status
 of the faculty member, as this field is utilized for AU calculation of courses in Engineering
 Science and/or Engineering Design that must be taught by a faculty member licensed to
 practice engineering in Canada.
- Click on the "Sync Faculty Information to Program Forms" button when you have already associated a faculty member with program-specific information forms and need to update details. If you have modified details like "hire date", "licensure status", "highest degree awarded", or "academic rank" for a faculty member, ensure these updates are recorded in all program-specific information forms the faculty member has been assigned to.
- Use the "Faculty" tab to create support staff members' accounts. To give them access to the system, you must provide their email address in the "Person info" section and click on "User may login with this email".
- After creating a contact, if any updates to their names or email address are needed, please send an email to Engineers Canada staff at <u>visits@engineerscanada.ca</u>.
- To learn how to enter faculty members' information, you can watch the tutorial.

Setting the length of term factors

The "length of term factors" refers to the calculation that provides the average length of the academic term in weeks that is utilized by Tandem to calculate a course's AUs per term. These factors can be entered into Tandem once and they will be auto-generated for any new course information forms created. Before entering course information, we recommend you set the length of term factors. If there are variations in the length of term factors across courses, you have the option to manually edit them within the "Course Information" form. These manual edits will only affect the specific course and will not impact the calculation for other courses. To manually adjust the length of term factors, please refer to the instructions provided in the "Entering generic course information" section of the User Guide.

To configure the automated feature of the system that calculates the length of term factors:

- 1. Click on the "Profile" tab.
- 2. Click on "Additional info".
- 3. Click on the pencil icon to enter the numbers that will allow the system to calculate the length of the term factors. The numbers provided here are examples; each institution should be entering its own numbers.
 - A. Enter the number of instructional days per academic year, including all academic terms, but excluding holidays and the final examination period.
 - B. Enter the number of teaching days per week.
 - C. Enter the number of terms of instruction in an academic year.
- 4. Click "Save".



Tandem tips

- Before entering course information, we recommend you set the length of term factors so that the calculation of this factor will be automatically generated for any new courses your institution will be creating.
- To learn how to set the length of term factors, you can watch the <u>tutorial</u>.

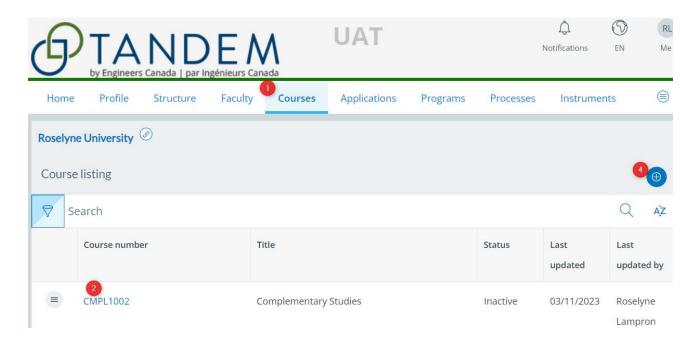
Entering generic course information

Generic course information refers to basic information about a course that should be applicable to that course regardless of the program(s) offering it. This enhancement to the accreditation process is designed to minimize redundant data entry by enabling the input of generic course information only once. These functionalities significantly contribute to maintaining data integrity and consistency while alleviating the data-entry workload for your institution. Later in the process, you will learn how to enter program-specific information unique to the course offered within a specific program.

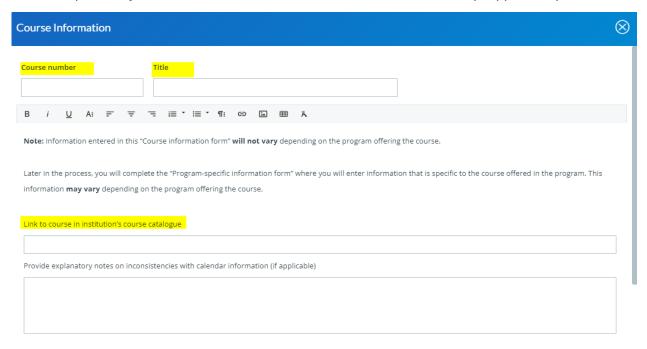
Before entering course information, we recommend you set the length of term factors so that the calculation of this factor will be automatically generated for any new courses your institution will be creating. Instructions are provided in the section "<u>Setting the length of term factors</u>" of the User Guide.

To enter generic course information:

- 1. Click on the "Courses" tab.
- 2. To update an existing course, select the course number.
- 3. You can also:
 - Use the search bar to find the course you are looking for;
 - Sort the list by creation dates; or
 - Use the filter option to display all courses.
- 4. To create a new course, click on the plus button.



5. You will access the "Course information" form, which is based on the former Excel file 6C. When you open the form, you will need to provide the following highlighted information: course number, course title, link to course in the institution's course catalogue, and explanatory notes on inconsistencies with calendar information (if applicable).

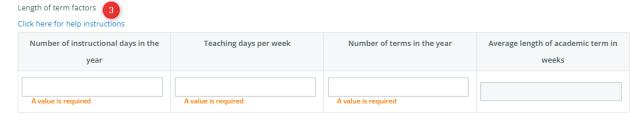


AU calculation type

1. Select the relevant AU calculation type.



- 2. For the Accreditation Units type, the calculation of the <u>length of term factors</u> is automatically populated based on the numbers you entered previously under the "Profile" tab if applicable.
- 3. If needed, the length of term factors can be manually modified here. This will not change the calculation for any other courses.



For the other calculation methods (K factor, Manual, Prior studies), the AU calculation methodology must be described.

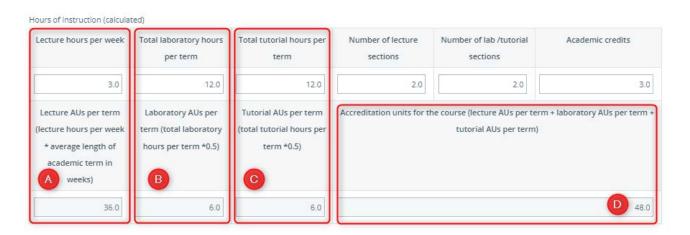
- 4. From the dropdown list, select the appropriate calculation type (K factor, Manual, Prior Studies).
- 5. Describe your AU calculation methodology in the comment box.



Hours of instruction

Enter appropriate data in each field related to hours of instruction.

- A. The total lecture AUs per term will be automatically calculated based on the lecture hours **per week** multiplied by the average length of the academic term in weeks.
- B. The total of laboratory AUs per term will be automatically calculated based on the total laboratory hours **per term** multiplied by 0.5.
- C. The total of tutorial AUs per term will be automatically calculated based on the total tutorial hours **per term** multiplied by 0.5.
- D. Once all fields are completed, the accreditation units for the course (lecture AUs per term + laboratory AUs per term + tutorial AUs per term) are automatically calculated.



Enter appropriate data in each field related to:

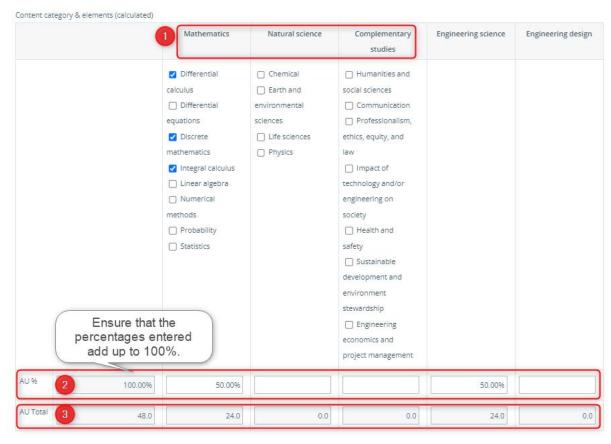
- E. The number of lecture sections.
- F. The number of lab/tutorial sections.
- G. The number of academic credits awarded to students for successful completion of the course.



Content category & elements

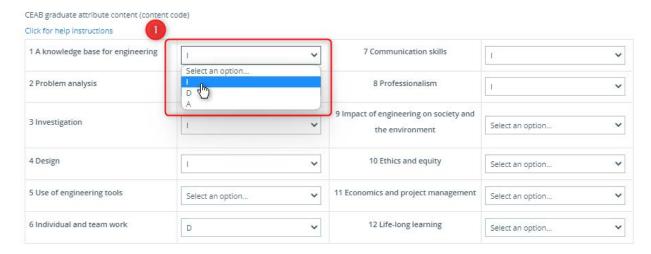
- 1. When applicable, select the appropriate elements of the listed content categories (mathematics, natural science, complementary studies) that are covered in the course.
- 2. Then, specify the percentage of AUs for each content category (including engineering science and engineering design).
- 3. The total of AUs per component will be automatically calculated.

Note: It is important to verify that the percentages entered add up to 100%. For this specific calculation, the system does not identify when the total exceeds or fails to meet 100%.



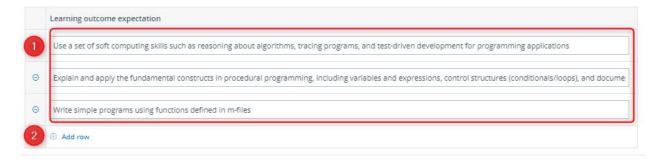
CEAB graduate attribute content

- 1. When applicable, select the most appropriate descriptor for each graduate attribute:
 - "I" = introduced/ introductory.
 - "D" = developed/intermediate.
 - "A"= applied/ advanced.



Learning outcome expectation

- 1. List the learning outcome expectations for this course.
- 2. To add an entry, click on "Add row".



Elective courses

For programs that offer many complementary studies, which may include courses offered in departments outside of the Faculty of Engineering, you can divide these courses into common groups from an AUs perspective. Create a generic "Course information" form for each group and only fill in the required data fields. Click "Save" initially to identify the required fields. For the calculation of the minimum path, please ensure that the AUs recorded are the lowest from any possible course.

Tandem tips

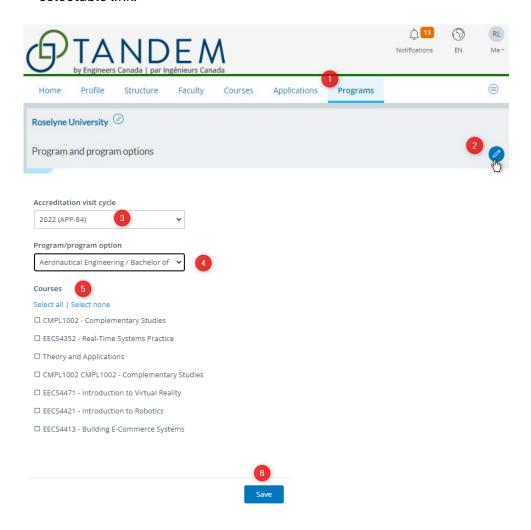
- You can remove a course by clicking on the menu next to the course number, except when the course has been assigned to a program. In such cases, you must archive it instead.
- When a value is required in a specific field, it will not be possible to save the form if those fields have not been populated. Please make sure that all required information has been entered and then click "Save".
- In the "Content category & elements" section of the "Course information" form, it is important to verify that the percentages entered add up to 100%. For this specific calculation, the system does not identify when the total exceeds or fails to meet 100%.
- To learn how to enter generic course information, you can watch the tutorial.

Assigning courses to a program

Previously, you entered generic course information through the "Course information" form. This form allows you to enter generic data only once and assign it across multiple programs, as necessary. Subsequently, for each course within a specific program, you will add additional information using the "Program-specific information" form, which pertains exclusively to the course within the program that is seeking CEAB accreditation.

To assign courses to a program:

- 1. Click on the "Programs" tab.
- 2. Click on the pencil icon.
- 3. Select the relevant application from the dropdown list titled "Accreditation visit cycle".
- 4. Select the program assigned to the specific application that you wish to assign courses to.
- 5. Select all the courses you wish to assign to that program.
- 6. Click "Save". The name of the program will appear in blue, which indicates it is now a selectable link.



7. To access the program dashboard, click on the name of the program you have just assigned at least one course to. The program dashboard is where you will input details of the courses offered in this specific program, such as the names of the instructors.

Program		Program option	Accreditation cycle	Courses
Aeronautical Ingineering	7		2023 (APP-143)	7

Entering program-specific information

Information entered in the "Program-specific information" form is information unique to a course offered in a specific program. For each course in a program, you must fill out this form as it complements the information you previously entered in the "Course information" form.

Information entered in the "Course information" form and the "Program-specific information" form serves to populate the "Program artifacts", which are accessible via the program's dashboard. "Program artifacts" are summary views of different program elements that will be reviewed by the visiting team. Leaving blank fields in these forms will generate incomplete summaries for the visiting team to review.

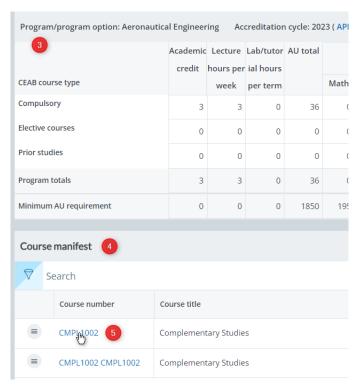
To enter program-specific information:

- 1. Click on the "Programs" tab.
- Click on the appropriate program name. For a program name to be selectable, at least one course must have been

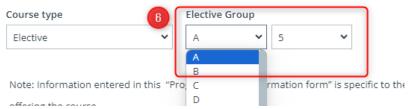


assigned to it. (Detailed instructions are provided in the section "<u>Assigning courses</u> to a program" of the User Guide.)

- 3. You are now in the program dashboard.
- 4. All the courses assigned to the program are listed under the "Course manifest".
- Click on each course number to access and complete the corresponding "Program-specific information" form. You can also use the search bar to look for a specific course.
 - Information entered in the "Course information" form can be viewed here, but not edited. If you wish to make any changes to the "Course information" form, you must return to the "Courses" tab. (Detailed instructions are provided in the section "Entering generic course information" of the User Guide).



6. For elective courses, you need to specify the group (A, B, C, etc.), and select the number of electives students can choose within that group.



- This will enable the calculation of the minimum path and populate the program artifact called "Minimum path compulsory and elective courses".
- 7. The rest of the form is the same for compulsory or elective courses.
- 8. When you created the course through the "Course information" form, you added graduate attributes and descriptors. Click on the **pencil icon** to update and review the following information:
 - Term of instruction.
 - Learning level (descriptor), which can only be edited from the "Course information" form.
 - Student achievement assessment.
 - Graduate attribute indicator(s) for the course.



9. Click "Done" to return to the "Program-specific information" form.



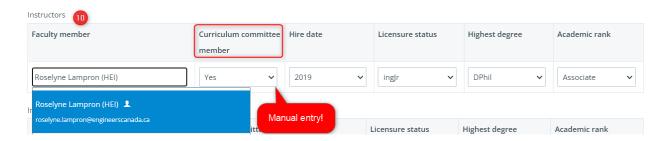
- 10. Under the "Instructors" section, you can import faculty information including hire date, licensure status, highest degree, and academic rank. This information would have been entered for each instructor earlier through the "Faculty" tab. We recommend you complete this section of the form when the faculty members' information has been entered under the "Faculty" tab and the instructors have been appointed to teach the course. (Detailed instructions are provided in the section "Entering faculty members' information" of the User Guide). To import this information:
 - Start typing the name of the instructor in the type-ahead field.
 - Select the name of the instructor.
 - Click on "Import Faculty Details.



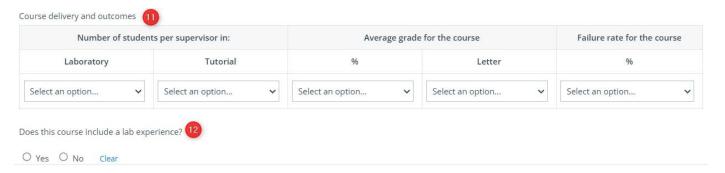
• If you have multiple instructors for that course, we recommend you list all faculty members first and then click on the "Import Faculty Details" button.

It is important to note that the "Curriculum committee member" field is a **manual entry**. This information will populate the list of curriculum committee members in the "Program artifacts".

The AU calculation of courses in engineering science or engineering design that must be taught by a faculty member licensed to practice engineering in Canada (known colloquially as the "specified AUs") is based on the information provided for the faculty member listed under the first "Instructors" section of the form.



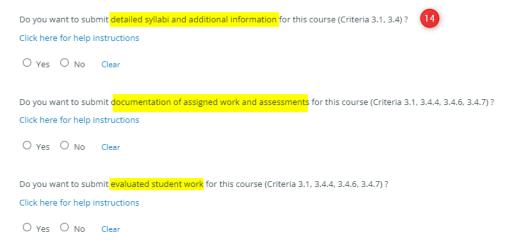
- 11. Under the "Course delivery and outcomes" section, enter the relevant information in relation to:
 - The number of students per supervisor in laboratory sections.
 - The number of students per supervisor in tutorials.
 - The average grade for the course, as a percentage.
 - The average grade for the course, as a letter grade.
 - The failure rate for the course.



- 12. Indicate if the course includes a laboratory component. If so, provide the appropriate details.
- 13. In the table under the "Required Text(s)" header, enter relevant information.
 - Any style guide can be used for citations, but you are asked to ensure consistency within a course and, preferably, across all courses in a program.
 - To add an entry, click on "Add row".



- 14. For each course, you should provide:
 - Detailed syllabi and additional information.
 - Documentation of assigned work and assessments.
 - Examples of evaluated student work.



Assigned work and assessments, as well as evaluated student work, can be uploaded directly into Tandem or submitted by providing a link to the designated folder on the institution's web-based collaborative platform (e.g., SharePoint). Providing the link to the exact folder where a course's information is stored is crucial to ensure the accuracy of your submission. If you wish to provide a link for the visiting team to access your institution's platform:

- 15. Click on "Yes" and enter the appropriate link.
- 16. To add an entry, click on "Add row".

Do you want to submit evaluated student work for this course (Criteria 3.1, 3.4.4, 3.4.6, 3.4.7)?

Clack here for help instructions

1. For culminating design experiences, provide all student deliverables from ten evaluated projects, including, but not limited to, written reports, physical models, or mathematical models as appropriate. If less than ten projects were completed in the course, include all projects. These samples must include at a minimum, three examples of work that in the opinion of the instructor marginally meet expectations at the time of assessment. If all work meets expectations, provide at least three works that, in the opinion of the instructor(s), are the lowest quality products.

Description

Upload

Hyperlink if needed

Or Choose Existing

17. When the form is complete click on "Save".

Tandem tips

- Information entered in the "Course information" form and the "Program-specific information" form serves to populate the "Program artifacts", accessible via the program's dashboard. "Program artifacts" are summary views of different program elements that will be reviewed by the visiting team. Leaving blank fields will generate incomplete summaries for the visiting team to review.
- Under the "Instructors" section, the "Curriculum committee member" field is a **manual entry** field. This information will populate the curriculum committee composition program artifact.
- The AU calculation of courses in engineering science or engineering design that must be taught by a faculty member licensed to practice engineering in Canada (known colloquially as specified AUs) is based on the information provided for the faculty member listed under the first "Instructors" section on the "Program-specific information" form.
- Assigned work and assessments, as well as evaluated student work, can be uploaded
 directly into Tandem or submitted by providing a link to the designated folder on the
 institution's web-based collaborative platform (e.g., SharePoint). Providing the link to the
 exact folder where a course's information is stored is crucial to ensure the accuracy of your
 submission.
- To learn how to enter program-specific information, you can watch the tutorial.

Reviewing a program dashboard

The program dashboard is built from the information entered in the "Course information" forms and the "Program-specific information" forms. This dashboard gives a summary view of the main components of your program. You can use this dashboard, and the "Program artifacts" section, to review the content of the accreditation materials your institution is submitting for the visit.

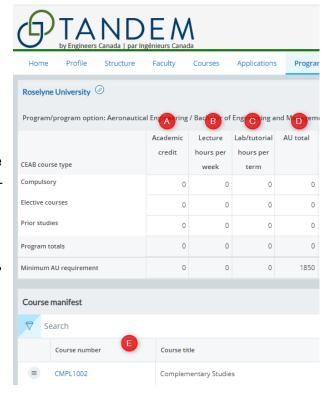
To access the dashboard of a program:

- 1. Click on the "Programs" tab.
- 2. Click on the name of the program you wish to view. To be able to select a program, at least one course must have been assigned to it. (Detailed instructions are provided in the section "Assigning courses to a program" of the User Guide.)
- 3. You are now in the program dashboard.



From the program dashboard, you can see:

- A. The number of academic credits.
- B. The number of hours of lecture per week.
- C. The number of hours of laboratory/tutorial sessions per term.
- D. The summary AU count, based on the courses assigned to the program. (The AU count will only be displayed once the "Course information" and the "Programspecific information" forms are complete and saved.)
- E. The list of courses assigned to the program in the "Course manifest" table, which gives you access to the programspecific information form associated with each course.



On the right-hand side of the page, you can see:

- F. The program's Questionnaire, which is also called an "instrument" in Tandem. To access the Questionnaire, click on the "Questionnaire – [Program name]."
- G. Under the "Program artifacts", you will have access to different views of program elements entered in the "Course information" and the "Program-specific information" forms. The numbers referenced in brackets beside each title match the numbering utilized in the Excel 6C file previously made available on the "Accreditation resources" page of the Engineers Canada website.



The "Program artifacts" links to summary views of your program's components detailed in the "Course information" form and the "Program-specific information" form¹. Program artifacts can only be updated through these two forms.



Program artifacts **G**

Summary graduate attribute map (3.1.1, 3.1.1.a)

Graduate attribute learning-level (3.1.1b/c)

Indicators and learning activities assessed (3.1.2)

Instructors (4.1)

Laboratory experience (4.2)

Enrolment and degree data (4.3)

Minimum path compulsory and elective courses (4.4a/b)

Minimum path summary (4.4c)

Curriculum committee members (4.5)

Average grade and failure rate (4.6)

Leaving blank fields will generate incomplete summaries for the visiting team to review. For instance, in the "Program-specific information" form, it is important to specify the term of instruction for each graduate attribute, indicate whether it is assessed, and detail its indicators. This information enables the system to accurately populate the following three program artifacts:

- 1. Summary graduate attribute map.
- 2. Graduate attribute learning level.
- 3. Indicators and learning activities assessed.

To access the "Course information" form, click on the "Courses" tab and select the appropriate course you wish to update. To access the "Program-specific information" form, click on the "Programs" tab, select the appropriate program you have assigned courses to, and click on the relevant course number under the "Course manifest" header.

Similar to the previous Excel 6C file, the summary views generated in the "Program artifacts" section also display colour-coded cells.

¹ The "Enrolment and degree data" artifact is populated based on the most recently completed Enrolment and Degrees Awarded Survey (EDAS).

- In the Summary graduate attribute map, the Graduate attribute learning level, and the Indicators and learning activities assessed:
 - Cells highlighted in yellow demonstrate where in the program student achievement has been, or is planned to be, assessed.
- In the Minimum path compulsory and elective courses:
 - Cells highlighted in blue indicate what CEAB content category (AU) are included in the minimum path for elective courses.
 - O Cells highlighted in yellow Average grade and failure rate (4.6) demonstrate where in the program student achievement has been, or is planned to be, assessed.

Tandem tips

- In the "Course manifest" table of a program:
 - You can filter the listed courses for status (active, archived) and course type (compulsory, elective, prior studies) using the filter function.
 - o You can search courses using the search bar.
 - You can organize the list of courses using the sorting function; this will allow you to sort by the date the courses' entries were created (either earliest or latest). To return to an alpha-numerically organized list, click the minus sign in the "Created date" widget.
- Similar to the previous Excel 6C file, the summary views generated in the "Program artifacts" section also display colour-coded cells.
- The numbers referenced in brackets next to each program artifact's title corresponds to the numbering utilized in the Excel 6C file previously made available on the "Accreditation resources" page of the Engineers Canada website.
- Program artifacts can only be updated through the "Course information" form and the "Program-specific information" form. Leaving blank fields in those forms will generate incomplete summaries for the visiting team to review.
- To learn how to review a program dashboard, you can watch the tutorial.



Completing and submitting a Questionnaire for the Evaluation of an Engineering Program

Once the CEAB Secretariat has received your Request for Accreditation, a Questionnaire for each program seeking accreditation will be made available for you to complete in Tandem. You can access the Questionnaire from the "Instruments" tab or from the dashboard of the appropriate program.

To access the Questionnaire directly from the "Instruments" tab:

- 1. Click on the "Instruments" tab.
- 2. Click on the name of the Questionnaire of the appropriate program.



To be able to access the Questionnaire from the dashboard of your program, at least one course must have been assigned to the program. (Detailed instructions are provided in the section "Assigning courses to a program" of the User Guide.)

To access the Questionnaire from the "Programs" tab:

- 1. Click on the "Programs" tab.
- 2. Click on the name of the program you wish to view.



3. You are now on the dashboard page of the program. Under the "Instruments" header on the upper right-hand corner of the screen, click on the name of the Questionnaire.



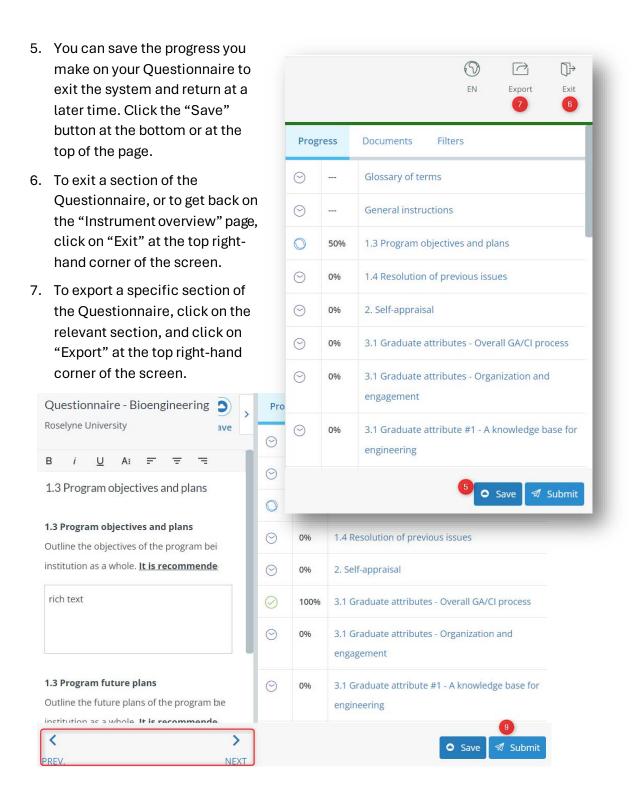
To complete a Questionnaire:

- Click on the different sections and follow the instructions.
- The progress of completion is displayed for each section. To be able to submit the Questionnaire, all sections must display 100%.
- 3. Note that the numbers referenced before each title match the numbering utilized in the former version of the Questionnaire.
- 4. To use the rich text editor in a response box:
 - Type your response.
 - Select the appropriate option you want to use from the upper ribbon.
- Progress Glossary of terms (9) General instructions 0% 1.3 Program objectives and plans 0% 1.4 Resolution of previous issues 9 (9) 0% 2. Self-appraisal (9) 0% 3.1 Graduate attributes - Overall GA/CI process В i≣ * i≣ * ¶: ٨ \blacksquare S X2 A۳ A۸۳

Overall graduate attribute/continual improvement process:

Under this heading, discuss how often a complete data set is collected and analyzed f

- · This is an example.
- Note that you can directly paste text, a table, or an image in a response box.

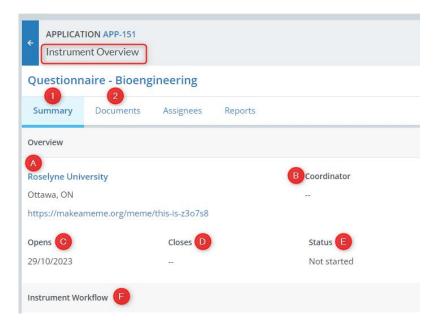


- 8. To navigate between sections in the Questionnaire, you can either click on the titles or click the "Prev." and "Next" arrows at the bottom of the page.
- 9. When all sections of the Questionnaire are completed and finalized, and the progress completion of the Questionnaire displays 100%, click on "Submit".

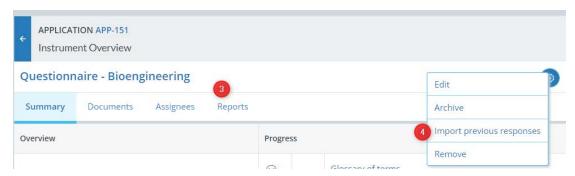
Questionnaire overview

To get to the "Instrument overview" page of the Questionnaire, if you are on a page of the Questionnaire, click on "Exit".

- 1. On the left-hand side of the page, under the "Summary" tab, are listed the following:
 - A. Your institution information.
 - B. The name of your visit coordinator.
 - C. The date the instrument response window will/was open(ed).
 - D. The date the instrument response window will/was close(d).
 - E. The status of the Questionnaire's completion.
 - F. The "Instrument workflow", which indicates the different steps of the process associated with the completion of the Questionnaire until its revision by the visiting team.
- 2. Under the "Documents" tab, you can find all documents uploaded in the Questionnaire by your institution.



- 3. Under the "Reports" tab, you can export a printable PDF copy of the Questionnaire.
- 4. It is possible to import responses from questionnaires previously submitted during past visits by clicking on the gear icon and selecting "Import previous responses."

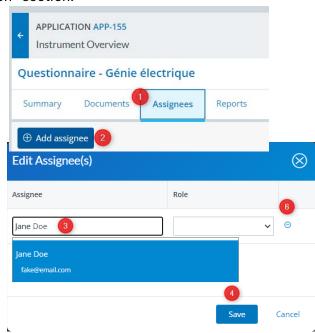


Assign the completion of the Questionnaire

Multiple people (trusted contacts) can work simultaneously on the Questionnaire, and any modifications made by an individual will be saved. Under the "Assignees" tab, you can assign the completion of the Questionnaire to a faculty or staff member of your institution who is not a trusted contact. The profile of that individual must have been created under the "Faculty" tab previously, and the box "**User may login with this email**" must have been selected. For more details, read the <u>Tandem tips</u> of the "Entering faculty members' information" section.

To assign the completion of a Questionnaire to a member of your institution who is not a trusted contact:

- 1. From the "Instrument overview", click on the "Assignees" tab.
- 2. Click on "Add assignee".
- 3. In the "Assignee" text field, enter the name of the individual you are looking for. Note that no specific "role" needs to be assigned to an assignee.
- 4. Click "Save". The assignee will be able to access the instrument through their "My Items" persona.
- 5. To add more assignees, repeat the steps above.
- 6. To remove an assignee, follow steps 1-3 above, then click on the minus icon.



Tandem tips

- You can directly paste text, a table, or an image in a response box in the Questionnaire.
- If certain sections of the Questionnaire do not apply to your situation, please indicate N/A in the appropriate answer boxes.
- Multiple people (trusted contacts) can work simultaneously on the Questionnaire, and any modifications made by any individual will be saved.
- You can assign the completion of the Questionnaire to a faculty or staff member of your institution who is not a trusted contact.
- To learn how to complete and submit a Questionnaire, you can watch the tutorial.

Appendix A: Quick reference

Getting started

To log in to Tandem's training environment, click here.

To log in to Tandem's production environment, click <u>here</u>

Log in to your Tandem account / Connectez-vous à votre compte Tandem

Log in by entering your email address and password. / Veuillez vous connecter avec votre adresse courriel et votre mot de passe.

Email address / Adresse courriel

is required

Password / Mot de passe
is required

Log in Did you forget your password or are you having problems
logging in? / Vous avez oublié votre mot de passe ou vous éprouvez des
difficultés pour vous connecter?

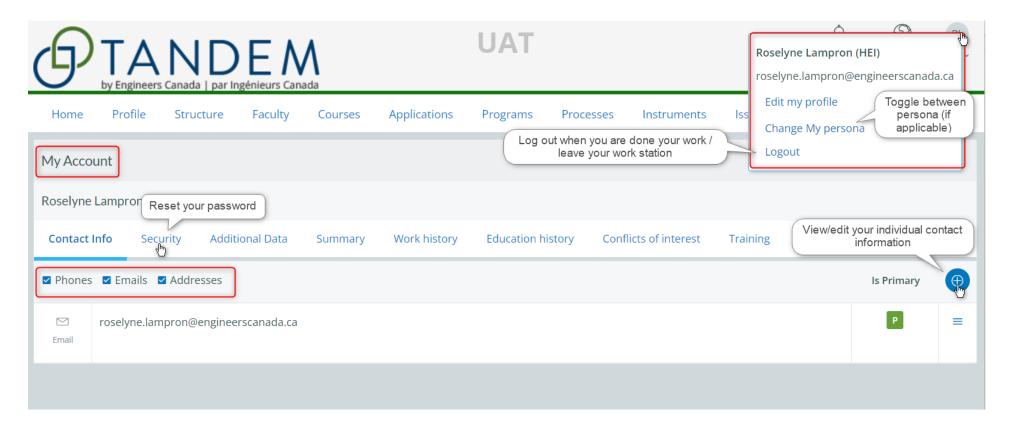




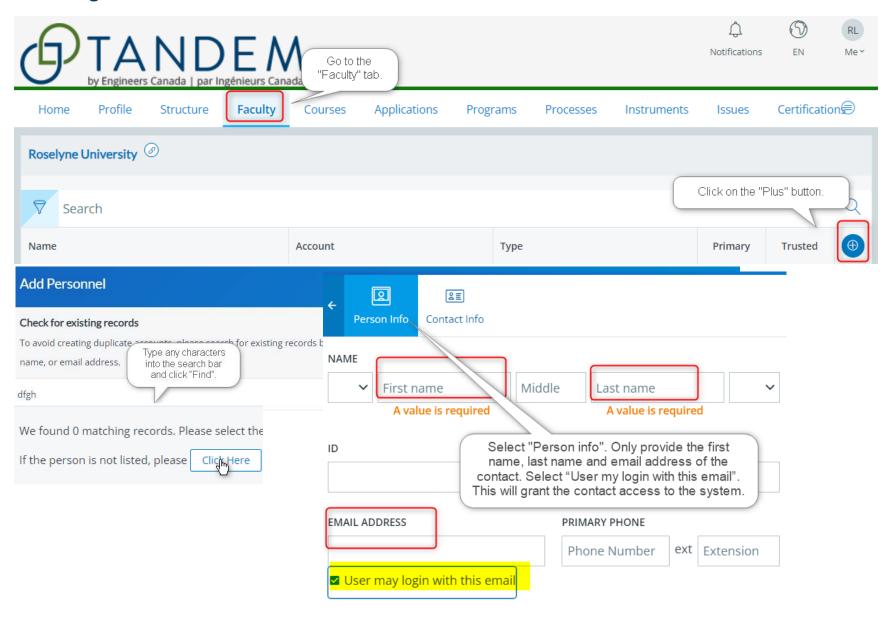
Enable multi-factor authentication

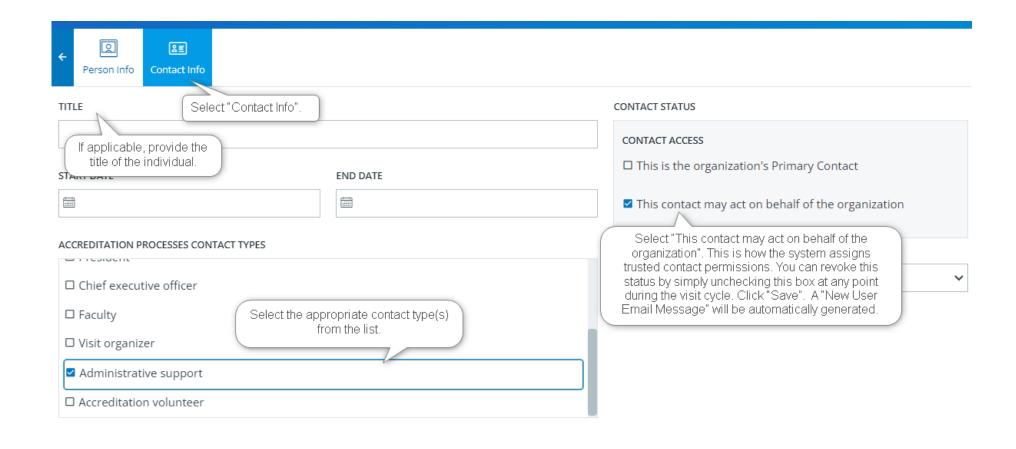


Entering Tandem

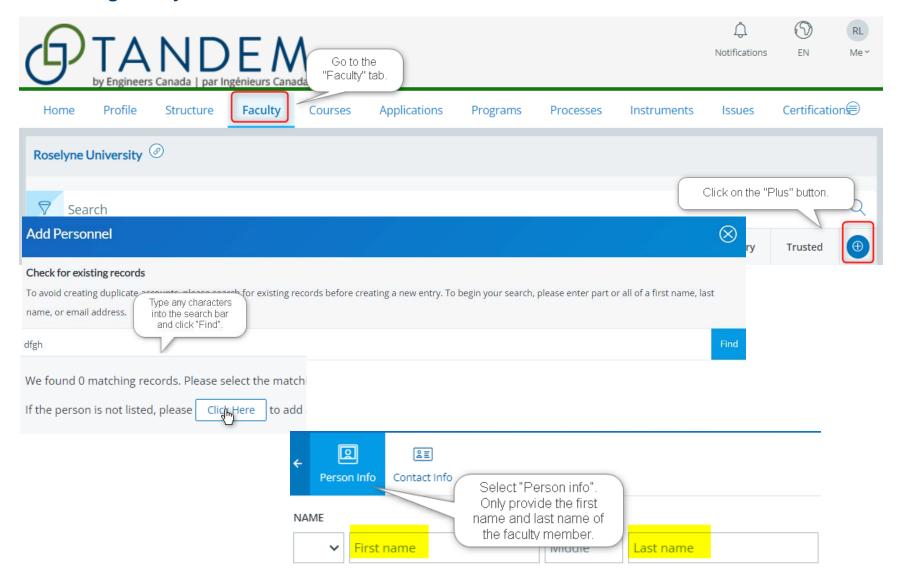


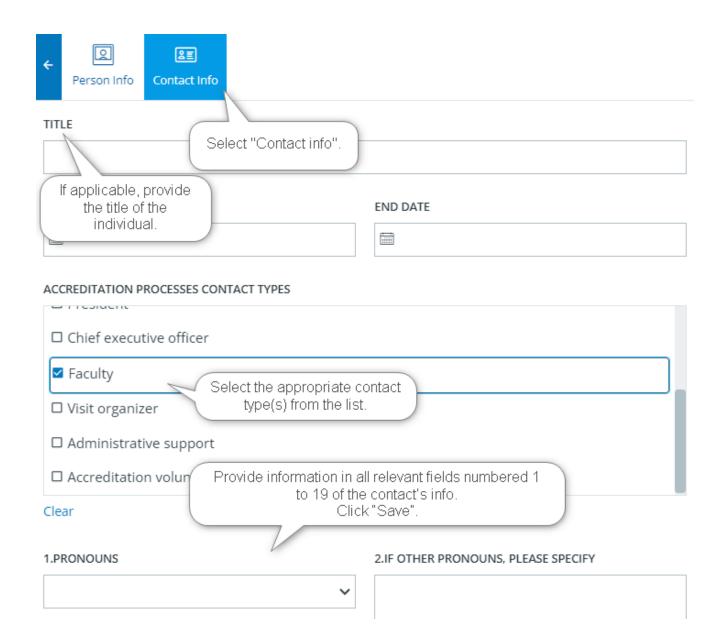
Creating a trusted contact



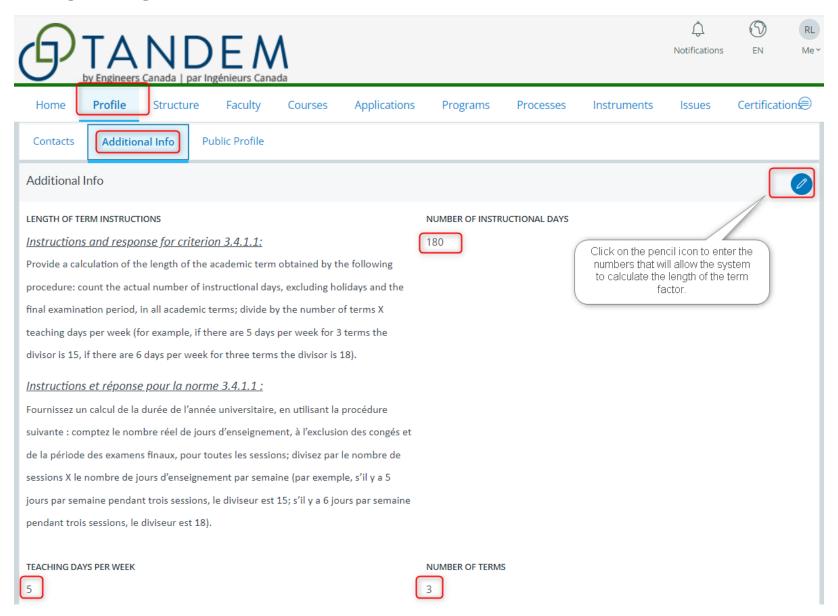


Entering faculty members' information

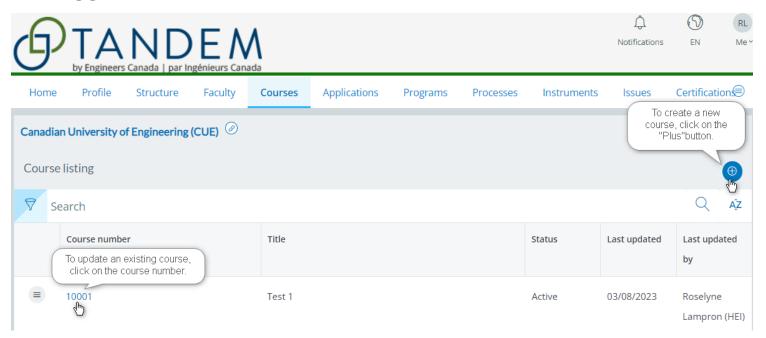


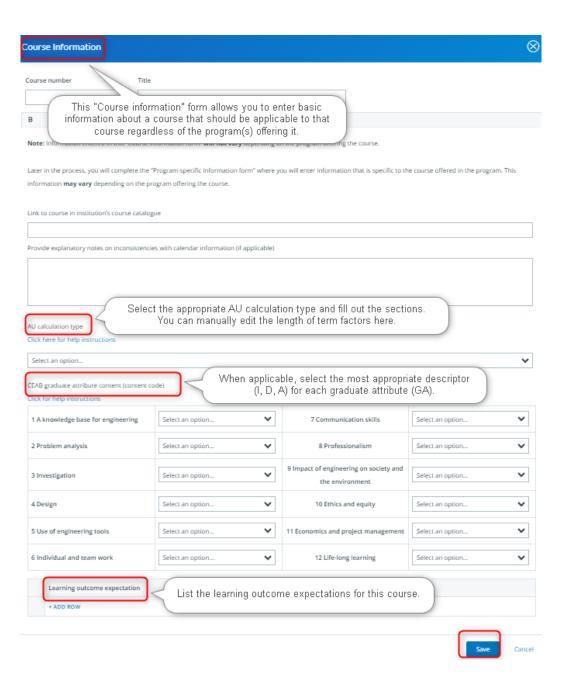


Setting the length of term factors

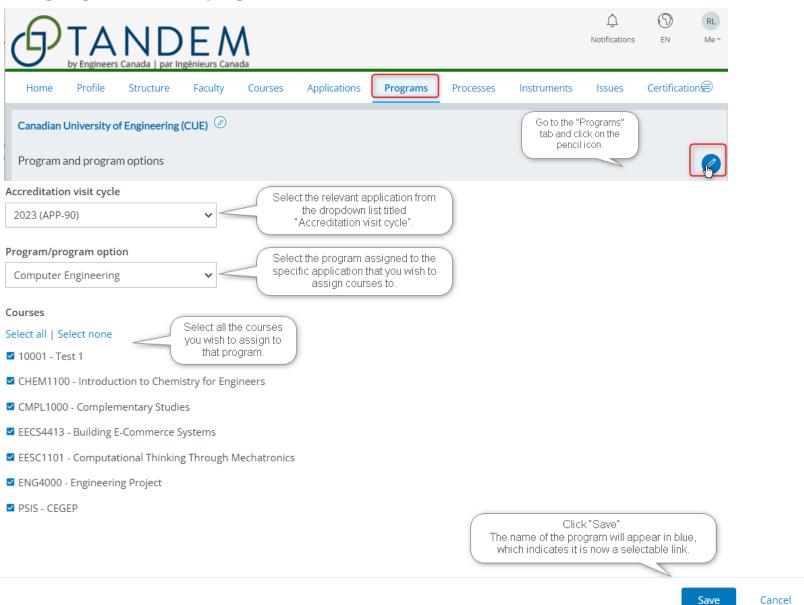


Entering generic course information

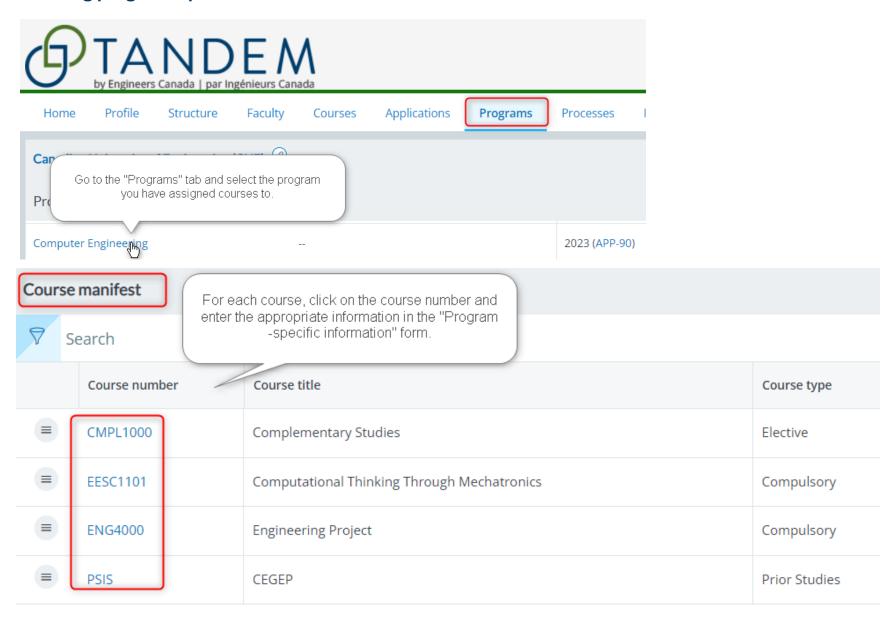




Assigning courses to a program



Entering program-specific information



ENG4000 - Engineering Project Program-Specific Information Form Course Information Form Cours Information entered in the Fill out each section of this form. The information entered here is specific to "Course information" form can the course offered in the program. be viewed but not edited. To make changes to this form, go to the "Courses" tab. ific information form" is specific to the course offered in the program. This information may vary depending on the program Note offering the course. Early you entered information in the "Course information form" which can be viewed but not edited by selecting the tab "Course information form". If you wish to make any changes to the "Course information form", please return to the "Courses" tab. Type of AU Calculation K Factor Accreditation Units (Calculated) Click on the pencil icon to update and review the following information: - Term of instruction. Accreditation Units (K Factor/Manual) - Learning level (which can only be edited from the "Course information" form). 80.0 - Student achievement assessment. - Graduate attribute indicator(s) for the course. Summary graduate attribute curriculum map Graduate attribute Learning level Term of instruction Communication Advanced 9

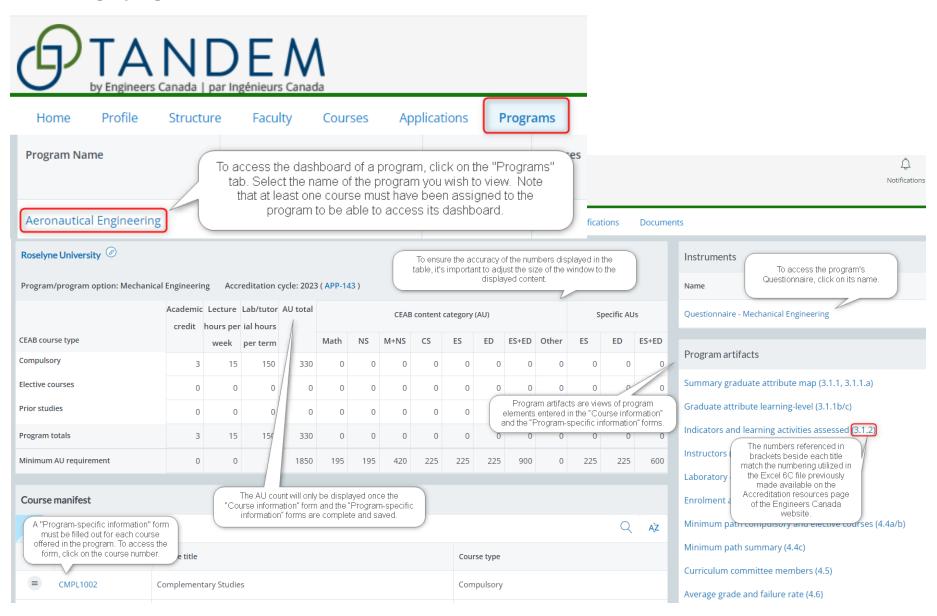
9

Advanced

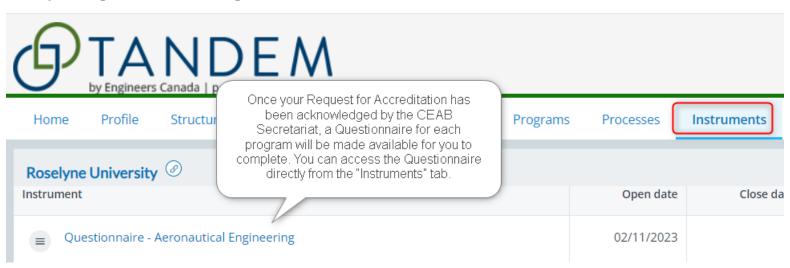
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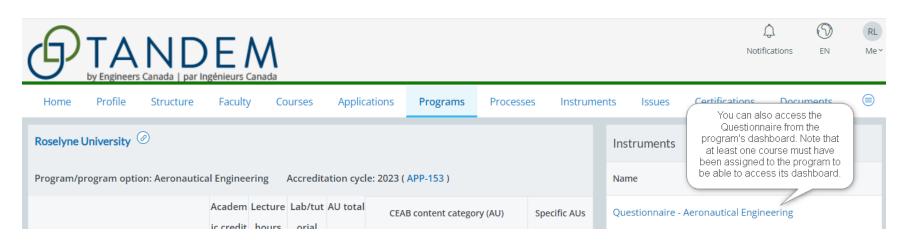
Professionalism

Reviewing a program dashboard



Completing and submitting a Questionnaire







Notifications



RL Me

Profile Structure Faculty Courses Applications **Programs** Processes Certifications Documents Home Instruments Issues To import responses from previous You can access all documents uploaded in questionnaires submitted during past visit the Questionnaire by your institution. You can export a printable cycles, click on the gear icon. PDF copy of the The progress of completion is Questionnaire. - Aeronautical Engineering Questionnair displayed for each section. To be able to submit the Questionnaire, all sections must display 100%. Summary Documents Assignees Reports Overview **Progress** You can assign the completion of the Questionnaire to a member 9 Glossary of terms **Roselyne University** Coordinator of your institution who is not a trusted contact. The numbers referenced before Ottawa, ON each title match the numbering 9 Gene/ utilized in the former version of https://makeameme.org/meme/this-is-z3o7s8 the Questionnaire 1.3 Program objectives and plans 0% Opens Closes Status 02/11/2023 In progress 0 1.4 Resolution of previous issues 0% 0 2. Self-appraisal 0% Instrument Workflow 3.1 Graduate attributes - Overall GA/CI process Opened on November 2nd, 2023 - In progress 0% 3.1 Graduate attributes - Organization and engagement 0% 3.1 Graduate attribute #1 - A knowledge base for engineering

Appendix B: Tandem tutorials for HEI users

To assist users in becoming familiar with Tandem, we have developed tutorials that cover themes aligned with the principal sections of the User Guide:

- How to create a trusted contact.
- How to enter faculty members' information.
- How to set the length of term factors.
- How to enter generic course information.
- How to assign courses to a program.
- How to enter program-specific information.
- How to review a program dashboard.
- How to complete and submit a Questionnaire.

To access the playlist of these tutorials on YouTube, click here.