

# ASET Professional Practice Exam Candidate Handbook

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## Introduction

The **ASET Professional Practice Exam (ASET PPE) Candidate Handbook** provides candidates for registration as a Certified Technician or Certified Engineering Technologist with Association of Science and Engineering Technology Professionals of Alberta (ASET).

## Examination Information

### Purpose of Exam

The purpose of the ASET Professional Practice Exam is to test C.Tech. and C.E.T applicants on their knowledge of the *Engineering and Geoscience Professions Act* and related regulations and of the practice of applied science, information, and engineering technology in accordance with section 13(1)(c) of the ASET Regulation. The ultimate goal is to protect the public by granting designations only to those practitioners who have an understanding of professionalism, law, and ethics in relation to the profession.

*This exam must be written by all candidates, unless they have passed the NPPE.*

### Examination Format

The examination consists of 110 multiple-choice questions of which there are 10 experimental questions that are not counted towards the candidate's exam score and are used for future exam development. Each multiple-choice question has four answer options, only one of which is correct. Exam questions vary in the level of cognitive difficulty. The exam is closed-book and is two and a half hours in duration.

### Prior NPPE (National Professional Practice Exam) Completion

Candidates who have successfully completed the NPPE with APEGA or ASET are not required to write the ASET Professional Practice Exam; however, must request exemption from the ASET exam **prior applying for certification**.

To request exemption from the ASET PPE Exam, candidates to email the ASET Registration department at [exams@aset.ab.ca](mailto:exams@aset.ab.ca) with the request and when/where they passed the NPPE, and if the exam was written with APEGA, their APEGA ID and name on file.

A verification process will be carried out by ASET Staff. Upon verification, the candidate will be exempted from the ASET Professional Practice Exam and will be provided further instructions to complete the registration process.

### Eligibility

To be eligible to write the exam, candidates must have at least 24 months of technical work experience. For this reason, student and T.T. members may not register to write the exam.

## Examination Registration

All C.Tech. and C.E.T. candidates register in the online initial application process, with their choice of the available exam dates (at the time of their application with ASET), and following payment of all assigned fees, applicant will receive confirmation of their choice exam date and location by emailed order confirmation. The ASET Professional Practice Exam [webpage](#) contains the available dates, locations, and the current exam fee.

## Location of Examination Centres and Virtual Proctoring

The ASET Professional Practice Exam will be administered on a computer in one of Yardstick's exam centres in Alberta or through the virtual proctoring service.

Physical locations: Edmonton, Calgary, Grande Prairie\*, and Lethbridge\*. *\*limited seating*

Virtual proctoring: This method of exam delivery uses a webcam with a virtual proctor to allow the candidate to write the exam from a home or work office. This method has the following additional requirements:

### Exam room requirements

- Quiet and private room; **if anyone enters the room during the exam other than the above the candidate, the exam results may be invalidated**
- Location can be at personal residence or from the office\*\* (see note at end)
- Good quality lighting in the room; no bright lights or windows behind candidate
- Desk must be clear of any notes, books, or electronics with access to power outlets and internet connection (Ethernet plugged or high quality password protected Wi-Fi)

### Internet requirements

- Stable, secure (must be password protected if Wi-Fi) high speed internet connection with download speeds of at least 3 Mbps and upload speeds of at least 1.5 Mbps (a free internet speed testing tool is available at [www.speedtest.net](http://www.speedtest.net) to test the internet connection).

### Computer requirements

- Laptops or desktop computers are permitted so long as they have the following minimum requirements:
  - <https://support.proctoru.com/hc/en-us/articles/115011772748-Equipment-Requirements>
  - Candidates must source their own computers with the minimum specifications for the exam.
  - No virtual machine desktops, must be on the host desktop or tablets or smartphones.
  - Google Chrome required
  - Please ensure that laptops are plugged in during the exam to prevent the exam terminating early due to battery failure.
- Functioning free standing or integrated webcam w/ microphone or independent microphone

**NOTE:** It is the candidate's responsibility to ensure that the internet and computer requirements are met prior to the exam administration date. The **compatibility check** information will be located in your BOOKING CONFIRMATION email which is sent by YARDSTICK.

- **Applicants must conduct a compatibility check using the computer they will use, in the room they will write in to test their connectivity prior to the virtually proctored exam. If they do not complete the compatibility check, there is no guarantee that the exam will happen. *The ProctorU exam program cannot be downloaded until the day of your exam so there is no way to check if it will work prior to exam day.***
- Yardstick has a [FAQ page](#) with a short tutorial video on the ProctorU program.

*\*\*Keep in mind administrative privileges on the computer you will use (some company's IT policies block download of the required program to use with ProctorU and can cause issues). As stated above, it will be important to complete the compatibility check **PRIOR** to the examination date.*

## Exam Time and Location Confirmation

All candidates will receive a confirmation email with the writing time and address of the testing centre location (physical location only) that was chosen at the time of application by **email from Yardstick one to two weeks before the exam date**. The confirmation email is important to review and a printed copy is required for admission to write the exam. Candidates can contact Yardstick directly at [testingsupport@getyardstick.com](mailto:testingsupport@getyardstick.com) to have the exam registration information re-sent if they did not receive the confirmation email by the deadline above.

## Policy for Reschedules, Rewrites, and Attempts

Candidates who wish to reschedule their exam must email the ASET Registration Department ([exams@aset.ab.ca](mailto:exams@aset.ab.ca)) with the new exam date. Candidates who reschedule **after the registered exam's Registration Deadline Date** are required to pay the **full exam fee** to reschedule. If the request is received **before** this deadline date, then there are no fees to reschedule.

Candidates who are required to re-write the examination must email the ASET Registration Department ([exams@aset.ab.ca](mailto:exams@aset.ab.ca)) with the requested exam date. ASET Staff will follow up to obtain payment of the exam rewrite fee in order to register for the requested date.

Candidates may attempt the exam **a maximum of three times** within one year from the date of application and must pass the exam within this time period.

## Exam Accommodations for Candidate with Disabilities

According to Canadian human rights legislation and test industry standards, exam developers are responsible for providing candidates with disabilities with exam accommodations where appropriate and feasible. Exam accommodations are designed to remove barriers related to individual characteristics of candidates that may prevent them from demonstrating their technical competencies on the exam. "An appropriate accommodation is one that that responds to specific individual characteristics but does so in a way that does not change the construct the test is measuring or the meaning of scores."<sup>1</sup>

Candidates with disabilities must request accommodations to write the ASET Professional Practice Exam **seven (7) weeks before the exam date of their choice**. In writing to the ASET Registration Staff to [exams@aset.ab.ca](mailto:exams@aset.ab.ca) with the appropriate documentation.

To protect the integrity of the examination, documented evidence of the candidate's disability must be submitted to ASET along with the application form. Such evidence includes a formal detailed diagnosis of the specific disability from an appropriate professional (e.g., physician,

psychologist, rehabilitation counsellor) and supporting documentation citing the need for exam accommodations and what accommodations the candidate received in the past.

ASET will review the candidate's written request for accommodation and determine if it can be supported. Depending on the candidate's individual needs, ASET may modify exam material or exam administration conditions, including exam setting, exam presentation, or the addition of individuals to the exam (e.g., readers, scribes). Each request will be reviewed on a case-by-case basis.

Below is a list of reasonable exam accommodations for candidates with a disability.\*

1. **Separate Room** - A separate room is provided to candidates who due to the nature of their disability require an exam environment that minimizes distractions resulting from noise or movement or process information by talking aloud.
2. **Additional Time** - Extending additional time to candidates is a frequently used exam accommodation that is used with a variety of disability-related conditions. Often candidates are offered time and a half to complete the exam (e.g., a 3-hour exam is extended to 4.5 hours).
3. **Interpreter** - Candidates with hearing impairment may request an interpreter who has proficiency in sign language.
4. **Reader** - A reader is an individual who reads exam instructions and/or exam questions to a candidate. Candidates with visual impairment or those with a learning disability may benefit from services of a reader during the examination.
5. **Recorder** - A recorder is an individual who fills in the answers for a candidate who has difficulty writing independently.

**\*All costs related to exam accommodations will be the responsibility of the candidate.**

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<sup>1</sup> American Educational Research Association (2014). Standards for Educational and Psychological Testing. Washington, DC (p. 67).

## Exam Content (Syllabus)

The following major subject areas are included in the ASET Professional Practice Exam:

### **PART I: Legislation and Regulation (20%)**

- Part 5 of the EGP Act: Discipline
- Part 8 of the EGP Act
  - Division 1, ASET
  - Division 3, Professional Technologists
  - Division 4, Other ASET Members
  - Division 5, Discipline of Regulated Members
  - Division 7, Prohibitions and Penalties
- ASET Regulation AR 282/2009
- Canadian Professional Engineering and Geoscience Practice and Ethics:
  - Chapter 2: Regulation of Engineering and Geoscience
  - Chapter 3: Disciplinary Powers and Procedures

### **PART II: Professional Practice and Law (40%)**

- Canadian Professional Engineering and Geoscience: Practice and Ethics
  - Chapter 1: Introduction to the Professions
  - Chapter 4: Basic concepts of Professional Practice
  - Chapter 6: Hazards, Liability, Standards and Safety
  - Chapter 7: Computers, Software, and Intellectual Property
  - Chapter 8: Fairness and Equity in the Professional Workplace
  - Chapter 17: Maintaining Your Professional Competence
- Practical Law of Architecture, Engineering and Geoscience
  - Chapter 1: The Canadian Legal System
  - Chapter 20: Labour Law
  - Chapter 21: Employment Law
  - Chapter 22: Health and Safety Law
  - Chapter 23: Environmental Law
  - Chapter 26: Privacy Law
  - Chapter 27: Internet Law
- Occupational Health and Safety Act of Alberta

### **Part III: Ethics (40%)**

- ASET Code of Ethics and Guidelines for Interpretation
- Canadian Professional Engineering and Geoscience: Practice and Ethics
  - Chapter 9: Principles of Ethics and Justice
  - Chapters 10-12: Ethics Concepts and Cases
  - Chapter 13: Environmental Ethics

## Study Materials

The following is a list of required textbooks and PDFs to use for preparation for the exam.

### Textbooks

These can be obtained from Amazon, Chapters, [Bookshelf@](#) app, Kijiji, or another exam candidate for PPE or NPPE if the textbooks are not available from the publishers' websites. Costs for the two textbooks will vary depending on where the candidate obtains them.

1. [Canadian Professional Engineering and Geoscience: Practice and Ethics - Sixth Edition by Gordon C. Andrews \(2019 Copyright\).](#)

Note: The fifth edition can be used to prepare for the exam as well

2. [Practical Law of Architecture, Engineering and Geoscience - Second Canadian Edition by Samuels & Sanders \(2011 Copyright\)](#)

Note: The Third Edition includes the same content as the Second Edition but with additional examples and cases; either edition may be used to prepare for the exam.

### PDFs

Free to download.

3. [ASET Professional Practice Exam Legislation Handbook](#)
  - o This is a study guide which provides all of the information necessary for exam preparation from [The Engineering and Geoscience Professions Act](#) (EGP Act) and [The ASET Regulations](#) (AR 282/2009). Reviewing the individual documents is optional.
4. [The ASET Code of Ethics](#)
5. [Occupational Health and Safety Act of Alberta. Revised Statutes of Alberta, 2017 Chapter O-2.1, current as June 2018](#)

### Practice Exam for Purchase

Practice exam questions are available for purchase through [Yardstick](#). As these questions are hosted by a third-party educational partner, candidates will need to create a new account to access the practice exam. This login is **not associated** with the candidate's ASET ID.

A one- time attempt practice exam of 25 questions\* is available. While the candidate is able to repurchase the same practice exam at a later date; the questions **will not change**.



## Day of Examination

### Admission to the Examination Centre

Upon entering the examination centre, Candidates will be asked to register with the proctor. The following information is required:

- candidate's first and last name (Must match candidate's registration with ASET),
- a valid government-issued photo ID (non-expired),
- candidate's printed confirmation email as provided by Yardstick

#### Important Notes:

- If you have a non-expired temporary driver's license you must also provide another form of photo identification. The first and last name on both documents must match. It is preferred that the photo identification not be expired.
- If your only form of photo identification has expired you must also provide another form of non-expired identification. The first and last name on both documents must match.
- If you have any other concerns about your forms of identification, please contact Yardstick support immediately to ensure your identification will be accepted on exam day: [testingsupport@getyardstick.com](mailto:testingsupport@getyardstick.com).

After the initial verification of identity, candidates will be asked to sign a roster.

Candidates' personal belongings, such as bags and jackets, will be stored in a designated area. At the proctor's discretion, candidates may be asked to remove hats, watches or other items that may possibly conceal aids to ensure examination security.

### Permissible Items

- Disposable ear plugs (provided by candidate).
- Scrap paper and pencils will be provided by the proctor to the candidates before the exam (if requested) and collected after the exam.

### Prohibited Items

- Electronic devices (i.e. calculators, cell phones, pagers, personal digital assistants etc.)
- All types of food and beverages.
- Unauthorized examination aids, assistance or collaboration materials.

### Taking the Exam

At the beginning of the examination, candidates will hear verbal examination instructions from the proctor and read the Candidate's Statement of Understanding and/or Non-disclosure Agreement in the software. Failure to comply with the regulations outlined in these documents will result in the candidate's results being invalidated. Candidates will not be able to begin the examination without agreeing to the conditions outlined in the document. The assigned Yardstick ID and chosen password will be used to log in when prompted by the proctor.

Next, candidates will be given written exam instructions in the software. These exam instructions will emphasize that if the text appear too small on the screen, candidates can adjust the text size on the screen. Following exam instructions, there will be a tutorial available to candidates

before they proceed to the exam.

The exam is closed-book and is two and a half hours in duration.

Upon submitting their exam responses, candidates will be offered an opportunity to provide feedback on exam material and exam administration conditions by completing a short online survey. **Results of the exam are not provided to the candidates at this time.** Candidates will then submit their scrap paper to the proctor, sign out from the candidate roster, and leave the examination centre.

## **After the Exam**

### **Examination Scoring**

Multiple-choice examination questions are scored dichotomously, using a score of “0” for an incorrect response and a score of “1” for a correct response. The ASET Professional Practice Exam is a criterion-referenced exam, which means that a candidate should obtain a score that is equal to or higher than an exam pass mark to pass the examination.

### **Pass Mark**

The pass mark for the exam was set by the Exam Committee, which took into account the difficulty of exam questions and the expected level of performance for a minimally competent technology professional. A psychometrically acceptable standard-setting methodology was used to set the examination pass mark.

The pass mark for the ASET Professional Practice Exam is 67%.

### **Results**

Candidates are emailed the results **within two to three weeks after the exam date.** Exam results are reported to the candidate as “pass” or “fail”.

Unsuccessful candidates will also receive a performance report outlining areas for further study and information about registering to re-take the exam. Please refer to the Rewrite Policy section in this handbook to schedule the next exam date.

### **Review and Appeal Process**

A candidate who fails the ASET Professional Practice Exam 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 ASET manually rescore their exam to verify the original score.