



Tandem User Guide

Conducting a program review
using Tandem

Questions?

Please contact visits@engineerscanada.ca

Last review date: August 2024

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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 six 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 [Accreditation Improvement Program \(AIP\)](#), 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 interest holders 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 visiting team members who will be conducting a CEAB accreditation visit using Tandem. It offers an overview of the system and detailed information on its features, enabling users to efficiently review the accreditation materials submitted by an institution for the visit to a specific program.

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 users out 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.

Generic course information

Generic course information refers to basic information about a course that is applicable to that course regardless of the program(s) offering it. Within Tandem, this information is displayed in the course information form.

Issue tracker

Formerly known as the tracking of issues sheet, the issue tracker is now superimposed on the *Questionnaire for the Evaluation of an Engineering Program*. The issue tracker allows the visiting team to review each section of the Questionnaire completed by the institution for a specific program. This is a tool used by visiting teams to record their observations as they review materials submitted by the program receiving a visit and collaborate with other visiting team members.

Issue tracker rollup summary

The issue tracker rollup summary automatically compiles all observations entered into the issue tracker associated with each program reviewed during the same visit. It displays all findings of all programs visited on the same screen.

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, My Items and Organization Representative, to filter the user experience within the system. Visiting team members will use the My Items persona to review the accreditation materials submitted by HEI representatives. HEI representatives will use the Organization Representative persona to enter course data and submit accreditation materials on behalf of their institution.

Program artifacts

Program artifacts are summary views of different components of evidence from the program. These artifacts are generated based on the information entered by the institution into the course information and the program-specific information forms. The program artifacts correspond to the summary views that were previously created using macros in the Excel 6C file.

Program dashboard

The program dashboard is built from the information entered in the course information and program-specific information forms. It gives a summary view of the program's main components, such as the list of courses attached to the program and the program's AU count. Visiting team members will use this dashboard and the program artifacts section to review the content of the accreditation materials the institution submitted 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 displayed 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.

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 review of accreditation materials. If you would like to get a user account for this environment, please contact visits@engineerscanada.ca. To access the training environment, [click here](#).

Tandem production environment

Unlike the training environment, the production environment is the space where finalized and validated data and submissions are reviewed by the visiting team members. To access the production environment, [click here](#).

What you need

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

Set your password

You have received an email from accreditation@engineerscanada.ca with the subject line “Your new ARMATURE Fabric account has been created” 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.

Reset your password / Réinitialisez votre mot de passe



EN

Please enter and confirm your new password. / Veuillez entrer et confirmer votre nouveau mot de passe.

New password / Nouveau mot de passe

Confirm new password / Confirmer le nouveau mot de passe

Submit

Return to the login screen. / Retour à l'écran de connexion.



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”.

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



EN

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?



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 “Log in”.

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 [password rules](#) 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 in to 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.

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.

roselyne.lampron@engineerscanada.ca

.....

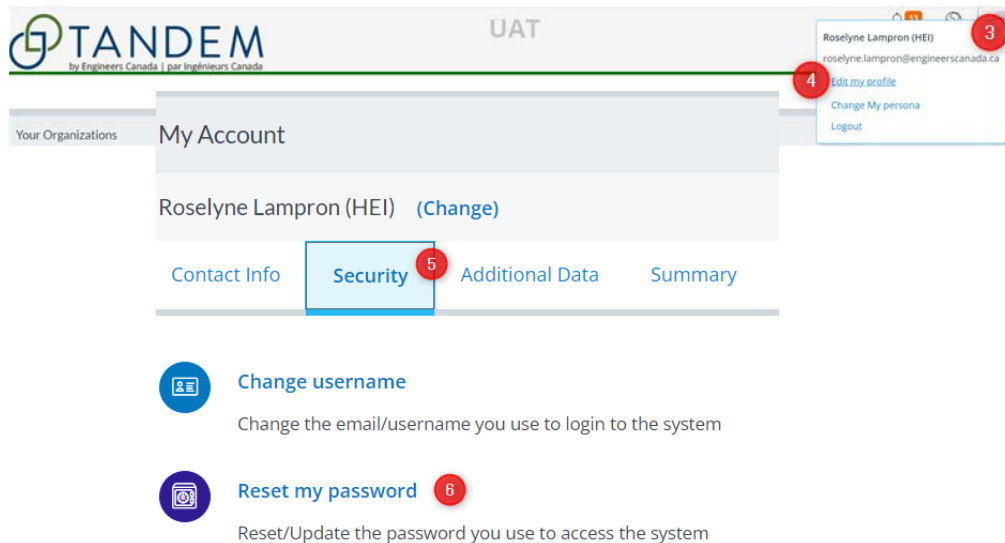
Log in

 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?



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.

The screenshot shows the Tandem web application interface. At the top, there's a navigation bar with the Tandem logo and user profile information. A dropdown menu is open, showing the user's name 'Roselyne Lampron TC' and email 'lampron.roselyne@gmail.com', with a red circle '2' next to the 'Edit my profile' link. Below this, the 'Security' tab is selected, and a 'Configure Authentication (MFA)' modal is displayed. The modal contains a password confirmation field (red circle '5') and 'Confirm' (red circle '6') and 'Cancel' buttons. Below the modal, a table lists authentication methods:

Authentication Method	On	Off
Authenticator (recommended) (red circle '7')	On (green power button, red circle '8')	Off (red power button)

Below the table, there's a QR code (red circle '12') and an 'Authentication code' input field (red circle '13') with a 'Verify' button (red circle '14'). A red error message 'A value is required' is shown below the input field. A callout box (red circle '9') says: 'Install the application on your mobile device and follow instructions 10 to 11 above.'

Access to Tandem training materials

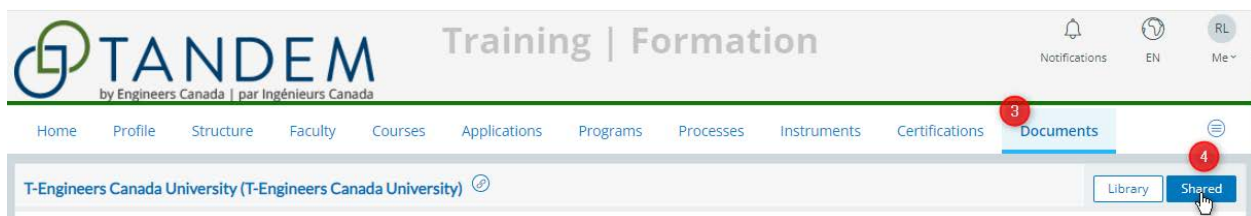
To assist users in becoming familiar with Tandem, we have developed training materials, such as six tutorials and one training scenario. The tutorials cover themes aligned with the principal sections of the User Guide:

- How to complete an issue tracker.
- How to review a program dashboard page.
- How to review program course data.
- How to review program artifacts.
- How to use an issue tracker rollup summary.
- How to use a program's AU reallocation tool.

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.

Entering Tandem

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

Persona

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



My Items

Visiting team members will use the “My Items” persona to review the accreditation materials submitted by HEI representatives.

Organization Representative

HEI representatives will use the “Organization Representative” persona to enter course data and submit accreditation materials on behalf of their institution.

If you work at an HEI, your account may have been assigned two personae. In that case, as a visiting team member, you will select “My Items” to enter Tandem. However, if only one persona has been assigned to your account, upon entering your email address and your password, you will directly access your Tandem dashboard without needing to select between “My Items” and “Organization Representative”.

Tandem dashboard

After you have selected your persona (if applicable), your Tandem dashboard will display as below.

The screenshot shows the Tandem dashboard for Roselyne Lampron (VTC). The dashboard is divided into several sections:

- My Profile:** Displays personal information including name, email, address, and phone numbers.
- My Work:** Shows work status with a progress bar and a message: "All clear! There are no items assigned to you."
- Applications:** Lists applications with columns for Organization, Application Type, Status, and Activities. One application is shown: "Application: APP-47" with status "Open" and a notification icon.
- Quick actions:** Includes buttons for "Update my profile", "Upload/Access Documents", and "View/Update Forms".
- Scheduled Items:** Shows a table with columns for Item, For, Begin, and End. One item is listed: "Visit process - Roselyne University (2024/2025)" for "Roselyne University" starting on "Mar 19th" and ending on "Mar 21st".
- Assigned Issues:** Shows a message: "All clear! There are no issues assigned to you at this time."
- Review Items:** Shows a table with columns for Programs / Program Options, Courses, Current Status, and Accreditation visit cycle.

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.

The screenshot shows the Tandem login screen. At the top, there is a dark blue bar with the text "Choose your persona..." and a red arrow pointing to a language selection icon (a globe) with "EN" below it. Below this bar, there are two options for persona selection: "My Items" and "Organization Representative", each with a magnifying glass icon.

- **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).

The screenshot shows the Tandem dashboard. In the top right corner, there is a language selection dropdown menu with "English" and "French" options. A red arrow points to the dropdown menu. The dashboard also shows the Tandem logo, the text "UAT", and a notification icon with the number "13".

Accreditation materials submitted through Tandem

Although Tandem is a new system, the type of information requested for an accreditation visit remains unchanged. This section of the User Guide offers details on the accreditation materials submitted by the institutions via Tandem and provides guidance on locating them within the system. Additionally, it presents a comparative overview of where this information was previously accessed in the former documentation to allow for a better understanding of the system's features.

All accreditation materials are now submitted through Tandem, replacing the Word versions of the *Questionnaire for an Evaluation of an Engineering Program* and its *Exhibit 1*, as well as the Excel versions of the 6A file (*Graduating student record*), 6B file (*Academic staff information sheet*), and 6C file (*Course information sheet* and *Artifacts generated by macros*).

Within Tandem, all sections of the *Questionnaire for an Evaluation of an Engineering Program* have been replicated, now incorporating the information previously contained in *Exhibit 1* and the graduating student record file (Excel 6A file). Visiting team members will utilize an issue tracker, replacing the former tracking of issues sheet, to review each section of the Questionnaire completed and submitted by the institution for a specific program. The issue tracker also serves as a tool for recording working observations throughout the review process.

The information previously found in the Excel 6C file is now displayed in the course information and the program-specific information forms, accessible through the program dashboard page. Course syllabi, documentation of assigned work and assessments, as well as evaluated student work, can be found in the program-specific information form.

The program dashboard page displays a summary view of the program's main components, including the list of courses offered in the program and the program's AU count. Additionally, it displays summary program artifacts previously generated by macros in Excel, which now include faculty information from the former Excel 6B file. The AU reallocation tool is also accessible through the program dashboard page. This tool allows the visiting team to reallocate AUs for any given course and track any AU adjustments required after triangulation of evidence. Finally, from the program dashboard page, visiting team members can view the issue tracker rollup summary, which compiles all issue trackers associated with programs reviewed during the same visit. Visiting team members will use the course information and program-specific information forms, the program dashboard page, the program artifacts, the issue tracker, and the issue tracker rollup summary to review the content of the accreditation materials the institution submitted for the visit, specific to the program they have been assigned.

In Tandem, program visitors are given access to accreditation materials uniquely relevant to the program they are assigned to review. Visiting team chairs and vice-chairs have broader access, encompassing all materials submitted by the institution.

The following sections of the User Guide specifically address the issue tracker, the program dashboard page, the program course data, the program artifacts, the issue tracker rollup summary, and the AU reallocation tool.

Completing an issue tracker

This section provides information about how to access and complete an issue tracker, formerly known as the tracking of issues sheet, which is now superimposed on the Questionnaire. The issue tracker allows the program visitors to review each section of the Questionnaire completed and submitted by the institution for a specific program. The program visitors also use this tool to record their observations during the visit as they review materials submitted by the program, carry out interviews, and collaborate with other visiting team members.

To access the issue tracker of a specific program:

1. From Tandem’s home page, on the right-hand side of the screen, under the “Scheduled Items” header, click on the issue tracker link associated with the specific program you are reviewing.
2. Read all sections of the Questionnaire.

The screenshot displays the Tandem user interface. At the top, the Tandem logo is on the left, and 'Training | Formation' is on the right. Below the logo is the text 'by Engineers Canada | par Ingénieurs Canada'. A navigation bar contains links for Home, Profile, Affiliations, Calendar, Applications, Processes, Events, Instruments, and Documents. The main content area is divided into several sections: 'My Profile' showing user details for Roselyne Lampron; 'My Work' with progress indicators for Not started, In progress, Coming due, and Overdue; 'Quick actions' with buttons for 'Update my profile' and 'Upload/Access Documents'; and 'Scheduled Items' which contains a table with one item: 'Issue Tracker - CEAB Engineering - C' for 'T-Engineers Canada University'. A red box highlights this item, and a red circle with the number '1' is placed above it.

3. The numbers referenced before each title match the numbering utilized in the former version of the Questionnaire.

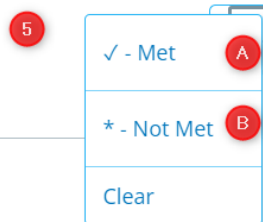
4. The completion progress is shown for each section necessitating review. When the progress reaches 100%, it signifies that all criteria within that section of the issue tracker have been reviewed.
5. For each criterion, select from the dropdown menu the appropriate symbol¹:
 - A. A checkmark (✓) means that there is no observed issue for the criterion or that it is a numerical criterion which has a positive binary result.
 - B. An asterisk (*) means that the *Program Visitor's Observations* field will contain a description of an observed item flagged for CEAB review that, in the opinion of the visiting team, has the potential to either jeopardize future compliance, or currently prevents compliance, with the criterion.

Progress	Documents	Filters
☾	---	Glossary of terms
☾	---	General instructions
☾	---	1.3 Program objectives and plans
☾	---	1.4 Resolution of previous issues
☾	---	2. Self-appraisal
☾	0%	3.1 Graduate attributes - Overall GA/CI process

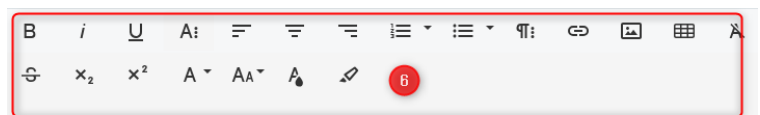
3.1.1 Organization and engagement

PROGRAM VISITOR'S OBSERVATIONS

For each criterion marked with an asterisk, write an observation.



6. When more than one program visitor assesses the same program, it can be helpful to highlight your observations in different colors. To use the rich text editor:
 - Type your response in the box.
 - Choose the appropriate option(s) from the upper ribbon. Please be aware that all observations are automatically compiled into the issue tracker rollup summary. It is recommended that you not incorporate tables, pictures, or extensive



3.1.2 Curriculum Maps

PROGRAM VISITOR'S OBSERVATIONS

1. This is an example

¹ Please note that “Met” and “Not met” are reserved terms for the CEAB. The system will be updated to display only the checkmark and asterisk options.

text in the response box.
Comments should be precise and concise.

- You can save the progress you make on the issue tracker in order to exit the system and return at a later time. To do this, click the “Save” button at the top or at the bottom of the page.
- Please refrain from clicking on “Complete review”**, the issue tracker must remain unsubmitted. Clicking “Complete review” will lock the issue tracker, preventing further edits by you and your team.
- To return to Tandem’s homepage, click on “Exit”. You will leave the issue tracker and be redirected to the Questionnaire.
- Click on the “Home” tab from the Questionnaire page.

The screenshot displays the Tandem issue tracker interface. At the top, there are tabs for 'Progress', 'Documents', and 'Filters'. Below this is a table with two rows, each showing a progress indicator (0% and ---) and a document title ('3.1 Graduate attributes - Overall GA/CI process' and '3.1 Graduate attributes - Organization and engagement'). Below the table are three buttons: 'Save' (with a red circle 7), 'Request Changes', and 'Complete Review' (with a red circle 8 and a red X). Below these buttons are three icons: 'EN' (with a red circle 9), 'Export', and 'Exit' (with a red circle 9). At the bottom, there is a navigation bar with the Tandem logo and the text 'by Engineers Canada | par Ingénieurs Canada'. Below the logo are four tabs: 'Home' (with a red circle 10), 'Profile', 'Affiliations', and 'Calendar'. Below the navigation bar is the text 'Questionnaire - CEAB Engineering - C'.

Tandem tips

- Please refrain from clicking on “Complete review”**, the issue tracker must remain unsubmitted.
- To facilitate the completion of the issue tracker, it may help to open the program dashboard page of the specific program you are reviewing in a different tab of your web browser.
- It is possible to access the issue tracker via the questionnaire link available from the program dashboard page.
- When more than one program visitor assesses the same program, it can be helpful to highlight your observations in different colors.
- Note that the “Request changes” button is not configured and should be disregarded.
- To learn how to access and complete an issue tracker, you can watch the [tutorial](#).

Reviewing a program dashboard page

This section provides information about how to access and review the program dashboard page of a specific program for which an institution is requesting accreditation.

A program visitor has access to the program dashboard page of the program to which they are assigned for review. The program dashboard page displays a summary view of the program's main components, including the list of courses offered in the program and the program's AU count. It also displays summary program artifacts which are summary views of different components of evidence from the program automatically populated based on the information entered by the institution into the course information and the program-specific information forms. These forms as well as the Questionnaire submitted by the institution and the AU reallocation tool are also accessible from the program dashboard page.

To access the dashboard page of a specific program:

1. From Tandem's home page, on the right-hand side of the screen, under the "Review items" header:
 - A. Click on the program name you are assigned to review.
 - B. If the program name is not listed, click on "View all items", then select the program's name.

The screenshot shows the Tandem Training | Formation interface. At the top, there is a navigation bar with the Tandem logo and the text "Training | Formation". Below the navigation bar, there are several tabs: Home, Profile, Affiliations, Calendar, Applications, Processes, Events, Instruments, and Documents. The main content area is divided into two sections. The top section is titled "Review Items" and contains a table with two columns: "Programs / Program Options" and "Courses". Below this table, there is a message: "There are no review items assigned to you at this time." The bottom section is titled "Program and program options" and contains a search bar and a table with five columns: "HEI Name", "Program Name", "Program option", "Accreditation cycle", and "Courses". The table contains one row with the following data: "T-Engineers Canada University", "CEAB Engineering - C", "--", "2024 (APP-28)", and "11". A red box highlights the "CEAB Engineering - C" cell, and a red circle with the letter "B" is next to a "View All Items" button.

HEI Name	Program Name	Program option	Accreditation cycle	Courses
T-Engineers Canada University	CEAB Engineering - C	--	2024 (APP-28)	11

From the program dashboard page, you will be able to view:

- A. The number of academic credits.
- B. The number of hours of lecture per week.
- C. The number of hours of lab/tutorial per term.
- D. The overall AU count for the program.
- E. The AU breakdown for CEAB content categories by course type.
- F. The Specific AUs breakdown for Engineering Science and Engineering Design. **Note: The minimum AU requirement incorrectly shows 225 Specific AUs for Engineering Science. This is a content error that does not reflect the CEAB criteria. Please ignore that cell.**
- G. The list of courses offered in the program, displayed in the “Course manifest” table.

T-Engineers Canada University
 Program/program option: CEAB Engineering - C Accreditation cycle: 2024 (APP-26)

	Academic credit	Lecture hours per week	Lab/tutorial hours per term	AU total
CEAB course type				
Compulsory	27	22	74	372
Elective courses	6	6	6	78
Prior studies	3	3	0	36
Program totals	36	31	80	486
Minimum AU requirement	0	0	0	1850

CEAB content category (AU)								Specific AUs		
Math	NS	M+NS	CS	ES	ED	ES+ED	Other	ES	ED	ES+ED
60	42	102	24	106	140	246	0	106	140	246
0	0	0	0	8	8	16	0	8	8	16
0	36	36	0	0	0	0	0	0	0	0
60	78	138	24	114	148	262	0	114	148	262
195	195	420	225	225	225	900	0	✖	225	600

On the right-hand side of the page, you will be able to view:

- H. The link that gives access to the Questionnaire completed and submitted by the institution for the program. From the Questionnaire page, you can access the issue tracker associated with the program. To do so, click on the selectable link in blue named “Issue Tracker – Program’s name”.
- I. The program artifacts.

Course manifest

Search

Course number	Course title
---------------	--------------

Instruments

Name

[Questionnaire - CEAB Engineering - C](#)

Program artifacts

[Summary graduate attribute map \(3.1.1, 3.1.1.a\)](#)

[Graduate attribute learning-level \(3.1.1b/c\)](#)

Tandem tips

- To learn how to access and review a program dashboard page, you can watch the [tutorial](#).

Reviewing program course data

This section provides guidance on accessing and reviewing course data submitted by the institution through the course information and program-specific information forms. These forms contain detailed course data, including AU calculation methodology, curriculum components, graduate attributes, and information on course delivery and outcomes. Furthermore, the course syllabi, documentation of assigned work and assessments, as well as evaluated student work, can be accessed through the program-specific information form.

Course information form

From this form, you will be able to view **generic course information applicable to that course regardless of the program(s) offering it.**

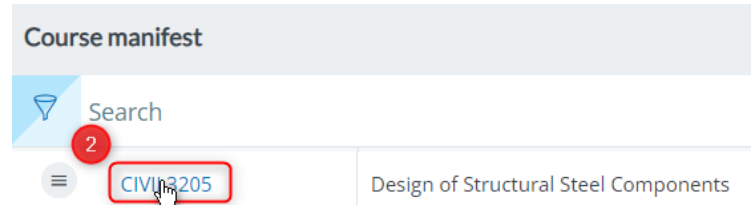
To access the course information form of a course offered in a program:

1. From Tandem’s home page, on the right-hand side of the screen, under the “Review items” header:
 - A. Click on the program name you are assigned to review.
 - B. If the program name is not listed, click on “View all items”, then select the program’s name.

The screenshot shows the Tandem web application interface. At the top, there is a navigation bar with the Tandem logo and the text "Training | Formation". Below the navigation bar, there is a "Review Items" section with a red notification icon. A table below this section shows "Programs / Program Options" and "Courses". A message states "There are no review items assigned to you at this time." A red callout 'B' points to a "View All Items" button. Below this, a "Program and program options" section is visible, containing a search bar and a table with the following data:

HEI Name	Program Name	Program option	Accreditation cycle	Courses
T-Engineers Canada University	CEAB Engineering - C	--	2024 (APP-28)	11

2. On the left hand-side of the screen, under the “Course manifest” header, click on the course number of the course you wish to review.
3. Click on the “Course information form” tab.



From this form, you will be able to view:

- A. Course number.
- B. Course title.
- C. Link to course in institution’s course catalogue.
- D. AU calculation type (Accreditation Units, K Factor, Manual, Prior Studies) and the AU calculation methodology (if applicable).
- E. Length of term factors².
- F. Hours of instruction.
- G. Total AUs for the course.



Length of term factors **E**

[Click here for help instructions](#)

Number of instructional days in the year	Teaching days per week	Number of terms in the year	Average length of academic term in weeks
180.0	5.0	3.0	12.0

Hours of instruction (calculated) **F**

Lecture hours per week	Total laboratory hours per term	Total tutorial hours per term	Number of lecture sections	Number of lab /tutorial sections	Academic credits
3.0	6.0	6.0	1.0	2.0	3.0
Lecture AUs per term (lecture hours per week * average length of academic term in weeks)	Laboratory AUs per term (total laboratory hours per term *0.5)	Tutorial AUs per term (total tutorial hours per term *0.5)	Accreditation units for the course (lecture AUs per term + laboratory AUs per term + tutorial AUs per term)		
36.0	3.0	3.0	42.0 G		

² The length of term factors provides the average length of the academic term in weeks utilized by Tandem to calculate the course’s AUs per term.

- H. Content category & elements.
- I. CEAB graduate attribute content.
- J. Learning outcome expectations.

Content category & elements (calculated)

H

		Mathematics	Natural science	Complementary studies	Engineering science	Engineering design
AU %	100.00%				50.00%	50.00%
AU Total	42.0	0.0	0.0	0.0	21.0	21.0

CEAB graduate attribute content (content code)

I

[Click for help instructions](#)

1 A knowledge base for engineering	D	7 Communication skills
2 Problem analysis	D	8 Professionalism
3 Investigation		9 Impact of engineering on society and the environment
4 Design	D	10 Ethics and equity
5 Use of engineering tools		11 Economics and project management
6 Individual and team work		12 Life-long learning

Learning outcome expectation

J

Compute the strength of tension members for all failure modes.

Note: For elective courses which may include courses offered in departments outside of a faculty/school/department of Engineering, institutions may have grouped these courses according to AUs. They would have created a generic course information form for each group and filled in only the required data fields. The AUs entered would be the lowest total from any possible courses' combination within that elective group.

Program-specific information form

From this form, you will be able to view **information specific to a course offered in a specific program**. Data in this form complements the information entered in the course information form.

To access the program-specific information form of a course offered in a specific program:

1. From Tandem’s home page, on the right-hand side of the screen, under the “Review items” header:
 - A. Click on the program name you are assigned to review.
 - B. If the program name is not listed, click on “View all items”, then select the program’s name.
2. On the left hand-side of the screen, under the “Course manifest” header, click on the name of the course you wish to review.

The screenshot displays the Tandem web application interface. At the top, the Tandem logo is visible with the text "by Engineers Canada | par Ingénieurs Canada" and "Training | Formation". Below the logo is a navigation menu with items: Home, Profile, Affiliations, Calendar, Applications, Processes, Events, Instruments, and Documents.

The main content area is divided into two sections:

- Review Items:** This section is on the right side of the screen. It has a header "Review Items" with a red notification badge containing the number "1". Below the header is a table with two columns: "Programs / Program Options" and "Courses". The table is currently empty, and a message below it states: "There are no review items assigned to you at this time." A red circle labeled "B" points to a "View All Items" button located to the right of the table.
- Program and program options:** This section is on the left side of the screen. It has a header "Program and program options" and a search bar. Below the search bar is a table with the following columns: HEI Name, Program Name, Program option, Accreditation cycle, and Courses. The table contains one row of data:

HEI Name	Program Name	Program option	Accreditation cycle	Courses
T-Engineers Canada University	CEAB Engineering - C	--	2024 (APP-28)	11

A red circle labeled "1" points to the "Review Items" header, and a red circle labeled "2" points to the "CEAB Engineering - C" program name in the table.
- Course manifest:** This section is at the bottom of the screen. It has a header "Course manifest" and a search bar. Below the search bar is a table with two columns: "Course ID" and "Course Name". The table contains one row of data:

Course ID	Course Name
CIVL3205	Design of Structural Steel Components

A red circle labeled "2" points to the search bar, and a red circle labeled "1" points to the "CIVL3205" course ID in the table.

3. Click on the “Program-specific information form” tab.

From this form, you will be able to view:

- A. Course type. For elective courses, the group (A, B, C, etc.) and the number of elective courses a student must choose within that group will be specified. This enabled the calculation of the minimum path and populated the program artifact called “Minimum path compulsory and elective courses”, which is accessible from the program dashboard page.
- B. Type of AU calculation.
- C. Total AU.
- D. Summary graduate attribute curriculum map.
 - To view the graduate attribute indicators, click on the eye icon. The same information is also displayed in the corresponding program artifacts, accessible from the program dashboard page. To return to the form, click “Done”.

CIVIL3205 - Design of Structural Steel Components

Course Information Form | **Program-Specific Information Form**

Course type: Elective (A)

Elective Group: A, 1

Type of AU Calculation: Accreditation Units (AUs) (B)

Accreditation Units (Calculated): 42.0 (C)

Summary graduate attribute curriculum map (D)

Graduate Attribute	Learning Level	Term of instruction
Knowledge Base - Fundamental engineering science	Developed/Intermediate	4

Summary graduate attribute curriculum map

Graduate attribute	Term of instruction	Learning level	Student achievement
Knowledge Base - Fundamental engineering science	4	Developed/Intermediate	<input checked="" type="checkbox"/> Assessed

List graduate attribute indicator(s) for the course

Applies theories to problems.

DONE Cancel < 1 of 4 >

- E. Instructor – course contact. 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 as the course contact.
- F. Instructor(s) – other contact(s).

Instructors - Course Contact E

Faculty member name	Curriculum committee member	Hire date	Licensure status	Highest degree	Academic rank
Prof A	Yes	2020	PEng	PhD	Full

OtherInstructors

Instructors - Other Contacts F

Faculty member name	Curriculum committee member	Hire date	Licensure status	Highest degree	Academic rank
---------------------	-----------------------------	-----------	------------------	----------------	---------------

G. Course delivery and outcomes, displaying:

- 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.

Course delivery and outcomes G

Number of students per supervisor in:		Average grade for the course		Failure rate for the course
Laboratory	Tutorial	%	Letter	%
11-20	11-20	84-80	B	<1

H. Laboratory details (if applicable).

Does this course include a lab experience?

Yes

Lab experience detail H

Lab type	Hands-on	Specify the predominant laboratory experience type for this course/learning activity
Number of labs	3	Specify the total number of laboratory experiences for the course/learning activity
Laboratory safety taught	Yes	Are students instructed in safety issues associated with the laboratory space and the specific learning experience?
Laboratory safety examined	Yes	Is there verification, testing or checking that students have both received and understood safety issues?

I. Required texts.

Required text(s) only; not a reading list I

Author: Title : Publisher: Year:
Johnson, R. (2023). Introduction to Engineering Disciplines: Design of Structural Steel Components. EngPress.

- J. Detailed syllabi and additional information.
- K. Documentation of assigned work and assessment.
- L. Examples of evaluated student work.

Do you want to submit detailed syllabi and additional information for this course (Criteria 3.1, 3.4)? J

Do you want to submit documentation of assigned work and assessments for this course (Criteria 3.1, 3.4.4, 3.4.6, 3.4.7)? K

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

Note: Assigned work and assessments, as well as evaluated student work, may have been 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).

Tandem tips

- To learn how to access and review program course data, you can watch the [tutorial](#).

Reviewing program artifacts

This section provides information about how to access and review program artifacts. Program artifacts are summary views of different components of the program's evidence. The institution enters data into the course information and program-specific information forms, which generate the artifacts.

To access the program artifacts of a specific program:

1. From Tandem's home page, on the right-hand side of the screen, under the "Review items" header:
 - A. Click on the program name you are assigned to review.
 - B. If the program name is not listed, click on "View all items", then select the program's name.

The screenshot shows the Tandem Training | Formation interface. At the top left is the Tandem logo with the text "by Engineers Canada | par Ingénieurs Canada". To the right of the logo is the text "Training | Formation". Below the logo is a navigation menu with the following items: Home, Profile, Affiliations, Calendar, Applications, Processes, Events, Instruments, and Documents. On the right side of the interface, there is a "Review Items" section with a red notification icon containing the number "1". Below this section, there are two columns: "Programs / Program Options" and "Courses". Below these columns, there is a message: "There are no review items assigned to you at this time." At the bottom right of the interface, there is a red notification icon containing the letter "B" and a button labeled "View All Items". Below the main interface, there is a table titled "Program and program options" with a search bar above it. The table has the following columns: HEI Name, Program Name, Program option, Accreditation cycle, and Courses. The table contains one row of data:

HEI Name	Program Name	Program option	Accreditation cycle	Courses
T-Engineers Canada University	CEAB Engineering - C	--	2024 (APP-28)	11

2. On the right hand-side of the screen, all summary views of the program are listed under the “Program artifacts” header, including:

- A. Summary graduate attribute map.
- B. Graduate attribute learning-level.
- C. Indicators and learning activities assessed.
- D. Instructors.
- E. Laboratory experience.
- F. Enrolment and degree data.
- G. Minimum path compulsory and elective courses.
- H. Minimum path summary.
- I. Curriculum committee members.
- J. Average grade and failure rate.
- K. Issue tracker rollup summary.

Program artifacts **2**

- Summary graduate attribute map (3.1.1, 3.1.1.a) **A**
- Graduate attribute learning-level (3.1.1b/c) **B**
- Indicators and learning activities assessed (3.1.2) **C**
- Instructors (4.1) **D**
- Laboratory experience (4.2) **E**
- Enrolment and degree data (4.3) **F**
- Minimum path compulsory and elective courses (4.4a/b) **G**
- Minimum path summary (4.4c) **H**
- Curriculum committee members (4.5) **I**
- Average grade and failure rate (4.6) **J**
- Issue Tracker Rollup Summary **K**

Note: Regarding the enrolment and degree data, this program artifact does not display any information. To resolve this issue, a workaround has been implemented. From Tandem’s home page, click on the “Instruments” tab. Filter the list by the most recent creation date and select “Enrolment and Degree data (4.3)”.

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

- 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.

Graduate attribute		1	2	3
Knowledge base	Mathematics		Civil 1111	
	Natural sciences	BIOM1103		
	Fundamental engineering science		Civil 1111	CORE1056
	Specialized engineering science		Civil 1111	CORE1056
Problem analysis	BIOM1103	Civil 1111		

- 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.
- Cells highlighted in yellow demonstrate where in the program student achievement has been, or is planned to be, assessed.

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

Course number	Course title	Academic credit	Lecture hours per week	Lab/tutorial hours per term	AU total	CEAB content category (AU)						CEAB content category (AU sp.)			
						Math	NS	M+NS	CS	ES	ED	ES+ED	ES	ED	ES+ED
CIVL3205	Design of Structural Steel Components	3	3	6	42	0	0	0	0	21	21	42	21	21	42
COM3100	Communication Skills for Engineering Students	3	3	0	36	8	8	15	8	8	8	15	8	8	15

Finally, some program artifacts include legends explaining the color codes and acronyms on the page. Some artifacts also have a filter option to facilitate data review.

Tandem tips

- To learn how to access and review program artifacts, you can watch the [tutorial](#).

Using an issue tracker rollup summary

This section provides information about how to access and update an issue tracker rollup summary.

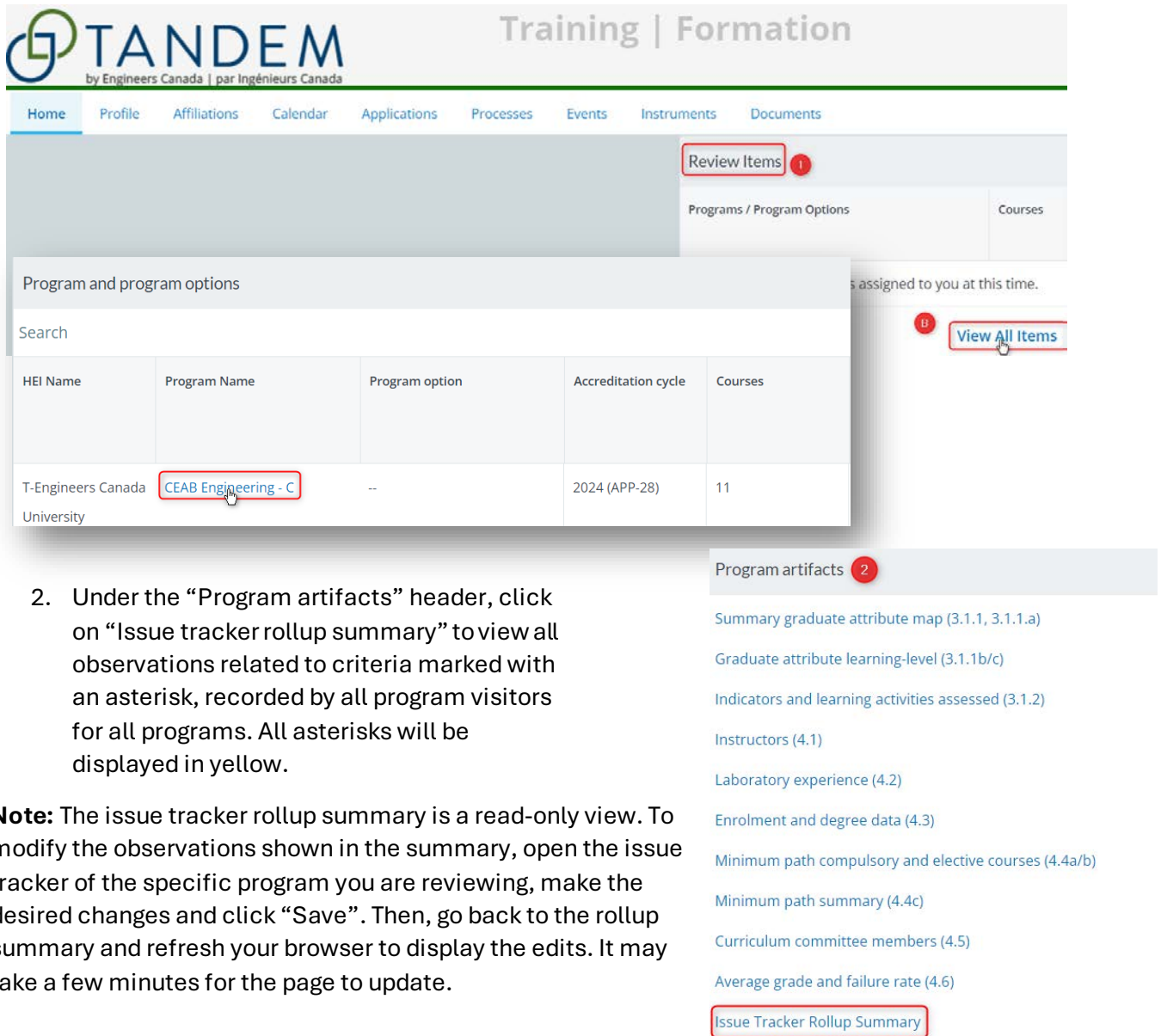
During the visit process, program visitors record their observations into the issue tracker associated with the program they are assigned to review. Formerly known as the tracking of issues sheet, the issue tracker is now superimposed on the Questionnaire. It allows the program visitors to review each section of the Questionnaire completed and submitted by the institution for a specific program.

The issue tracker rollup summary automatically compiles all observations entered into the issue tracker associated with each program reviewed during the same visit. It displays all findings of all programs visited on the same screen. During the visit, in the evening team meetings at the hotel, it is suggested that the visiting team chair or vice-chair present the issue tracker rollup summary on the screen, using a computer connected to a projector (or similar setup). This will allow for the refinement of the information entered in the issue trackers and facilitate discussions on the recorded observations. Program visitors will be able to edit their observations in real-time, directly in the issue tracker associated with the program they are evaluating, using their personal computers. In Tandem, the rollup summary is available when reviewing single or multiple engineering program(s).

The exit statement, which is presented to the institution at the end of the visit, is based on the rollup summary view, but is produced by the visiting team chair outside of Tandem. The visiting team report is also based on the rollup summary view and is produced by the CEAB Secretariat in a Word document outside of Tandem before being sent to the visiting team chair.

To access the issue tracker rollup summary:

1. From Tandem’s home page, on the right-hand side of the screen, under the “Review items” header:
 - A. Click on the program name you are assigned to review.
 - B. If the program name is not listed, click on “View all items”, then select the program’s name.



2. Under the “Program artifacts” header, click on “Issue tracker rollup summary” to view all observations related to criteria marked with an asterisk, recorded by all program visitors for all programs. All asterisks will be displayed in yellow.

Note: The issue tracker rollup summary is a read-only view. To modify the observations shown in the summary, open the issue tracker of the specific program you are reviewing, make the desired changes and click “Save”. Then, go back to the rollup summary and refresh your browser to display the edits. It may take a few minutes for the page to update.

Tandem tips

- To facilitate the revision of the rollup summary view, it will help to open the issue tracker of the specific program you are reviewing in a different tab of your web browser.

- The rollup summary view can be useful to see where comments from program visitors are required, for example when an asterisk (*) has been assigned to a criterion but no observation has been written.
- Please note that, by default, in the issue tracker rollup summary, all non-reviewed criteria will be marked with asterisks and the mention: “Program visitor observations not provided”.
- To learn how to access and use a rollup summary view, you can watch the [tutorial](#).

Using a program’s accreditation units reallocation tool

This section provides information about accessing and filling out a program’s accreditation units (AUs) reallocation tool. The reallocation table is a tool for the visiting team to reallocate AUs for any given course and track any adjustments required after triangulation of evidence.

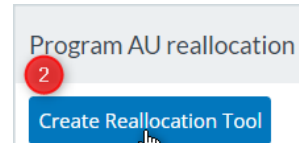
To access a program’s AUs reallocation tool:

1. From Tandem’s home page, on the right-hand side of the screen, under the “Review items” header:
 - A. Click on the program name you are assigned to review.
 - B. If the program name is not listed, click on “View all items”, then select the program’s name.

The screenshot shows the Tandem web application interface. At the top, there is a navigation bar with the Tandem logo and the text "Training | Formation". Below the navigation bar, there is a menu with options: Home, Profile, Affiliations, Calendar, Applications, Processes, Events, Instruments, and Documents. The main content area is titled "Review Items" and has a red notification badge with the number "1". Below this, there is a table with columns "Programs / Program Options" and "Courses". A dropdown menu is open, showing a search bar and a table of programs. The table has columns: HEI Name, Program Name, Program option, Accreditation cycle, and Courses. The first row in the table is highlighted with a red box and a red "A" label, showing "T-Engineers Canada University" with "CEAB Engineering - C" in the Program Name column. To the right of the dropdown menu, there is a "View All Items" button highlighted with a red box and a red "B" label.

HEI Name	Program Name	Program option	Accreditation cycle	Courses
T-Engineers Canada University	CEAB Engineering - C	--	2024 (APP-28)	11

2. On the right-hand side of the screen, under the “Program reallocation” header, click on “Create reallocation tool”. Once the tool has been created, the system will re-title it “Open AU reallocation tool”.
3. Under the “VT” column, for each course, when applicable, enter the appropriate AUs number. It is important to note that **data entered in the AUs reallocation tool does not automatically synchronize with other programs’ AUs reallocation tools**. When reallocating AUs for courses offered across multiple programs, visiting team members must collaborate to ensure consistency in data entry.
4. Before exiting the tool, click “Save”.



T-Engineers Canada University
Program/program option: CEAB Engineering - C Accreditation cycl

Course Number	Total AUs			M		
	HEI	VT	Diff.	HEI	VT	Diff.
<i>Compulsory Courses</i>						
BIO3203	42	42	0.0	0.0	0.1	0.0

4 Save

Explanatory notes about the table:

- A. The table displays accreditation units of compulsory and elective courses entered by the institution (“HEI” columns).
- B. The visiting team will reallocate AUs under the “VT” columns. Please note that the same numbers are entered in columns “HEI” and “VT” by default.
- C. The “Diff.” columns display the difference between the AUs entered by the institution and the AUs reallocated by the visiting team.
- D. The section in yellow displays the specified AUs, the AUs courses in engineering science or engineering design that must be taught by a faculty member licensed to practice engineering in Canada. **Note: The minimum AU requirement incorrectly shows 225 Specific AUs for Engineering Science. This is a content error that does not reflect the CEAB criteria. Please ignore that cell.**

T-Engineers Canada University
Program/program option: CEAB Engineering - C Accreditation cycl

Course Number	Total AUs			M		
	HEI	VT	Diff.	HEI	VT	Diff.
<i>Compulsory Courses</i>						
BIO3203	42	42	0.0	0.0	0.1	0.0
BIO4201	40	40	0.0	0.0	0.1	0.0
Requires P.Eng. or LL						
ES sp.		ED sp.			ES + ED sp.	
HEI	VT	Diff.	HEI	VT	Diff.	HEI VT
134	134	0.0	168	161	-7.2	302 295
225			225			600

Tandem tips

- If an HEI updates its accreditation units after the reallocation tool is created, the program visitor will need to click on the “Resync AU values” button to synchronize the new data entered in the course information form. This button is located on the program dashboard page under the “Program reallocation header”.
- To learn how to access and fill out a program’s AUs reallocation tool, you can watch the [tutorial](#).

