

Agrément en **Technologie du** Canada

National Program Accreditation Manual



January 28, 2022



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# **1.0 Introduction**

Welcome to Technology Accreditation Canada!

Technology Accreditation Canada (TAC) is a bold, world class accreditation organization, delivering accreditation services for the engineering technology and applied science profession in Canada.

TAC was established in 2010 by Technology Professionals Canada to revitalize the national accreditation process for technician and technologist programs. The original members are Applied Science and Engineering Technologists Association of Alberta (ASET), Applied Science Technicians and Technologists of British Columbia (ASTTBC), Ontario Association of Certified Technicians and Technologists (OACETT) and Technology Professionals Saskatchewan (TPS).

On November 12, 2019, TAC welcomed five new members; Association of Engineering Technicians and Technologists of Newfoundland and Labrador (AETTNL), Certified Technicians and Technologists of Manitoba (CTTAM) Island Technology Professionals (ITP), New Brunswick Society of Certified Engineering Technicians and Technologists (NBSCETT) and TechNova.

On November 15, 2019 an agreement was signed with Canadian Council of Technicians and Technologists to integrate the accreditation services of the Canadian Technology Accreditation Board (CTAB), whereby TAC assumed responsibility of all CTAB accredited programs.

#### 1.1 Vision, Mission and Values

Vision – Trusted excellence in engineering technology and applied science accreditation.

Mission - To deliver world class accreditation services and develop and maintain educational standards for the engineering technology and applied science profession in Canada.

We value;

Integrity - We aim to be fair, honest and transparent in all that we do, basing our judgments on sound evidence. We demonstrate high ethical standards. We keep our promises and commitments.

Passion - We are passionate about our business, customers and stakeholders. We take pride in our work. We have a passion to excel in everything we do. We aim for flawless delivery and learn from our mistakes.



Respect - We treat each other, our customers, team members and stakeholders with honesty and respect. We respect differences, support diversity and value the contributions of others. We are open and approachable about the work we do and how we do it, believing this encourages trust and confidence.

Accountability - We take ownership and accountability for our decisions and actions. We are dedicated to being a socially and environmentally responsible corporate citizen. We are committed to the long-term sustainability of our assets and business.

Innovation - We encourage creativity and open-minded thinking, continually exploring new and better ways to solve problems and create value. We have the courage to challenge the status-quo. We embrace and enable change.

# 1.2 Spirit of TAC

Through accreditation, TAC is committed to partnering with educational institutions to ensure students receive the highest quality education which meets the standards of Canada's engineering technology and applied science profession.

#### 1.3 Purpose of Manual

The purpose of this manual is to provide administrators with information and tools required to understand and implement TAC's national program accreditation process.



# Glossary

The following terms are used throughout the accreditation process.

**Aligned Programs:** A category of accreditation defined as two or more technician or two or more technology programs with significant commonality (approximately 80% common courses overall and 67% common courses in the final year).

**Canadian Technology Standards (CTS):** The set of general and discipline learning outcomes, one of the National Accreditation Components.

**Course Learning Outcome:** A statement found in course outlines (or alternatively in the documentation for assessments such as projects, tests or assignments) that describes significant and essential learning that students have achieved and can reliably demonstrate at the end of a course.

**Discipline Learning Outcome (DLO):** A set of learning outcome statements for each technician and technologist discipline.

**Educational institution (EI):** A college or polytechnic institute or polytechnic university where students are enrolled in an engineering technology or applied science program.

**Governance and Audit Council (GAC):** The group within Technology Accreditation Canada that is responsible, among other things, for the appeals stage of the accreditation process.

**General Learning Outcome (GLO):** A common set of learning outcome statements for each technicians and technologists.

**Joint Programs:** A category of accreditation defined as a technician and a technology program with significant commonality (approximately 80% common courses overall and 67% common courses in the first or first and second year).

**Learning Outcome:** A statement that describes significant and essential learning that students have achieved and can reliably demonstrate at the end of a course or program.

**Learning Outcome Indicator (LOI):** A measurable action a student must be able to perform to achieve a learning outcome.

**National Accreditation Criteria (NAC):** The set of standards by which an engineering technology or applied science program is measured against for the purposes of national program accreditation.



**Provincial Professional Association (PPA):** A member based, not-for-profit, organization which certifies engineering technology and applied science technicians and technologists.

**Program Options:** A category of accreditation defined as a technician or technology program with a fast track or accelerated option or a program with one or more "majors" or "streams" in the final year. Co-op is considered an option if not mandatory and students complete some different courses.

**Standard:** A category of accreditation defined as a stand alone technician or technology program, including a program with co-op as a mandatory component of the program or an option if all students complete the same courses.

**Technology Accreditation Canada (TAC):** An autonomous, not-for-profit, national accreditation body.

**Technology Professionals Canada (TPC):** An alliance of engineering technology professional associations in Alberta, British Columbia, Manitoba, New Brunswick, Newfoundland and Labrador, Nova Scotia, Ontario, Prince Edward Island and Saskatchewan, which represent more than 91% of engineering technology and applied science professionals in Canada.

**Technology Report (TR):** A document which describes the process or results of engineering technology or applied science related research which students submit in the final year of their technologist program.



# 2.0 Accreditation

Accreditation is both a process and a condition related to assuring the quality of education programs. The process, recognized worldwide as an objective method of assessment, involves an integrated system of continuous assessment, evaluation and improvement to comply with specified standards. The condition or state of being accredited provides a credential for the educational institution, students, regulators and the public, affirming that a program has accepted and is fulfilling its commitment to educational quality.

# 2.1 National Program Accreditation

The TAC national program accreditation model was developed in direct response to findings made by the Canadian Standards Association (CSA) after performing a comprehensive, independent review of technology accreditation practices that existed at the time measured against best practices from other jurisdictions and sectors.

TAC accredits engineering technology and applied science technician and technology programs at the technician and technologist levels. TAC accreditation measures an educational institution's engineering technology or applied science program against the standards in the National Accreditation Components, including the learning outcomes in the Canadian Technology Standards (CTS).

The process for accreditation is detailed in the following section.

### 2.2 Accreditation Eligibility

To apply for accreditation, an engineering technology or applied science program at the technician or technologist level must have alumni working in the engineering technology and/or applied science profession for at least one year.

### 2.3 Accreditation Categories

TAC has a number of accreditation categories, recognizing the various types of engineering and applied science programs offered.

- Standard a stand alone technician or technology program, including a program with co-op as a mandatory component of the program or an option if all students complete the same courses.
- Joint a technician and a technology program with significant commonality (approximately 80% common courses overall and 67% common courses in the first or first and second year).



- *Aligned* two or more technician or two or more technology programs with significant commonality (approximately 80% common courses overall and 67% common courses in the final year).
- Program Options a technician or technology program with a fast track or accelerated option or a program with one or more "majors" or "streams" in the final year. Co-op is considered an option if not mandatory and students complete some different courses.

# 2.4 Accreditation Program Key Features

National program accreditation is based on an transparent, fair and flexible process, and has the following key features;

- Custom designed, automated forms which streamlines the process and saves time
- Audit conducted by a trained and skilled audit team, with industry or academic experience, reviewed by the educational institution
- Staff support throughout the process
- Educational program selects the discipline learning outcomes which reflect the program being delivered, from any CTS
- One day site visit
- Detailed feedback to the educational program throughout process
- Accreditation is determined by the audit team
- Audit Report identifies best practices and opportunities for improvement
- Accreditation granted for 5 years

# 2.5 Achieving Accreditation

In order to achieve TAC accreditation status, a program must be compliant with all National Accreditation Criteria, including showing that graduates have reliably demonstrated achievement of all the general learning outcomes (GLO) and the five core discipline learning outcomes (DLO).

Once an educational institution's program has been accredited, this achievement will be announced publicly, posted as an accredited program on the TAC website. The educational program is presented a national program accreditation certificate and provided promotional toolkit, which includes TAC's National Accredited Program logo, IEA Accord logo (where applicable), student flyer, graduate banner and flyer.



# 2.6 Accreditation Benefits

- Assures current and prospective students the program is delivering the knowledge and skills required by the profession.
- Assures employers graduates are receiving the knowledge and skills required by the profession.
- Assures the educational institution the program is meeting the educational standards for the profession.
- Creates an opportunity for continuous improvement.
- Provides a team building opportunity for those associated with the program.
- Use of the promotional tools to differentiate program and attract prospective students.
- Provides graduates have an expedited path to a professional designation by provincial certifying bodies across the country.
- Provides academic credential recognition for graduates from accredited engineering technology programs in Dublin and Sydney Accord signatory countries.
- Entry into the annual Technology Report Contest.

# 2.7 Fees

Accreditation fees are posted on the TAC website.



# **3.0 National Program Accreditation Process**

National Program Accreditation involves assessing an engineering technology or applied science program against the educational standards of the engineering technology and applied science profession.

#### **3.1 National Accreditation Criteria**

The <u>National Accreditation Criteria</u> are the standards used for the purposes of national program accreditation and are available on the TAC website.

#### 3.2 Canadian Accreditation Standards

<u>Canadian Technology Standards</u> (CTS) are the engineering technology and applied science profession's set of national learning outcomes and are used by accreditation bodies, provincial certifying bodies, educational institutions, government agencies, industry and others for various purposes.

The CTS comprise of general learning outcomes, relative to all educational programs and discipline learning outcomes, particular to an engineering technology and applied science discipline, at the technician and technologist level. Each general and discipline learning outcomes contains a number of Learning Outcome Indicators (LOIs), which are examples, illustrating, defining and clarifying the level of performance to be achieved.

The CTS are used as part of the National Accreditation Criteria.

The 37 CTS are posted on the TAC website.



The accreditation process for a "standard" accreditation is outlined in the following sections. Unique steps in the process for other accreditation categories are detailed in sections 3.16 and 3.17.

#### An educational institution submits an Accreditation Application for an engineering Two (2) weeks prior to the site visit, no new materials may be submitted by the 8 educational institution unless permitted by the lead auditor. technology or applied science technician or technology program at a technician or technology level. The site visit is conducted by the audit team. The application is reviewed within five (5) days. Once approved, an email is forwarded 9 within five (5) days, providing access to the Self-assessment Form. Once the audit is concluded, the audit team determine the outcome of the audit The Self-assessment Form is completed and submitted by the educational institution 10 and submits the Audit Report within thirty (30) days. at least ten (10) weeks prior to the site visit date. The Form is reviewed for completeness within ten (10) days. The Audit Report is reviewed by the Executive Director and a second level review An audit team is selected and approved by the educational institution. 11 is conducted by the Governance and Audit Council within thirty (30) days. The educational institution is notified of the accreditation decision. If the program The Accreditation Coordinator works with the accreditation contact at the educational is compliant with all National Accreditation Components, the program is accredited institution and the audit team to determine the site visit date. 12 for 5 years. If not, the program has up to eighteen (18) months to resolve the non-compliant components. At least eight (8) weeks prior to the site visit, the audit team commences the audit, assessing whether the information provided in the Self-assessment Form complies with Each year, on the accreditation anniversary date, the educational institution is required 13 the National Accreditation Components. to submit an Annual Report, detailing changes to the program. The site visit schedule is finalized at least two (2) weeks prior to the site visit. The educational institution is notified one year prior to the accreditation expiring 14 to commence the renewal of the accreditation.

#### **Accreditation Process Chart**



### 3.3 Accreditation Prep Guide

The <u>Accreditation Prep Guide</u> is a tool to help prepare programs for accreditation. The Guide focuses on key elements of the process which are important to review and understand prior to moving forward with accreditation.

### 3.4 Timing

The timing of the accreditation process is very much dictated by the educational program. TAC makes every effort to accommodate the program's timing.

Completion of the Self-assessment Form (SAF) is based on the program's timing. Once the SAF is submitted, the process takes approximately 20 weeks to communicate the accreditation decision and present the Audit Report to the program.

Activity	Timing	Week #
Application submission	Optimally 9 months prior to site visit	1
Completion of Self-assessment Form (SAF)	Determined by educational program	
Site visit date selection	Minimum 16 weeks from site visit date	16
Self-assessment Form (SAF) submission	Minimum 12 weeks from site visit	20
Audit of SAF by audit team	Minimum 9 weeks from site visit	24
Site visit	1 day	32
Audit Report submission (assumes audit is completed at site visit)	Within 3 weeks of audit completion	35
Audit Report reviews (staff, program, second level)	Within 5 weeks of Audit Report submission	40
Communication of accreditation decision	Same day or day after Audit Report review	40

# 3.5 Application

- 1. The educational program completes the <u>accreditation application</u>, found on the TAC website, and submits it optimally nine (9) months prior to the site visit date.
- 2. The category of accreditation will determine how to complete the application process. Please consult the chart below.



Accreditation Category	Application	
Standard	One application	
Joint	Separate application for each program	
Aligned	One application, identifying one program as the program name and the others as options	
Program Options	One application, identifying each option as an option	

- 3. The accreditation application is reviewed within five (5) days of receipt. One of three decisions is made:
  - the program is approved to proceed to the next stage of the accreditation process;
  - (2) the program is required to revise the application;
  - (3) the program is denied proceeding with accreditation.
- 4. The educational program is sent an email indicating the decision.
- 5. The appropriate PPA is notified once the accreditation application has been approved.

#### 3.6 Self-Assessment Form

- 1. Once the accreditation application is approved, the educational program is sent an email with log in credentials to create the Self-assessment Form.
- 2. The Self-assessment Form lists the National Accreditation Criteria and indicates the information required from the program for assessment by the audit team.
- 3. The program completes the Self-Assessment Form, providing the requested information. A Self-assessment Form Guide is provided for support. Email or telephone assistance is available as required.
- 4. The Self-Assessment Form must be submitted at least twelve (12) weeks prior to the date of the site visit.
- 5. Student work, which is used as evidence to verify achievement of discipline and general learning outcomes, must be provided in the Self-assessment Form. Student work from the previous graduating class may be submitted.
- 6. The information in the Self-Assessment Form will be saved and available for the accreditation renewal.

The following documents pertain to this stage of the accreditation process:



- Accreditation Self-Assessment Form, which includes
  - Table 1 Enrollment and Graduation Data
  - Table 2 Discipline Learning Outcomes
  - Table 3 Contributing Courses to Discipline Learning Outcomes
  - o Table 4 Student Work for Discipline Learning Outcomes
  - Tables 5 General Learning Outcomes
  - Table 6 Contributing Courses to General Learning Outcomes
  - Table 7 Student Work for General Learning Outcomes
  - Table 8 Faculty Qualifications
  - Table 9 Faculty Workload
- Self-assessment Form Guide

**Note:** The quality of the audit is a function of the quality of the materials provided by the program. The onus is on the program to fully disclose all information and materials relevant to the process to the audit team.

### 3.7 Audit Team

- 1. All Auditors must have the following qualifications;
  - certified or licensed by a relevant provincial professional association
  - at least five (5) years of work experience in his or her discipline
  - completed the TAC Auditor Training
- 2. The audit team is appointed from individuals listed in the auditor registry.
- 3. The audit team is selected based upon:
  - technical suitability (subject matter expertise),
  - availability,
  - location,
  - avoidance of conflict of interest.
- 4. The audit team consists of a lead auditor and two additional auditors. At least one auditor will be a subject matter expert (SME). An SME is defined as being certified in the discipline of the program. The lead auditor may or may not be an SME. The goal is to have a well-balanced audit team in terms of industry and auditing experience. A fourth auditor is added for joint accreditations and may be added to programs with options.
- 5. If necessary, an additional SME may be brought in to the audit process as a resource at the discretion of the lead auditor and in consultation with the Executive Director.
- 6. An auditor-in-training may also be assigned to the audit team. No more than two auditors-in-training may be assigned to an audit team. Auditors-in-training may be



from the same province in which the educational institution is located or from outside of the province.

- 7. Wherever possible, at least one of the three audit team members must be from the province in which the educational institution is located. If an auditor is not available from the province in which the educational institution is located, then an auditor from the next closest province will be assigned to the team. At least one of the three audit team members must be from outside the province in which the educational institution is located.
- 8. The educational institution is advised of the audit team members. The educational institution reviews the audit team's resumes and may only request changes on the grounds of conflict of interest. Any request for a change to the audit team must be provided to the Executive Director in writing no more than ten (10) days after the educational institution receives notification of the audit team.

### 3.8 Audit

- 1. The timeframe for the audit is approximately nine (9) weeks, optimally concluding at the site visit.
- 2. The lead auditor establishes contact with the designated educational program accreditation contact person. The Executive Director and Accreditation Coordinator are copied on all communication with the program. Timely communication is crucial to the success of audit.
- 3. Each auditor reviews the Self-Assessment Form independently and completes the Audit Form.
- 4. The audit team notes any criteria which are non-compliant and criteria specific comments, unique program features, best practices and opportunities for improvement.
- 5. Should there be any issues of non-compliance at approximately week four (4) of the audit process, the lead auditor brings these issues to the attention of the educational program. The lead auditor may also request any missing information or if the audit team has any questions about the submitted materials.
- 6. The lead auditor prepares the audit team for the site visit. The audit team confirms questions they will ask and areas that they will investigate based on the audit.
- 7. The Accreditation Coordinator informs the program when the audit is completed.



### 3.9 Site Visit

- 1. The site visit is one full day with interviews with students, graduates, employers, PAC members, faculty and program administration and a tour of the program's facilities to verify specific national accreditation criteria and to identify unique program features, best practices and opportunities for improvement. The site visit also provides the opportunity for the audit team to present key audit findings to date.
- 2. The site visit is conducted virtually.
- 3. The site visit date may be conducted anytime during the year, with the date to be determined a minimum sixteen (16) weeks prior to the date.
- 4. The date will be confirmed by the Accreditation Coordinator upon confirmation with the audit team.
- 5. A Site Visit Preparation Letter and Site Visit Schedule are sent via e-mail to the program once the date is confirmed.
- 6. The Virtual Site Visit Guide is provided to help prepare for the site visit.
- 7. At least one week prior to the site visit, a virtual meeting with the program contact is conducted as final preparation for the site visit.
- 8. The audit team conducts the site visit following the agreed upon site visit schedule (see Appendix 1).

The following documents pertain to this stage of the accreditation process:

- Site Visit Preparation Letter
- Site Visit Schedule (in person and virtual)
- Virtual Site Visit Guide
- Virtual Site Visit Policy (Appendix 6)

### 3.10 Audit Report

- 1. The audit team prepares a draft Audit Report.
- 2. The audit team determines one of three outcomes for the accreditation process:
  - (1) the program receives accreditation;
  - (2) the program is not accredited and is required to make revisions within a timeframe designated by the audit team (not to exceed 18 months) in order to receive accreditation; or
  - (3) the program is denied accreditation.



- 3. If the audit team cannot reach an agreement about the accreditation outcome, the Executive Director is notified. A meeting with the audit team, the Executive Director and the Governance and Audit Council (GAC) is held in order to reach an accreditation decision.
- 4. The Audit Report indicates the assessment for the National Accreditation Criteria, provides general comments and identifies unique program features, best practices and opportunities for improvement. The Report provides answers to all the questions asked at the site visit.
- 5. The audit team signs the last page of the Audit Report to indicate that they have read the report in detail, agree with its content and agree to the accreditation decision.
- 6. The draft Audit Report is submitted by the lead auditor within twenty-one (21) days of the completion of the audit, optimally the date of the site visit, unless a review of materials post site visit is required.

### 3.11 Accreditation Report

- 1. The Accreditation Coordinator prepares an Accreditation Report once the Audit Report is finalized.
- 2. The Report provides a general overview of the accreditation, measures customer service standards and other accreditation timing, includes photos from the site visits and any recommendations resulting from the accreditation.

# 3.12 Reviews

- 1. Staff have seven (7) days to review the draft Audit Report for completeness and value to the program. Staff may <u>not</u> change the decision of the audit team.
- 2. The draft Audit Report, is sent to the educational program to correct factual errors (e.g. spelling, grammar, errors in names, titles or attendees at meetings) in the Report. The review is not an opportunity to provide new, updated or more detailed information since completion of the audit. The program has seven (7) days upon receipt of the draft Audit Report to respond. Should the program send a response, the corrected Report is sent to the audit team for review.
- 3. Once reviewed, the Accreditation Report and final Audit Report are submitted to the Governance and Audit Council (GAC) for a Second Level Review.
- 4. The Second Level Review of the Accreditation Report is to ensure the accreditation process was followed by staff and of the Audit Report to ensure the audit team followed the audit process.



- 5. The GAC may not change the decision of the audit team.
- 6. The timeframe for the Second Level Review is within twenty-one (21) days from the program's review of the draft Audit Report.
- 7. Should the GAC determine the audit team did not follow the audit process, the GAC will issue a letter to the audit team, within seven (7) days of the second level review, informing the team of the parts of the process which were not followed and providing an opportunity for the audit team to correct the parts of the process which were not followed.
- 8. Within thirty (30) days of the date of the GAC's letter to the audit team, the audit team will correct the parts of the process which were not followed and, if required, submit a revised Audit Report.
- 9. In the event the audit team does not review the parts of the process which were not followed, the GAC will instruct the Board of Directors to correct the parts of the process which were not followed.

### 3.13 Communication of Accreditation Decision

- 1. Within five (5) days of the Second Level Review, an Accreditation Letter, which indicates the accreditation decision, and the Audit Report is sent to the educational program. Copies are also forwarded to the PPA.
- 2. Tools to promote the accreditation are provided with the accreditation letter email and shortly thereafter.
- 3. Accreditation is awarded for a period of five (5) years.
- 4. The accredited program is listed on the TAC website.
- 5. A ceremony is scheduled to present the National Program Accreditation certificate.

The following documents pertain to this stage of the accreditation process:

- TACNAC 030 Accreditation Approval Letter
- TACNAC 031 Accreditation Revisions Required Letter
- TACNAC 032 Accreditation Denial Letter

#### 3.14 Resolving Non-compliant Components

1. If the educational program is not accredited and is required to resolve non-compliant criteria to be granted accreditation, the program will be provided up to eighteen (18) months to provide materials as evidence the non-compliant criteria are resolved.



- 2. Upon receipt of the submitted materials, the audit team has twenty-one (21) days to re-assess the non-compliant criteria, determine an outcome and submit an updated Audit Report.
- 3. Staff has (7) days to review the Audit Report from the date of submission.
- 4. The GAC have twenty-one (21) days from the staff review date to conduct the Second Level Review.
- 5. If the non-compliant criteria are not resolved within the designated timeframe accreditation is denied.
- 6. Programs required to resolve non-compliant criteria during the initial audit may be requested to submit material related to the non-compliant component during the five (5) year accreditation period for review by an audit team. Programs will be provided at least 3 months notice of a request for such materials. The timing of the review of the materials by the audit team, the submission of the Audit Report and the reviews by the staff and GAC shall be consistent with the timing outlined in points 2 and 3 noted above.

#### 3.15 Evaluation Process

- 1. A Customer Satisfaction Survey is forwarded to the educational program with the accreditation letter.
- 2. Auditors evaluations are also conducted. The auditors are evaluated by the lead auditor. The lead auditor is evaluated by the auditors. If there is an auditor-in-training in the audit team, he or she is evaluated by the lead auditor as part of the auditor training process.
- 3. All evaluations are forwarded to the Executive Director who then determines if any immediate follow-up action is required specific to the audit that was just completed either with the auditors or with the educational program.
- 4. All evaluations are done online using Survey Monkey.

The following documents pertain to this stage of the accreditation process:

- Customer Satisfaction Survey
- Auditor Evaluation by Lead Auditor
- Auditor-in-Training Evaluation by Lead Auditor
- Auditor Evaluation of Lead Auditor



### 3.16 Joint and Aligned Programs

- 1. The following chart provides the steps in the accreditation process for joint and aligned programs. The steps of the accreditation process are in the left hand column, with particulars for these accreditation categories in the right hand column.
- 2. The educational program may be requested to provide the courses from each of the programs to understand commonality.

Accreditation Step	Particulars
Accreditation Application	<ul> <li>Joint – an application for each program is required</li> </ul>
	<ul> <li>Aligned – one application is required which lists each</li> </ul>
	program as an option
Self-Assessment Form	<ul> <li>Joint – a Self-Assessment Form for each program is required</li> </ul>
	<ul> <li>Aligned – one Self-Assessment Form is required, with</li> </ul>
	tables for each program required in criteria E.1 and E.2.
Audit team	<ul> <li>Joint and Aligned – A four-person audit team is formed.</li> </ul>
Site visit	• Joint – audit team conducts the site visit for both programs
	on the same day.
	<ul> <li>Interviews are conducted together.</li> </ul>
	<ul> <li>Alumni and students from both programs are to be interviewed.</li> </ul>
	<ul> <li>Aligned – Same as Joint though an extra half day may be</li> </ul>
	added if more than two programs.
Audit Report	<ul> <li>Joint – An Audit Report for each program is prepared.</li> </ul>
	<ul> <li>Aligned – one Audit Report is prepared.</li> </ul>
National Program	National Program Accreditation is granted for each program
Accreditation	for five (5) years.
	Accreditation certificates presented for each program.

### 3.17 Program Options

1. Accreditation for programs with options follows the same process as a standard accreditation with one exception. Separate tables for each option are required for criteria E.1 and E.2.

### 3.18 Appeals

1. If a program is not accredited or denied accreditation, the educational program may appeal the decision by filing an Appeal Request within thirty (30) days of the Accreditation Letter date. The only grounds for an appeal is the audit process was not followed. The Appeal Request requires the educational program to indicate, by National Accreditation Criteria, the part of the audit process which was not followed and to provide an explanation.



- 2. The audit process is defined as the examination of the information provided in the Self-assessment form and gathered from the site visit and the assessment of whether said information complies with the National Accreditation Criteria.
- 3. The Governance and Audit Council appoints an Appeals Panel within thirty (30) of the submission of the Appeal Request.
- 4. The Executive Director forwards the Appeal Request to the Appeals Panel for review. The Executive Director informs the audit team of the Appeal Request. A representative of the audit team may address any concerns regarding the process at the request of the Appeals Panel.
- 5. The appropriate PPA is notified once an Appeal Request has been received.
- 6. The Appeals Panel reviews the Appeal Request and renders a decision.
- 7. An Appeal Response Letter is forwarded to the educational program within thirty (30) days. A copy of the Appeal Response Letter is sent to the appropriate PPA.
- 8. Should an appeal be granted, the National Accreditation Criteria which was assessed non-compliant will be re-assessed by the audit team or assessed compliant.

The following documents pertain to this stage of the accreditation process:

- Appeal Policy (Appendix 3)
- Appeal Request
- Appeal Response Letter

#### 3.19 Withdrawal

- 1. The educational program may withdraw from the accreditation process at any time prior to receiving the Audit Report by notifying the Executive Director in writing.
- 2. The financial penalty for withdrawing from the accreditation process will be determined by the Executive Director.

### 3.20 Annual Report

- The educational program is required to complete and submit an Annual Report for the accredited program each year on the anniversary of their accreditation, disclosing changes to the program related to the National Accreditation Criteria and to report on the action taken, including the timing thereof, of the opportunities for improvement identified in the Audit Report.
- 2. Four (4) weeks prior to the accreditation anniversary date, a copy of the Annual Report will be emailed.



- 3. The Annual Report is reviewed within five (5) days of receipt.
- 4. Once the Annual Report has been reviewed, an Annual Report Response Letter will be sent to the educational program.
- 5. In the event that program changes reported in the Annual Report are determined to affect the program's compliance of the National Accreditation Criteria, the program may be required to submit materials for review.
- 6. If required, an audit team, preferably from the original audit, will review the submitted materials.
- 7. At the conclusion of the review, an Audit Report will be prepared with the outcome of the review.
- 8. If the program is not accredited, the program will be provided up to eighteen (18) months to provide materials as evidence the non-compliant criteria are resolved.
- 9. In the event program changes are not reported in the Annual Report and are determined to affect the program's compliance with one or more National Accreditation Criteria, accreditation may be withdrawn. The program may be provided an opportunity to resolve the non-compliant criteria within a designated timeframe. Accreditation withdrawal shall be from the time of non-compliance until such time as the non-compliant criteria is resolved.

The following documents pertain to this stage of the accreditation process:

- Annual Report
- Annual Report Response Letter

#### 3.21 Customer Service Standards

Activity	Standard
Accreditation application review Self-assessment Form (SAF)	Email response within 5 days of receipt Email with access to SAF within 5 days of application approval
Self-assessment Form review Audit status	Email response within 10 days of receipt Email from the lead auditor at approximately week 4 of the audit
Audit completion Accreditation decision	Email notification upon audit completion Email accreditation letter and Audit Report within 5 days of Second Level Review
Annual Report review	Email response within 5 days of receipt



Accreditation appeal review

Email appeal response letter within 30 days of appeal submission

#### **3.22 Accreditation Renewal Process**

- 1. The educational institution is sent an accreditation renewal one-year reminder email at least one year before the expiry of the program's accreditation.
- 2. The site visit must take place during the semester in which the accreditation expires, unless agreed to in writing by TAC.

The following documents pertain to this stage of the accreditation process:

• Accreditation Renewal One-Year Reminder Email



# 4.0 National Program Accreditation Continuous Improvement Procedures

### 4.1 Customer Satisfaction Survey

1. At the end of each year, Customer Satisfaction Surveys are compiled and reviewed. Results from the review are noted in the TAC's Annual Report and may be utilized in the preparation of the annual Continuous Improvement Report.

### 4.2 Auditor Performance Reviews

1. Throughout the year, auditor evaluations are documented in each auditor's file to help determine additional support required and to identify potential lead auditors.

### 4.3 National Accreditation Criteria Continuous Improvement Procedures

- An annual review of the National Accreditation Criteria will be conducted for continuous improvement purposes. The annual review will be conducted by the Executive Director in consultation with the Board and the GAC at the end of the financial/planning year. The annual review will be based upon the collated auditor evaluations and customer surveys from the past year as well as data and anecdotes collected by staff.
- 2. Every five (5) years a Comprehensive Review of the National Accreditation Criteria will be completed for continuous improvement purposes. The review will be completed at the end of that financial/planning year. The Comprehensive Review will be based upon the following data:
  - Collated auditor evaluations from the past five (5) years.
  - A survey to auditors on the current version of the auditor registry.
  - A survey to educational institutions that have TAC accredited programs.
  - A survey to employers that employ engineering technicians and technologists and applied scientists.

The surveys will ask the respondents to comment on the relevance of the National Accreditation Criteria to the current industry requirements. The surveys will be developed by the Executive Director in consultation with the Board and GAC.

- 3. At the end of the Comprehensive Review, the Board and GAC will determine revisions, if any, that are required to the National Program Accreditation Criteria.
- 4. At the end of the Comprehensive Review, a revised version of the National Accreditation Criteria will be issued if revisions are required. The revised criteria will be publicized on the TAC website and communicated to all educational institutions with accredited programs.



- 5. Any accreditations in progress at the time of the issuance of the revised National Program Accreditation Criteria resulting from the Comprehensive Review will be completed under the version of the components in place at the time of the submission of the Accreditation Application.
- 6. If, during the Annual Review, any urgent changes to the National Accreditation Criteria are identified by the Executive Director, in consultation with the Board and the GAC, a Comprehensive Review will be initiated, regardless of where TAC is in the five-year continuous improvement review cycle.

### 4.4 National Program Accreditation Process Continuous Improvement Procedures

- An annual review of the accreditation process will be conducted for continuous improvement purposes. The annual review will be conducted by the Executive Director in consultation with the Board and the GAC at the end of the financial/planning year. The Annual Review will be based upon the collated auditor evaluations and customer surveys from the past year as well as data and anecdotes collected by the Executive Director.
- 2. Every five (5) years a Comprehensive Review of the accreditation process will be completed for continuous improvement purposes. The review will be completed at the end of that financial/planning year. The Comprehensive Review will be based upon the following data:
  - Collated auditor evaluations from the past five (5) years.
  - A survey to auditors on the current version of the auditor registry.
  - A survey to educational institutions that have TAC accredited programs.

The surveys will ask the respondents to comment on the efficiency and effectiveness of the accreditation process. The surveys will be developed by the Executive Director in consultation with the Board and GAC.

- 3. At the end of the Comprehensive Review, the Board and GAC will determine revisions, if any, that are required to the accreditation process.
- 4. At the end of the Comprehensive Review, a revised version of the accreditation process will be issued if revisions are required. The revised process will be publicized on the TAC website, and communicated to all educational institutions with accredited programs and all PPAs.
- 5. Any accreditations in progress at the time of the issuance of the revised accreditation process resulting from the Comprehensive Review will be completed under the version of the process in place at the time of the submission of the Accreditation Application.



6. If, during the Annual Review, any urgent changes to the accreditation process are identified by the Executive Director, in consultation with the Board and the GAC, a Comprehensive Review will be initiated, regardless of where TAC is in the five-year continuous improvement review cycle.



# 5.0 Roles and Responsibilities

The following are the roles and responsibilities of those individuals/groups involved in the national program accreditation process.



# 5.1 Board of Directors

The Board of Directors is responsible for oversight of TAC operations. The Board approves the processes by which the accreditation is granted, including the establishment of the standards, the determination of auditor competency, the appropriate composition of the audit team and the documentation supporting the audit process.

The Board consists of a representative from each members (PPAs) and one representative from industry and academia.

# 5.2 Governance and Audit Council (GAC)

The GAC, reporting to the Board, is responsible for the evaluation and monitoring of governance structures and processes, including policy development and processes for Board monitoring/oversight of operations. The GAC validates that the accreditation and audit processes were followed through a second level review and an annual review. The GAC also has oversight of the appeals process.

The GAC consists of one Board Director, a registrar from a PPA, an audit professional and three members at large.



### 5.3 Standards Council

The Standards Council (SC) oversees the development and maintenance of national standards to be used for accreditation and certification process.

The Standards Council consists of the registrars of the members, an academic representative and a representative from CSCT.

### 5.4 Provincial Professional Association (PPA)

The PPAs are the certifying bodies for engineering and applied science technologists and technicians.

A representative of the appropriate PPA may participate as an observer in site visits for programs in that province. The PPAs are acknowledged in TAC presentations to colleges and at accreditation site visits as a key partner.

The PPAs nominate candidates to be auditors. The PPAs also receive a copy of the accreditation letter and Audit Report for programs in their province.

#### **5.5 Executive Director**

The Executive Director reports to the Board of Directors. The Executive Director is responsible for:

- monitoring communication between the lead auditor and the educational institution;
- reviewing the Audit Report for clarity and accuracy and liaising with the lead auditor in the event any changes are required;
- approving the Audit Report;
- forwarding the Audit Report to the to the educational institution and appropriate PPA.

### **5.6 Accreditation Coordinator**

The Accreditation Coordinator reports to the Executive Director. The Accreditation Coordinator is responsible for:

- forwarding the log in information to the educational institution;
- maintaining all accreditation files;
- monitoring the communication between lead auditor and the educational institution;
- appointing the audit team;
- co-ordinating the site visit with the educational institution and auditors;



# 5.7 Lead Auditor

The Lead Auditor reports to the Executive Director for the completion of a specific program accreditation or audit.

A lead auditor must:

- Be certified or licensed by the relevant Provincial Professional Association.
- Have completed the auditor training.
- Have at least five (5) years of work experience in their discipline.
- Have performed at least three (3) TAC audits or the equivalent.
- Maintain positive auditor evaluations from the auditors and the educational institution.
- Sign the Auditor Policy Declaration.

Additional desirable qualifications for a lead auditor include:

- Leadership or management experience.
- Other auditing or quality management experience or training, for example internal auditing or ISO auditing.

The lead auditor is responsible for:

- Completing the auditor training.
- Conducting an audit of the information provided in the Self-assessment Form.
- Being the point of contact for the educational institution during the preparation for and implementation of the site visit.
- Copying the Executive Director and Accreditation Coordinator on all correspondence with the educational institution in preparation for the site visit.
- Scheduling audit team tasks.
- Facilitating the auditor communications for materials required for the audit (course outlines, samples, etc.).
- Leading the site visit.
- Coordinating completion of the Audit Report with the audit team members.
- Submitting a signed Audit Report.
- Answering any questions about clarity and accuracy in the Audit Report from the Executive Director.
- Completing evaluations on the auditors and auditors-in-training.

### 5.8 Auditor

An auditor reports to the lead auditor.

An auditor must:

- Be certified or licensed by the relevant Provincial Professional Association.
- Have completed the auditor training.
- Have at least five (5) years of work experience in his or her discipline.



- Have preferably participated in at least one (1) TAC audit as an auditor-intraining.
- Maintain positive auditor evaluations from the lead auditor and the educational institution.
- Sign the Auditor Policy Declaration.

An auditor is responsible for:

- Completing auditor training process.
- Conducting an audit of the information provided in the Self-assessment Form.
- Attending the site visit as part of an audit team.
- Participating in the accreditation decision.
- Participating in the completion of the Audit Report.
- Reviewing and signing the Audit Report.
- Completing evaluations on the lead auditor.

### 5.9 Auditor-in-Training

An auditor-in-training reports to the lead auditor.

An auditor -in-training must:

- Be certified or licensed by the relevant Provincial Professional Association.
- Have completed the auditor training.
- Have at least five (5) years of work experience in his or her discipline.
- Sign the Auditor Policy Declaration.

An Auditor-in-Training is responsible for:

- Completing auditor training process.
- Conducting an audit of the information provided in the Self-assessment Form.
- Attending the site visit as part of an audit team.
- Completing evaluations on the lead auditor.

# 5.10 Auditor Documents

The following documents pertain to auditors, lead auditors and auditors-in-training:

- Auditor Policy Declaration
- Auditor Code of Conduct
- Auditor Conflict of Interest Policy
- Auditor Confidentiality Policy
- Expense Policy
- Acceptance of Gifts Guidelines
- Auditor Dress Code Guidelines



# Appendix 1

# Virtual Site Visit Schedule

Time	Activity & Particulars		
8:15 - 8:30 am	Welcome		
	Brief introductions of program/institution contacts, audit team		
	members and TAC staff.		
8:30 - 9:00 am	Employer Interview (Group)		
	<ul> <li>The interview is to assess graduate employability and success from</li> </ul>		
	local employers.		
	• 4 representatives (technical and/or H.R.) from companies who can		
	comment on the grads' work performance.		
9:00 - 9:30 am	Program Advisory Committee Interview (Group)		
	<ul> <li>The interview is to assess how effectively the program advisory</li> </ul>		
	committee is functioning.		
	4 Program Advisory Committee members.		
9:30 – 9:45 am	Break		
9:45 - 10:30 am	Alumni Interview (Group)		
	• The interview is to assess the graduate experience in the workforce		
	after completion of the program and to ensure that this experience		
	aligns with program's objectives.		
	<ul> <li>5 recent alumni (graduated within 1-3 years) to attend.</li> </ul>		
10:30 – 10:45 am	Break		
10:45 - 11:45 am	Program Information Session		
	The information session is to provide;		
	$\circ$ 1) a brief overview of the program's history, details about		
	program options (if applicable), unique program features and		
	careers that graduates can pursue (15 minutes)		
	<ul> <li>2) an explanation why the 5 core discipline learning outcomes</li> </ul>		
	were selected (5 minutes each outcome)		
	Program Chair/Coordinator to present.		
11:45 am - 12:00	Please allow time for questions and answers.  Break		
	Diedk		
pm 12:00 – 12:30 pm	Virtual Tour of Facilities		
12.00 12.00 pm	<ul> <li>The purpose of the live video tour of the labs to review equipment</li> </ul>		
	and health and safety signage and procedures specific to the		
	program.		
12:30 – 1:00 pm	Lunch Break		
	Personal time.		
1:00 – 1:45 pm	Student Interview (Group)		
p	<ul> <li>The interview is to assess the student experience in the program and</li> </ul>		
	to ensure that this experience aligns with program's objectives.		



	• 5 students in their final semester (preferred), or final year, to attend.		
1:45 – 2:00 pm	Break		
2:00 – 3:00 pm	Faculty Interviews (Group)		
	• The interviews are to assess faculty experience in the program and to ensure that this experience aligns with the program's objectives.		
	• 3 instructors teaching a culminating course and the instructor for the capstone/Technology Report course are to be interviewed.		
	Lead auditor may request additional faculty to be interviewed.		
3:00 – 3:15 pm	Break		
3:15 – 3:45 pm	Program Head Interview		
	• The purpose of the interview is to understand any challenges with the program, discuss the value of accreditation, communicate issues any issues relating to the audit.		
	<ul> <li>Program Chair/Coordinator/Head to attend.</li> </ul>		
3:45 – 4:00 pm	Break		
4:00 – 4:30pm	Audit Team Deliberation		
	• The audit team compiles the key findings of the audit and prepares for the exit meeting.		
4:30 – 5:00 pm	Exit Meeting with Program Administrators and Institution		
	Representatives		
	• The exit meeting provides verbal feedback by the lead auditor on the key findings to date, including disclosing non-compliant components,		
	unique program features, best practices and opportunities for improvement.		
	<ul> <li>Timelines for the next steps of the audit process are detailed.</li> </ul>		
	<ul> <li>The meeting also provides an opportunity for program administrators and institution representatives to ask questions of the audit team.</li> </ul>		
	<ul> <li>Institution representatives (i.e. VP of Academics, quality assurance staff), program administrators (i.e. Dean, Chair/Coordinator) and any others involved with or interested in the accreditation may attend.</li> </ul>		



# Appendix 2

# Site Visit Schedule for Joint or Aligned Program Accreditation

Time	Activity	Together or Separate?
8:15 - 8:30 am	Breakfast with Alumni, Employers, Advisors	This activity is to be completed together.
8:30 – 9:00 am	Employer Interview	This activity is to be completed together.
9:00 - 9:30 am	Program Advisor Interview	This activity can be completed together if there is one Program Advisory Committee (PAC) for the two programs. If there are two PACs, two separate interviews should take place.
9:30 - 9:45 am	Break	
9:55 - 10:30 am	Alumni Interview	This activity may be completed together though there must be sufficient input from alumni from both programs.
10:30 - 10:45 am	Break	
10:45 - 11:45 am	Program Information Session	The program overview can be completed together. The overview of the discipline learning outcomes and culminating courses two programs are then described separately.
11:45 am - 12:00 pm	Break	
12:00 – 12:30 pm	Tour of Facilities	N/A.
12:30 – 1:00 pm	Lunch	
1:00 – 1:45 pm	Student Interviews	This activity can be completed together though there must be students from both programs.
1:45 – 2:00 pm	Break	
2:00 – 3:00 pm	Faculty Interview	This activity is to be completed together or separately depending on how many unique instructors there are.
3:00 – 3:15 pm	Break	
3:15 – 3:45 pm	Program Administrator Interview	This activity is to be completed together.
3:45 – 4:00 pm	Break	
4:00 – 4:30 pm	Audit Team Deliberation	This activity is to be completed together.
4:30 – 5:00 pm	Exit Meeting with Program and Institution Representatives	This activity is to be completed together.



# Appendix 3

# **Appeal Policy**

Effective: Revised August 10, 2020

### Scope

This policy describes the conditions for an accreditation appeals by an educational institution and the appeals process.

### **Principles**

Technology Accreditation Canada recognizes the right of an educational institution to appeal the accreditation decision. Operating procedures exist in support of this policy, in section 3.13 of the National Program Accreditation Manual.

### Definition

The accreditation decision is one of three outcomes decided by the audit team at the conclusion of the audit and communicated in the Audit Report.

The audit process is the examination of the information provided in the self-assessment form and gathered from the site visit and the assessment of whether said information complies with the national accreditation components.

# Policy

If the program is not accredited or denied accreditation, the educational institution may appeal the decision by filing an Appeal Request within thirty (30) days of the date of the Accreditation Letter.

An educational institution which does not file a written request for an appeal within thirty (30) days of the date on the Accreditation Letter shall waive the right to appeal.

The Appeal Request requires the educational institution to indicate, by National Accreditation Criteria, the part of the audit process which was not followed and to provide an explanation.

The only grounds for an appeal is if the audit process was not followed.

Appeals will be reviewed and determined by a panel of three individuals ("Appeals Panel")



The Appeal Panel will be appointed from a pool of candidates, comprising of current TAC auditors and educators, each of whom shall;

- o be familiar with TAC accreditation standards and processes,
- o not had any involvement relating to the accreditation under appeal,
- not be in a conflict of interest with the program (e.g. sitting on PAC)

Educators may include Deans, Associate Deans and program administrators (i.e. Program Coordinator, Academic Chair) and faculty.

The Appeals Panel will comprise of two auditors and one educator.

The educational institution is notified of the Appeals Panel members and must notify TAC of any conflict of interest within seven (7) days.

The Appeals Panel has thirty (30) days to review the Appeal Request and render a decision.

Should an appeal be granted, the National Accreditation Criteria which was assessed non-compliant will be either re-assessed by the audit team or assessed compliant.

The decision of the Appeals Panel is final and binding.

#### Procedure

The Appeal Request is forwarded to the Appeals Panel for review. The appropriate PPA is notified once an Appeal Request has been received. The audit team is informed of an appeal.

The Appeal Panel will be appointed by the Governance and Audit Council within thirty (30) days of the date of the Appeal Request.

A representative of the audit team may address any concerns regarding the process at the request of the Appeals Panel.

Once a decision is rendered, the Appeals Panel sends the educational institution an Appeal Response Letter. A copy of the Appeal Response Letter is sent to the appropriate PPA.