Technology Accreditation Canada

Agrément en Technologie du Canada

National Program Accreditation Manual

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1.0 Introduction

Welcome to Technology Accreditation Canada (TAC)!

Technology Accreditation Canada 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 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.

2.0 Accreditation

Accreditation is the act of granting credit or recognition that maintains suitable standards. The process of accreditation is recognized worldwide as an objective method of assessment and an important tool to identify program strengths and challenges.

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. 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 Accreditation Criteria (CTAC).

The process for accreditation is detailed in the following section.

2.2 Accreditation Criteria

To apply for accreditation, a program must have alumni working in the engineering technology and/or applied science profession.

2.3 Accreditation Categories

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

Standard – a stand alone technician or technology program

Joint – a technician and technology program with significant overlap (at least 80% common courses overall and 67% common courses in the second year)

Aligned – two technician or two technology programs with significant overlap (at least 80% common courses overall and 67% common courses in the final year)

Program Options – a program with one or two common years and two or more streams in the final year or a standard program with fast track or accelerated options

2.4   Accreditation Program Key Features

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

- Custom, automated forms which streamlines the process and saves time
- Audit conducted by a trained and skilled audit team, with industry or academic experience, approved by educational institution
- Site visit
- Detailed feedback to the educational institution throughout process
- Program accreditation is determined by the audit team
- Copy of audit report provided with 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 Components, including showing that graduates have reliably demonstrated achievement of all 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 institution will be provided TAC's National Accredited Program logo for promotional purposes.

2.6   Accreditation Benefits

- Demonstrates a commitment to delivering a high quality of education for assurance and pride.
- Creates an opportunity for continuous improvement.
- Provides a team building opportunity.
- Differentiates your program to attract students.
- Graduates from TAC accredited programs are generally fast tracked to professional status by provincial professional regulators.

2.7   National Accreditation Components

The National Accreditation Components are the standards by which an engineering technology or applied science program are measured against for the purposes of national program accreditation.

The National Accreditation Components can be found as Appendix 1.

2.8   Canadian Accreditation Technology Criteria

Canadian Technology Accreditation Criteria (CTAC) are the engineering technology profession's set of national learning outcomes and are used by accreditation bodies, provincial professional associations, educational institutions, government agencies, industry and others for various purposes. TAC uses CTAC for the purposes of national program accreditation.

CTAC for each engineering technology and applied science discipline is comprised of eight (8) general learning outcomes found in the technician (GLON) and technologist (GLOY) and standards, plus discipline learning outcomes found in discipline specific standards.

Each GLO and DLO contains a number of Learning Outcome Indicators (LOIs), which are examples, illustrating, defining and clarifying the level of performance to be achieved.
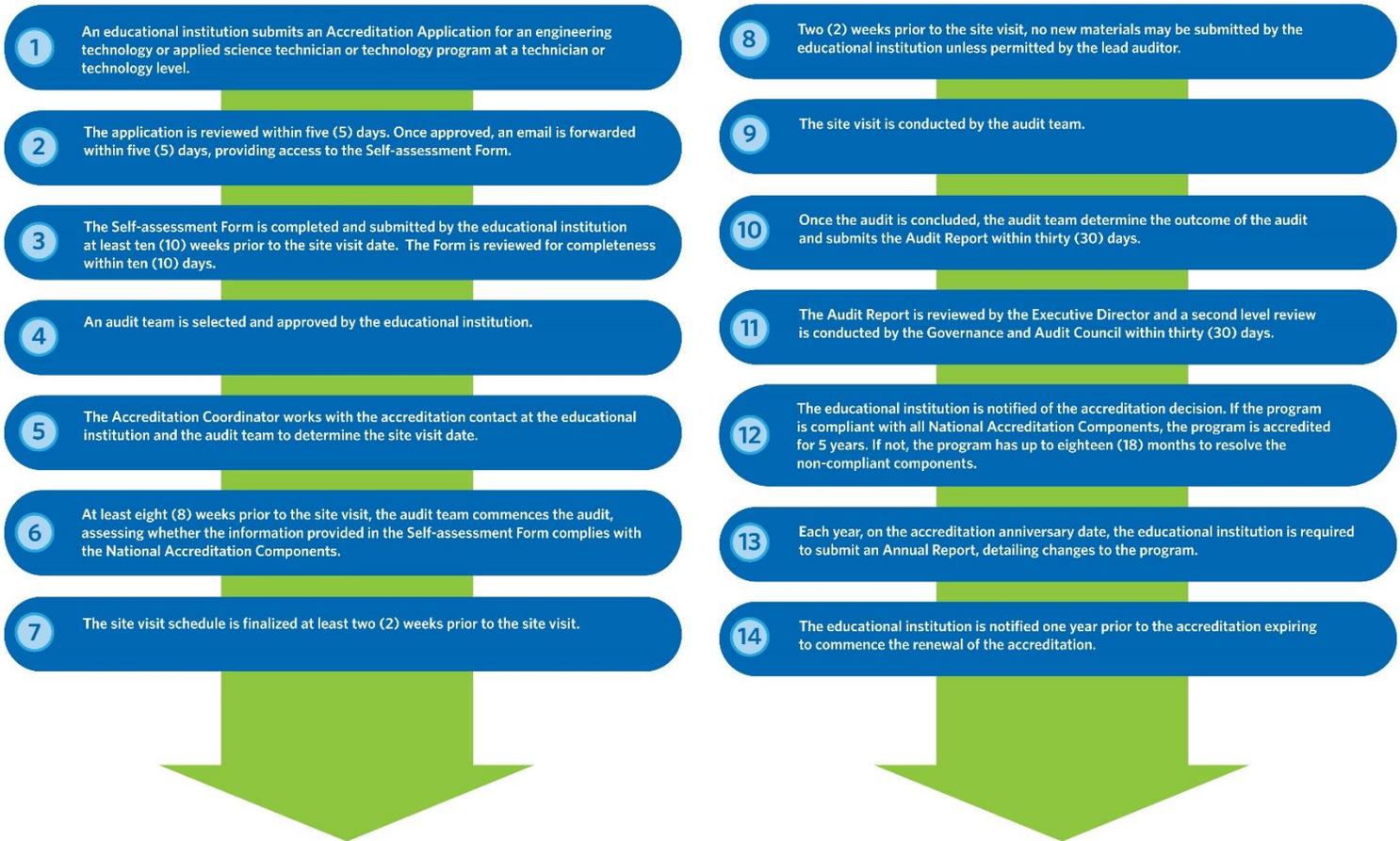
The 37 CTAC can be found on the TAC website.
http://www.technologyaccreditation.ca/Accreditation/National_Accreditation_Standards_-_CTAC.

3.0 National Program Accreditation Process

The National Program Accreditation process for a standard accreditation is outlined in the following sections. Unique steps in the process for other categories of accreditations are detailed in sections 3.9 and 3.10.

Accreditation Process Chart

1 An educational institution submits an Accreditation Application for an engineering technology or applied science technician or technology program at a technician or technology level.

2 The application is reviewed within five (5) days. Once approved, an email is forwarded within five (5) days, providing access to the Self-assessment Form.

3 The Self-assessment Form is completed and submitted by the educational institution at least ten (10) weeks prior to the site visit date. The Form is reviewed for completeness within ten (10) days.

4 An audit team is selected and approved by the educational institution.

5 The Accreditation Coordinator works with the accreditation contact at the educational institution and the audit team to determine the site visit date.

6 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 the National Accreditation Components.

7 The site visit schedule is finalized at least two (2) weeks prior to the site visit.

8 Two (2) weeks prior to the site visit, no new materials may be submitted by the educational institution unless permitted by the lead auditor.

9 The site visit is conducted by the audit team.

10 Once the audit is concluded, the audit team determine the outcome of the audit and submits the Audit Report within thirty (30) days.

11 The Audit Report is reviewed by the Executive Director and a second level review is conducted by the Governance and Audit Council within thirty (30) days.

12 The educational institution is notified of the accreditation decision. If the program is compliant with all National Accreditation Components, the program is accredited for 5 years. If not, the program has up to eighteen (18) months to resolve the non-compliant components.

13 Each year, on the accreditation anniversary date, the educational institution is required to submit an Annual Report, detailing changes to the program.

14 The educational institution is notified one year prior to the accreditation expiring to commence the renewal of the accreditation.

3.1 Accreditation Application

1. The educational institution completes the accreditation application, found on the TAC website, and submits it to TAC, optimally nine (9) months prior to the site visit date.

2. The accreditation application is reviewed within five (5) days of receipt. One of three decisions is made:
    (1) 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 not allowed to proceed with accreditation.

3. The educational institution is sent an email indicating the decision.

4. The appropriate PPA is notified once the accreditation application has been approved.

3.2 Accreditation Timing

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

The process takes approximately 20 weeks, that is from the time the Self-assessment Form is posted to the communication of the accreditation decision and the presentation of the Audit Report to the educational institution.

3.3 Self-Assessment Form

1. Once the accreditation application is approved, the educational institution is sent an email with a link to the Self-Assessment Form and information about the site visit.

2. The educational institution completes the Self-Assessment Form. Online, email or telephone assistance is available to the educational institution as required.

3. The Self-Assessment Form must be submitted at least twelve (12) weeks prior to the date of the site visit.

4. 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.

5. No changes to the Self-Assessment Form may be made within 2 weeks of the site visit, unless requested or approved by the lead auditor.

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
    - 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

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.

3.4 Audit Team

1. The audit team is appointed from individuals listed in the auditor registry.

2. The audit team is selected based upon:
    - Technical suitability (subject matter expertise),
    - Availability,
    - Location,
    - Avoidance of conflict of interest.

3. The audit team consists of a lead auditor and two additional auditors. At least one auditor will be a subject matter expert (SME). 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.

4. 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.

5. 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.

6. At least one of the three audit team members must be from the province in which the educational institution is located. At least one of the three audit team members must be from outside the province in which the educational institution is located.

7. The educational institution is advised of the audit team members. The educational institution either approves the audit team or requests changes. Only changes requested based upon perceived conflict of interest are considered. 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.

3.5 Audit

1. The timeframe for the audit is approximately eight (8) weeks, optimally concluding at the site visit.

2. The lead auditor establishes contact with the designated educational institution accreditation contact person. The Executive Director and Accreditation Coordinator are copied on all communication with the educational institution. Timely communication is crucial to the success of audit.

3. Each auditor reviews the Self-Assessment Form independently.

4. The audit team notes any components that are non-compliant and best practices and opportunities for improvement.

5. Should there be any issues of non-compliance evident at this stage of the audit process, the lead auditor brings these issues to the attention of the educational institution at approximately week four (4) of the audit. 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 upon the audit.

7. The Accreditation Coordinator informs the institution when the audit is completed.

3.6 Site Visit

1. The site visit is one full day with interviews and a tour of the program's facilities to verify specific national accreditation components 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 date may be conducted anytime during the year, with the date to be determined a minimum sixteen (16) weeks prior to the date.

3. The date will be confirmed by the Accreditation Coordinator upon confirmation by the audit team.

4. A Site Visit Preparation Letter and Site Visit Schedule are sent via e-mail to the educational institution once the date is confirmed.

5. The audit team conducts the site visit following the agreed upon site visit schedule (see Appendix 3).

The following documents pertain to this stage of the accreditation process:
- Site Visit Preparation Letter
- Site Visit Schedule

3.7 Audit Report

1. The audit team completes an Audit Report. The timeframe for completing the Audit Report is within thirty (30) days from the completion of the audit, optimally the date of the site visit, unless a review of materials post site visit is required.

2. The audit team determines one of three outcomes for the accreditation process:
    (1) the program receives accreditation;
    (2) the program 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 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. The Audit Report is submitted to the Executive Director by the lead auditor.

Reviews

5. The Executive Director reviews the Audit Report for completeness and value to the institution. Once reviewed, the Audit Report is submitted to the GAC for a Second Level Review.

6. The GAC reviews the report to ensure the audit team has followed proper process.

7. The Executive Director, GAC or the Board of Directors may <u>not</u> change the decision of the audit team.

8. The timeframe for the review of the Audit Report by the Executive Director and for the Second Level Review is thirty (30) days.

9. Once the Second Level Review is complete the Audit Report and corresponding communication is forwarded to the educational institution.

Communication of Decision

10. If accreditation is awarded, an Accreditation Letter and a copy of the Audit Report is sent to the educational institution. Copies are also forwarded to the PPA. Note that accreditation is awarded for a period of five (5) years, after which time the program applies for accreditation again. Notice of the accreditation is placed on the TAC website.

11. If the program is required to make revisions within a timeframe designated by the Audit Team, an Accreditation Revisions Required Letter is sent to the educational institution along with a copy of the Audit Report. Copies are also forwarded to the PPA. If the revisions are not completed in the designated timeframe accreditation is denied.

12. If the program is denied accreditation, an Accreditation Denial Letter is sent to the educational institution along with a copy of the Audit Report. Copies are also forwarded to the PPA.

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

3.8 Program Required to Make Revisions

1. Programs required to make revisions to be granted accreditation will be given up to eighteen (18) months to provide materials to resolve the non-compliant components.

2. Upon review of the submitted materials, the Audit Team determines an outcome and submits an updated Audit Report.

3. The Audit Report is due within fourteen (14) days after the review period.

4. The Executive Director and GAC have twenty-one (21) days to conduct their reviews.

3.9 Accreditation Evaluation Process

1. An evaluation of the accreditation process is forwarded to the educational institution immediately after the accreditation letter is sent.

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 institution.

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

3.10 Accrediting Joint and Aligned Programs

1. The following chart provides the steps in the accreditation process for joint or aligned programs. The steps of the accreditation process are in the left hand column, with particulars for these accreditation types in the right hand column.

Accreditation Step	Particulars
The educational institution completes and submits an **Accreditation Application Form** for the programs.	• Two Accreditation Applications are completed, indicating the category of accreditation (i.e. Joint, Aligned) • The educational institution may be requested to provide the courses from each of the two programs to understand the commonality.
The Accreditation Applications are reviewed	• To qualify for the accreditation category, the definition must be met. See Appendix 2 Glossary of Accreditation Terms. • If the definition is met, the applications are approved to proceed with the national accreditation process.

Self-Assessment Packages are completed and posted by the educational institution.	• Two Accreditation Self-Assessment Packages are completed by the educational institution.
An **audit team** is selected. **The audit** is conducted by the audit team.	• A four-person Audit Team is formed. • The Audit Team is divided into two sub-teams, of two auditors each. Each sub-team is assigned a program. • Each sub-team conducts a separate preliminary audit.
A site visit is conducted by the audit team.	• The audit team conducts the site visit for both programs on the same day. • Most interviews will be conducted together. • Alumni and students from both programs are to be interviewed.
The audit team completes the **Audit Reports.**	• The audit team complete two separate Audit Reports.
The Audit Reports are reviewed.	• The two Audit Reports are reviewed by the Executive Director and the GAC.
National Program Accreditation	• If all the National Accreditation Components are met, National Program Accreditation is issued for each program for five (5) years. • A copy of each audit report is provided to the educational institution.

3.11 Program Options

1. Accreditation for programs with options follows the same process as a standard accreditation with the exception of the following.

2. Though one Self-Assessment Form is completed by the educational institution, learning outcome tables (2, 3, 4, 5, 6, 7) for each option must be provided.

3.12 Withdrawal from the Accreditation Process

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

3.13 Appeals Process

1. 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 on the Accreditation Letter. The Appeal Request requires the educational institution to indicate, by National Accreditation Component, the part of the audit process which was not followed and to provide an explanation. The only grounds for an appeal is the audit process was not followed.

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 components.

3. The Executive Director forwards the Appeal Request to the GAC for review. The Executive Director informs the audit team of the Appeal Request. A representative of the team may address any concerns regarding the process at the request of the GAC.

4. The appropriate PPA is notified once an Appeal Request has been received.

5. The GAC considers the appeal based only on whether the audit process was correctly followed by the audit team. No other grounds for appeal will be considered.

6. Once a decision is made, the GAC sends the educational institution an Appeal Response Letter within thirty (30) days of the submission of the Appeal Request. A copy of the Appeal Response Letter is sent to the appropriate PPA.

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

The following documents pertain to this stage of the accreditation process:
- Appeal Request
- Appeal Response Letter

3.14 Annual Reporting

1. Educational institutions are required to complete and submit an Annual Report for the accredited program on the anniversary of their accreditation each year to update TAC on any program changes related to the National Accreditation Components.

2. Four (4) weeks prior to the accreditation anniversary date, a link to the Annual Report will be emailed.

3. The Annual Report is reviewed within five (5) days of receipt.

4. Changes which will or may affect compliance of any national accreditation component maybe reviewed by an audit team, preferably from the original

accreditation audit. The educational institution may be required to submit materials for review.

5. In the event that program changes reported in the Annual Report are determined to affect the program's compliance with the requirements of the National Accreditation Components, the Executive Director will indicate the revisions required and a designated timeframe in which the revisions need to be made. The Executive Director will also indicate that if the revisions are not completed in the designated timeframe, accreditation will be removed.

6. Once the Annual Report has been reviewed, an Annual Report Response Letter will be sent to the educational institution.

The following documents pertain to this stage of the accreditation process:
- Annual Report
- Annual Report Response Letter

3.15 Accreditation Renewal Process

1. The Accreditation Coordinator sends the educational institution an Accreditation Renewal One-Year Reminder Letter one year before the expiry of the program's accreditation. Included in this letter is the link to the Self-Assessment Form and details about the site visit.

The following documents pertain to this stage of the accreditation process:
- Accreditation Renewal One-Year Reminder Letter

3.16 Customer Service Standards

Activity	Standard
Accreditation application review	Email response within 5 days of receipt
Self-assessment Form (SAF)	Email with access to SAF within 5 days of application approval
Self-assessment Form review	Email response within 10 days of receipt
Audit status	Email from the lead auditor at approximately week 4 of the audit
Audit completion	Email notification upon audit completion
Accreditation decision	Email accreditation letter and Audit Report same day or day after Accreditation and Audit Report reviews
Annual Report review	Email response within 5 days of receipt
Accreditation appeal review	Email appeal response letter within 30 days of appeal submission

4.0 National Program Accreditation Continuous Improvement Procedures

4.1 Auditor Registry

1. All auditors who complete the training process and qualify as auditors are included in the auditor registry. The auditor registry is a list of all trained and approved auditors, including their location and their subject matter expertise.

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 Program Accreditation Components Continuous Improvement Procedures

1. An annual review of the National Program Accreditation Components 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 from the past year as well as data and anecdotes provided by the Executive Director.

2. Every five (5) years a Comprehensive Review of the National Program Accreditation Components 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 Program Accreditation Components 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 Components.

4. At the end of the Comprehensive Review, a revised version of the National Program Accreditation Components will be issued if revisions are required. The revised components 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 Components 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 Form.

6. If, during the Annual Review, any urgent changes to the National Program Accreditation Components 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

1. An annual review of the National Program 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 from the past year as well as data and anecdotes provided by the Executive Director.

2. Every five (5) years a Comprehensive Review of the National Program 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 National Program 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 National Program Accreditation process.

4. At the end of the Comprehensive Review, a revised version of the National Program 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 National Program 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 Form.

6. If, during the Annual Review, any urgent changes to the National Program 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 Accreditation 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 representation from Provincial Professional Associations, 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 two Board Directors, a registrar from a PPA, an audit professional and two 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 member PPAs, an academic representative and a representative from CSCT.
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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-in-training.
- 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 two (2) 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

National Accreditation Components

The National Accreditation Components are the standards by which an engineering technology or applied science program are measured against for the purposes of national program accreditation.

Component A: Program Background Information

A.1 Program History: The program has a documented history of educational delivery in the designated technician and technologist field.

A.2 Program Option Names and Descriptions: The program has clear names and descriptions for all program options (e.g. fast track, co-op, streams/majors).

A.3 Program and Option Instructional Delivery Modes: The program instructional delivery modes are documented.

A.4 Program Organizational Structure: A description of the relationship between the program administration and the institutional administration is documented. The program has a clear, logical and documented administrative structure as illustrated in an organizational chart with descriptions of roles and responsibilities.

A.5 Program Enrolment Numbers: Enrollment and program graduate numbers are documented.

Component B: Student Policies

B.1 Program Admission Policies: Policies related to program admission requirements based on secondary school courses and grades are documented and accessible to applicants. Policies for other admission paths (i.e. for mature students) are documented and accessible to applicants.

B.2 Policies for Monitoring Student Progress: Policies used to monitor student progress each semester to ensure that pre-requisite course credits have been obtained are documented and accessible to students.

B.3 Academic Policies and Procedures: Institutional and/or departmental policies on plagiarism, cheating, grade appeals are documented and accessible to students.

B.4 Student Transfer Policies: Articulation and transfer agreements for the program are documented and accessible to students.

B.5 Graduation Requirements: Graduation policies, including graduation requirements, passing grades for courses, overall program average grade and number of credits, are documented and accessible to students.

Component C: Program Policies

C.1 Program Development Policies and Procedures: Policies for program and course development, including timelines, institutional processes and governance, are documented.

C.2 Program Continuous Improvement Policies: Policies for program continuous improvement are documented. Periodic program self-assessments, producing recommendations that are used for improvements in the curriculum and/or student success, are documented. There is documented evidence of program and course changes.

C.3 Work Placement Policies: If imbedded in the program or an option available to students, policies and procedures for work terms, co-op, practicums or internships, including how to obtain a placement, get credit for the placement, ensuring placement is relevant to the area of study, placement assessment and options available if a placement opportunity is not secured, is documented and accessible to students.

C.4 External Program Input: A Program Advisory Committee (PAC) exists. Policies regarding the establishment of a Program Advisory Committee, including the frequency of meetings, terms of members, are documented. Names and contact information for the current PAC members is documented. Minutes from Program Advisory Committee meetings over the past three (3) years are documented. Reports from any other external bodies which have reviewed the program over the past three (3) years are documented.

Component D. Program and Course Information

D.1 Program Description Documents: Printed and online calendar information, brochures, program handbooks and web-based information about the program are available to all interested in the program.

D.2 Program Objectives: Program educational objectives are documented. Program educational objectives fit the mission statement of the educational institution.

D.3 Course Outlines: Course outlines are documented for all courses, including those in program options, are accessible to students. Course outlines include the course ID, title, description, pre-requisites, co-requisites, objective, learning outcomes and grading scheme, required textbooks or other learning materials, instructional delivery modes, scheduled instructional contact hours, credits, relationship of course outcomes to program outcomes, policies and procedures for submitting student work, grade required for successful credit, method of evaluation (assignments, tests, projects) and the date of last revision of the course outline.

D.4 Transcript and Diploma: An accurate and complete transcript is provided to students at the end of each semester. An accurate and complete diploma is provided to students upon completion of the program.

D.5 Scholarship and Bursary Information: Scholarships and bursaries are available to applicants applying to and students enrolled in the program. Scholarship and bursary information, including award criteria, application procedure and awarded amounts, is accessible to applicants and students.

Component E: Learning Outcomes

E.1 Discipline Learning Outcomes: The program must substantiate that students have reliably demonstrated achievement of the program's five (5) core (i.e. most important) discipline learning outcomes, specific to the technician or technologist level.

E.2 General Learning Outcomes: The program must substantiate that students have reliably demonstrated achievement of all eight (8) of the general learning outcomes, specific to the technician or technologist level.

E.3 Technology Report: There is a documented process for the Technology Report which incudes when the report topic is selected, how the topic is selected, whether the report is written individually or as a team, faculty support provided, the timing of progress reports and how the project is presented and defended. If the Technology Report is completed by multiple project team members, each team member must contribute to each section of the report, the presentation and defense of the report.

Component F. Faculty

F.1 Faculty Qualifications: Policies are documented for hiring qualified faculty. There is documented evidence that the program follows these policies and procedures, including required academic qualifications, teaching and work experience, professional certifications and professional development.

F.2 Faculty Workload: Policies and procedures are documented for faculty teaching workload, preparation and assessment marking, class and lab sizes.

Component G. Facilities, Resources and Other Student Support

G.1 Offices, Classrooms and Labs: Office and classroom space, lab facilities, meeting rooms for faculty and students, office and lab support staff are sufficient to meet the needs of the students and faculty.

G.2 Maintenance and Upgrade of Facilities: Procedures are documented to maintain and upgrade tools, equipment, computing resources and laboratories used by students and faculty. There is documented evidence the procedures are followed.

G.3 Health and Safety Procedures: Health and safety procedures for all facilities are documented and accessible. Procedures for training students and staff in the health and safety procedures are documented and accessible. There is documented evidence that student and staff training procedures are followed. Appropriate health and safety warnings are clearly displayed in relevant facilities.

G.4 Student Research and Library Resources: Library resources are sufficient for students to conduct the required research for course assignments, projects and reports.

G.5 Student Academic Resources and Support: Course related resources and faculty support are available to students for coursework, homework, research and lab projects.

G.6 Student Career Resources and Support: Resources, advisors and other institutional support are available for student career counselling and guidance.

Appendix 2

2019 Fees

Program Application Fee (one time only)* $500 +tax

Accreditation Fee (Five Year Accreditation Cycle) $4,500 +tax

Payment Schedule
        Submission of Application $500 +tax
        Upon granting of accreditation $2,000 +tax
        1st anniversary date of accreditation $500 +tax
        2nd anniversary date of accreditation $500 +tax
        3rd anniversary date of accreditation $500 +tax
        4th anniversary date of accreditation $500 +tax

*The Application Fee is a one-time only charge of $500+tax payable at the time of initial application for national accreditation. If the program has previously been nationally accredited by another Canadian technology accrediting agency, the application fee will be waived.

Multiple Accreditation Discount

Educational institutions submitting multiple applications simultaneously may receive a discount to the accreditation fee.

No. of Programs	Discount
2 to 5 inclusive	10%
6 to 10	15%
11 plus	20%

Appendix 3

Site Visit Schedule

Time	Activity & Particulars
8:00 - 8:30 am	**Breakfast with Employers, Program Advisory Committee members, Dean, Program Chair/Coordinator**
8:30 – 9:15 am	**Program Advisory Committee/Employer Interview (group)** • The interview is to gauge graduate employability and success from local employers and how effectively the program advisory committee is functioning. • 3 Program Advisory Committee members and 3 representatives (technical and/or H.R) from companies who have been directly involved in hiring and/or supervising recent graduates.
9:15 - 10:00 am	**Alumni Interview (group)** • The interview is to gauge the graduate experience in the workforce after completion of the program and to ensure that this experience aligns with program's objectives. • 5 recent alumni (graduated within 1-3 years) to attend.
10:00 – 10:10 am	**Break**
10:10 - 11:15 am	**Program Information Session** • The information session is to provide; ○ 1) an overview of the program including its history, program options, unique program features, careers that graduates can pursue (10 minutes) ○ 2) an explanation for the selected of the 5 most important program discipline learning outcomes selected and an explanation of how each selected culminating course contributes to the learning outcome (5-8 minutes each outcome) • Program Chair/Coordinator to present. • Please allow time for questions and answers.
11:15 – 12:15 pm	**Tour of Facilities** • The tour is to review the state of the facilities including labs, library, research, academic and career resources and to review the health and safety processes and procedures specific to courses in the program.
12:15 – 1:00 pm	**Lunch with Program Administrators and Institution Representatives** • Lunch with 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.
1:00 – 1:45 pm	**Student Interview (group)** • The interview is to gauge the student experience in the program and to ensure that this experience aligns with program's objectives. • 5 students in their final semester (preferred), or final year, to attend.
1:45 – 2:50 pm	**Faculty Interviews (individually)**

	• The interviews are to gauge faculty experience in the program and to ensure that this experience aligns with the program's objectives. • 3 instructors from the culminating courses and the instructor for the capstone/Technology Report course are to be interviewed. • Lead auditor may request additional faculty to be interviewed. • Approximately 20 minutes per interview.
2:50 – 3:00 pm	**Break**
3:00 – 3:30 pm	**Program Administrator Interview** • The interview is to understand the challenges associated with the program and for the audit team to communicate any missing information. • Program Chair/Coordinator/Head to attend.
3:30 – 4:00pm	**Audit Team Deliberation** • Time for the audit team to compile the key findings of the audit and prepare for the exit meeting.
4:00 – 4:30 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. • Timelines are detailed for the next steps of the audit process. • The meeting also provides an opportunity for program administrators and institution representatives to ask questions of the audit team. • 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 to attend.

Appendix 4

Site Visit Schedule for Joint or Aligned Program Accreditation

Time	Activity	Together or Separate?
8:00 - 8:30 am	**Breakfast with Alumni, Employers, Advisors**	This activity is to be completed together.
8:30 – 9:15 am	**Program Advisor/Employer 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.
9:15 - 10:00 am	**Alumni Interview**	This activity may be completed together though there must be sufficient input from alumni from both programs.
10:00 - 10:10 am	**Break**	
10:10 - 11:15 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.
11:15 – 12:15 pm	**Tour of Facilities**	N/A.
1:00 – 1:45 pm	**Student Interviews**	This activity can be completed together though there must be students from both programs.
1:45 – 2:50 pm	**Faculty Interview**	This activity is to be completed together or separately depending on how many unique instructors there are.
2:50 – 3:00 pm	**Break**	
3:00 – 3:30 pm	**Program Administrator Interview**	This activity is to be completed together.
3:30 – 4:00 pm	**Audit Team Deliberation**	This activity is to be completed together.
4:00 – 4:30 pm	**Exit Meeting with Program and Institution Representatives**	This activity is to be completed together.

Appendix 5

Glossary of Terms

The following terms are used throughout the accreditation process.

Aligned Programs: A category of accreditation defined as 2 technician or 2 technology programs with at least 80% common courses overall and at least 67% common in the final year

Canadian Technology Accreditation Criteria (CTAC): 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: 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: A common set of learning outcome statements for each technicians and technologists.

Joint Programs: A category of accreditation defined as 1 technician and 1 technology program with at least 80% common courses overall and at least 67% common in the 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 Components (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 one program with one or two common years and two or more streams in with final year or a standard program with a fast track or accelerated option.

Standard: A category of accreditation defined as a single technician or technology program.

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

Technology Professionals Canada (TPC): An alliance of engineering technology professional associations (Alberta, British Columbia, Ontario and Saskatchewan) which represent approximately 85% 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 that students submit in the final year of their technologist program