ASTTBC TECHNOLOGY PROFESSIONALS

Certification Exam Handbook

Technician Education Equivalence Examination

ASTTBC TECHNOLOGY PROFESSIONALS

Table of Contents

Introduction

The Technician Education Equivalence Examination ("TE3") has been prepared for engineering and applied science technicians who are required to pass a certification exam to achieve registration with ASTTBC. This handbook is designed to provide candidates with essential information regarding the certification examination.

Examination Information

ASTTBC's exam policy outlines the rules, procedures, and expectations related to all exams. All candidates are expected to be in compliance with ASTTBC's exam policy at all times.

Purpose of Examination

The Technician Education Equivalence Examination assesses the knowledge of candidates seeking certification as technicians who have completed a non-accredited technician education program, either within Canada or outside. The TE3 assesses candidates on the knowledge underlying 9 of the 10 General Learning Outcomes outlined in the Canadian Technology Standards, using questions that are applicable to most or all disciplines. (GN05 Ethics, Sustainability, Contract, and Codes is covered on the PPEE and so excluded from the TE3.)

Successful candidates will demonstrate substantial equivalence to the expectations for students completing an accredited technician education program.

Examination Length and Duration

110 items, 3 hours.

Eligibility

Persons seeking certification as technicians in any discipline in British Columbia who have completed a non-accredited technician-level training program.

Examination Registration

Applicants who are required to complete the TE3 will register for the examination after the credentials committee has determined the applicant has met all other requirements for registration.

Examination Administration

Each exam is to be administered securely via computer with a proctor. Candidates are permitted use of a calculator.

Examination Content

The TE3 assesses knowledge and comprehension of 9 of the 10 General Learning Outcomes in GLON 2023. GN05 (Ethics, Sustainability, Contracts, and Codes) is excluded because it is covered by the Professional Practice and Ethics examination requirement.

The assessment measures only those elements of the general learning outcomes that are common across technician disciplines. The goal is to assess enough of the scope of the general learning outcomes so that, in conjunction with completion of a technician education program, a determination can be made as to whether the candidate completed a technician education program that is at the same level (or higher) as an accredited technician education program

The TE3 consists of 3-option multiple choice test items.

Images and equations are used as applicable.

Weighting and item counts
100–120 items. Target is 110. Targets are considered to be met if within ±3%.

Domain	Weight	Items
GN01 Communication	14%	15–16
GN02 Mathematical techniques	11%	12
GN03 Teamwork	11%	12
GN04 Management and business principles	8%	9
GN05 Ethics, Sustainability, Contract, and Codes[ǂ]	0%	0
GN06 Graphical communications	10%	11
GN07 Computer knowledge	11%	12
GN08 Health and safety	10%	11
GN09 Engineering fundamentals	14%	15–16
GN10 Engineering tools	11%	12

[ǂ]GN05 is not assessed on the TE3

Study Tips

The following tips may be of use to candidates interested in refreshing their knowledge prior to writing the examination.

1. **Communication**

Study Tips:

- Review professional writing formats (reports, memos, proposals).
- Practice summarizing technical information in plain language.
- Focus on clarity, conciseness, and audience awareness.

2. Mathematical Techniques
Study Tips:
- Brush up on algebra, geometry, trigonometry, and applied calculations.
- Practice solving engineering problems using formulas.
- Be comfortable with unit conversions and interpreting graphs.

3. Teamwork
Study Tips:
- Understand group dynamics and conflict resolution strategies.
- Review principles of collaboration and delegation.
- Focus on leadership styles that improve team performance.

4. Management & Business Principles
Study Tips:
- Review project planning, budgeting, and risk management.
- Understand organizational structures and decision-making.
- Be familiar with ethical and legal responsibilities in business.

5. Graphical Communication
Study Tips:
- Refresh on engineering drawing conventions and standards.
- Review interpretation of schematics, diagrams, and CAD drawings.
- Practice reading and sketching simple engineering graphics.

6. Computer Knowledge
Study Tips:
- Know how to create and edit spreadsheets, charts, and technical documents.
- Review file management, formatting, and presentation skills.
- Familiarize yourself with engineering-related software basics.

7. Health & Safety
Study Tips:
- Review hazard identification and risk assessment.
- Understand workplace safety responsibilities and regulations.
- Study WHMIS symbols, labels, and SDS requirements

8. Engineering Tools
Study Tips:
- Be familiar with basic tools, instruments, and their applications.
- Review calibration, measurement accuracy, and tolerances.
- Understand safety precautions when using technical tools.

9. Engineering Fundamentals
Study Tips:
- Review core concepts: mechanics, materials, fluid dynamics, and electricity.
- Practice solving applied problems in these areas.
- Focus on understanding principles rather than memorization.

- Applicants should review basic geometry (Pythagorean Theorem, area, volume), electrical formulas (Ohm's Law: V=IR), mechanical formulas (Force=Mass x Acceleration), and formulas for heat transfer and fluid dynamics.

After the Examination

Examination Scoring

A total score will be provided to candidates as the basis for making pass/fail decisions with 1 point per item and no penalty for guessing.

Pass Mark

The pass mark is 70 out of 110 (63.64%).

The pass mark for the examination was set using the Modified Angoff method. This is a compensatory examination, and so there is no need to ‘pass’ each domain as long as the candidate’s total score is above the established standard (pass mark).

Results

Candidates will receive a score for each of the 9 domains assessed on this examination for use in preparing for future attempts. If you are not successful on your exam attempt, we recommend reviewing all domains. Focusing only on the areas where you scored lower does not guarantee success in the domains where you previously performed well.

Review and Appeal Process

A candidate who fails the examination may request that their exam score be verified. Due to the automated scoring and extensive quality control procedures, errors in scoring are extremely unlikely. However, candidates may request that ASTTBC manually rescore their exam to verify the original score.