

TSSA Certification Examination Preparation Guide



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1. Background

The Technical Standards and Safety Authority (“TSSA”) issues Certificates of Qualification for individuals to legally work in TSSA’s regulated industries (“program areas”). In most instances, the completion of at least one certification examination is one of the pre-requisites for certification.

The TSSA Certification Examination Preparation Guide has been designed to provide certification candidates with general information related to:

- [Basic Examination Details](#)
- [Scheduling an Examination](#)
- [Examination Disability Accommodation Requests](#)
- [Examination Day](#)
- [Permitted Exam Reference Materials](#)
- [Frequently Asked Questions](#)

The Certification Examination preparation guide also forms the examination policies and procedures for each program area and will be strictly enforced.

2. Basic Examination Details

Examinations are structured to include sections on the regulatory sector and specific technical information for the certificate type. Typical exams range from 50 to 165 questions depending on the certificate type.

Depending on the examination type, you may have up to three and a half hours (3.5 hours) to write the examination. Additional time will not be permitted, unless previously approved by TSSA through the disability accommodation request process.

All examination questions are multiple choice, except for the Standardization of Power Engineer Examinations Committee (“SOPEEC”) examinations for Operating Engineers which range from multiple choice to essay responses.

3. Scheduling an Examination

The examination registration process is outlined in the examination application forms of the respective program areas at [Register for an Exam - TSSA](#). Examination candidates should take note of the following:

- Submit a completed Examination Application
 - Fill in all required information accurately in the examination application, including up-to-date contact information and valid -payment information. Candidates who do not submit the applicable non-refundable pre-payment for the examination fee will not be scheduled for the requested examination.
 - Applications must submitted via the payment portal [Service Prepayment Portal - TSSA](#). They are booked on a first come first serve basis, examination seats will not be held.

Important note: if you are registering for Fuels Safety exam and have completed an Accredited Training Program, please note that TSSA cannot schedule your exam until we have received the completed “*Application for an Ontario Certificate of Qualification*” from your Accredited Training Provider.



- Cancellation/Rescheduling Requests:
 - Candidates are permitted to make changes or 'reschedule' an examination once at no charge. They must notify TSSA via email (examinationandcertification@tssa.org) at least two (2) weeks before the examination date. Failure to do so will result in the forfeiture of the examination fee and a new application form (including pre-payment) will be required.

Note: in some instances, an accredited training provider will make examination arrangements for candidates who are enrolled and attending their in-class training program. Please contact your accredited training provider to learn more about this process.

4. Examination Disability Accommodation Requests

TSSA is committed to ensuring that persons with disabilities have an equal opportunity to become certified to work in TSSA regulated occupations. TSSA recognizes its obligations to accommodate persons with disabilities under the Ontario Human Rights Code and is committed to ensuring that its certification and examination practices meet the needs of all qualified candidates wishing to take the required examination(s) for the appropriate TSSA-issued certificate of qualification.

Candidates with disabilities who require examination accommodations are encouraged to review the [Examination Disability Accommodation Policy](#).

Accommodations must be pre-approved by TSSA prior to registering for the examination. Send the approval email with every application sent in to TSSA, this will ensure they are not missed for each exam.

5. Examination Day

On examination day a TSSA representative, TSSA approved invigilator, or representative of the Exam Centre will preside over the exam. Candidates should take note of the following:

- Arrival:
 - Candidates must arrive at least 30 minutes before to the examination start time.
 - The examination administrator or invigilator reserves the right to permit food or drinks into the examination room.
 - If a candidate arrives late to an examination, the examination administrator or invigilator reserves the right to permit/deny entry to write the examination.
 - Please note: Additional time will not be provided to candidates who arrived late and have been permitted entry to write the examination.
- Identification:
 - Examination candidates are required to provide valid government issued photo identification on the day of the examination. Acceptable forms of government issued photo identification must include your legal name, date of birth, photo and signature. This includes the common identification types, below:
 - A valid Provincial Driver's Licence
 - A valid Canadian Passport (or International Passport)
 - A valid Ontario Provincial Health Card
 - A valid Provincial Identification Card
 - Examination candidates who do not have a valid form of government issued photo identification are encouraged to contact TSSA in advance of any examination or certification activity.



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- Examination Reference Material – Exam Centres:
 - Operating Engineers/Operators, Fuels, Elevating Devices, Amusement Devices, Ski Lifts and other examination types:
 - Examination candidates are required to bring their own permitted reference materials (i.e. Code(s), TSS Act, Regulations, etc.) on examination day.
 - Reference materials must be unmarked and unaltered with the exception of page/section dividers or highlighting of sections, words or clauses.
 - Reference materials that do not meet these criteria are not permitted for use during an examination.
 - The Exam Centres will not provide the candidate with a non-programmable calculator and pencils. Candidates will be required to bring their own writing utensils and calculators.
 - The SOPEEC binder will be available as a reference material. There will be one binder for every five seats. Candidates will not be able to keep the SOPEEC binder for the entire duration of the exam, as it will need to be shared with other candidates.
 - Important note: ASME IX Welding and ASME B31.3 Process Piping are not provided in the TSSA SOPEEC binders, and candidates are permitted to bring their own materials to the examination.
 - No other reference materials will be permitted or provided, unless otherwise approved by TSSA in advance of the examination.
 - A candidate is prohibited from accessing or otherwise transporting the following materials into the examination room, please note that this list is not exhaustive: electronic devices (i.e. cell phone, pagers, tablets, laptops, etc.); watches, hats (i.e. baseball caps, winter hats, etc.); personal reference material of any kind, etc.
- Examination Reference Material –Hub City:
 - Operating Engineers/Operators, Fuels, Elevating Devices, Amusement Devices, Ski Lifts and other examination types:
 - Examination candidates are required to bring their own permitted reference materials (i.e. Code(s), TSS Act, Regulations, etc.) on examination day.
 - Reference materials must be unmarked and unaltered with the exception of page/section dividers or highlighting of sections, words or clauses.
 - Reference materials that do not meet these criteria are not permitted for use during an examination.
 - The hub city examinations centers will not provide the candidate with a non-programmable calculator and pencils. Candidates will be required to bring their own writing utensils and calculators.
 - No other reference materials will be permitted or provided, unless otherwise approved by TSSA in advance of the examination.
 - A candidate is prohibited from accessing or otherwise transporting the following materials into the examination room, please note that this list is not exhaustive: electronic devices (i.e. cell phone, pagers, tablets, laptops, etc.); watches, hats (i.e. baseball caps, winter hats, etc.); personal reference material of any kind, etc.
- By sitting an examination, candidates are bound by the applicable Certification and Examinations Policies and Procedures. Candidates agree not to duplicate or copy the examination in any manner nor will they transmit in any way any information regarding the examination to any third party. If any electronic device or prohibited material is found in the possession of an examination candidate, it may be immediately seized by TSSA or its representatives and used as evidence against the examination candidate in any subsequent prosecution or Notice of Proposal to revoke or suspend a certificate, or deny the candidates application for a certificate, as is applicable.



6. Permitted Exam Reference Materials

As outlined in [Section 5: Examination Day](#), there are certain reference materials that a candidate is allowed to use during an examination. Please refer to [Appendix – Permitted Materials](#) for detailed information on the permitted materials for the most common TSSA examinations. For more information on other permitted examination reference materials for classifications not listed below, please contact the Certification and Examinations Department examinationandcertification@tssa.org

7. Frequently Asked Questions

- **Where can I find the address for the Exam Centres and Hub City locations?**
 - Please refer to [Examination Locations](#) for more information.
- **What is the passing grade for an examination?**
 - The passing grade varies based on the program area, as reflected below:

Program Area	Passing Grade
Fuels	75%
Elevating, Amusement Devices, Ski Lifts	70%
Operating Engineers and Operators	65%
Boilers and Pressure Vessels	70%

- **If I did not pass an exam, will I receive an examination breakdown so that I know which area to focus on?**
 - Yes. Candidates who are unsuccessful and have completed a multiple-choice examination will receive an individual mastery report providing a breakdown of the examination module(s). TSSA will send the mastery report along with the formal correspondence to the candidate via email.
- **When can I re-write an exam if I did not achieve a passing grade?**
 - If a candidate is unsuccessful, the period to re-write an exam varies based on the program area, as reflected below:

Program Area	Eligible to Re-Write
Fuels	30 days
Elevating, Amusement Devices, Ski Lifts	30 days
Operating Engineers and Operators	60 days
Boilers and Pressure Vessels	30 days

- **Can I request a re-assessment if I was not successful in a multiple-choice examination?**
 - No. Multiple choice examinations are not eligible for reassessment. Our team diligently reviews each examination which is electronically scored to validate that the examination results align with the information provided on the response sheet (i.e. scantron).
- **What outcome can I expect if I challenge an examination question that I believe to be incorrect?**
 - If a candidate follows the procedure outlined by the examination invigilator to challenge an examination question and has made proper reference, providing the supporting rationale (i.e. code reference, etc.), the question will be reviewed by a technical expert within the applicable safety program area. If the challenge is deemed successful, a



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point/mark will be awarded for that question. Formal notification will not be delivered to the candidate as questions or subject matter will not be discussed or reviewed with the candidate following the completion of an examination.

- Candidates who fail to follow the approved procedure to challenge an examination question are not eligible to do so once the examination has been completed.
- ***Can I leave the examination room for a break during an examination?***
 - No. Breaks are not permitted during an examination, except in the case of an approved disability accommodation, emergency or bathroom break (if permitted by the examination invigilator).
- ***I passed the required examination(s) for certification, how do I obtain my certificate?***
 - For more information on the requirements for certification, please review the applicable links below:
 - [Amusement Devices](#)
 - [Boilers and Pressure Vessel](#)
 - [Elevating Devices](#)
 - [Fuels](#)
 - [Operating Engineers](#)
 - [Ski Lifts](#)
- ***Will I receive a result letter?***
 - Yes. Results letters will be sent to candidates for all examination results via email.
- ***Other questions?***
 - Please contact TSSA toll free via 1-877-682-8772 to speak with a customer service representative.



8. Appendix – Permitted Materials

Fuels Industry Certification

- Gas Technician 1:
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - CSA-B149.1 Natural Gas and Propane Installation Code
 - CSA-B149.2 Propane Storage and Handling Code
 - B149.3-10 Code for the field approval of fuel-related components on appliances and equipment
 - Optional: B149.2S1 Supplement No. 1 to CSA-B149.2, Propane Storage and Handling Code
- Gas Technician 2,3, Gas Piping Fitter, Domestic Appliance Technician:
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - CSA-B149.1 Natural Gas and Propane Installation Code
 - CSA-B149.2 Propane Storage and Handling Code
 - Optional: B149.2S1 Supplement No. 1 to CSA-B149.2, Propane Storage and Handling Code
- Oil Burner Technician 1, 2, 3, Oil Piping Fitter:
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - Ontario Installation Code for Oil-Burning Equipment – Based on CSA B139, with Ontario amendments 1st Edition
- Petroleum Mechanics (PM1, PM2, PM3, PM4, PMH), Site Operator:
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - Liquid Fuels Handling Code
- Hydrogen Technician (H2)
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - Canadian Hydrogen Installation Code
- Refuelling Station Technician/Installer (RST-NG/RSI-NG)
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - CSA B108-14 Compressed natural gas fueling stations installation code
 - CSA-B149.1 Natural Gas and Propane Installation Code
- Internal Combustion Alternate Fuel Technicians
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - CSA-B149.1 Natural Gas and Propane Installation Code
 - CSA-B109-01 Natural Gas for Vehicles Installation Code



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- CSA-B149.5-15 Installation code for propane fuel systems and containers on motor vehicles
- CSA-B149.2 Propane Storage and Handling Code
- Optional: B149.2S1 Supplement No. 1 to CSA-B149.2, Propane Storage and Handling Code
- Gas Pipeline Inspector (GPI)
 - Technical Standards and Safety Act, 2000, all Fuels Regulations and associated Code Adoption Documents
 - CSA-Z662-15 – Oil and gas pipeline systems
 - CSA-Z247-15 – Damage prevention for the protection of underground infrastructure
- Local Knowledge Examination:
 - [Technical Standards and Safety Act, 2000](#)
 - [Oil and Gas Pipeline Systems, Ontario Regulation 210/01](#)
 - [Propane Storage and Handling Regulation, Ontario Regulation 211/01](#)
 - [Gaseous Fuels Regulation, Ontario Regulation 212/01](#)
 - [Fuel Oil Regulation, Ontario Regulation 213/01](#)
 - [Fuels Industry Certificates Regulation, Ontario Regulation 215/01](#)
 - [Certification of Petroleum Mechanics, Ontario Regulation 216/01](#)
 - [Liquid Fuels Regulation, Ontario Regulation 217/01](#)

Elevating Device Mechanic and Ski Lift Mechanic Certification

- Elevating Device Mechanics
 - Technical Standards and Safety Act, 2000
 - Elevating Devices Regulation, Ontario Regulation 209/01
 - Certification of Elevating Device Mechanics, Ontario Regulation 222/01
 - Elevating Devices Code Adoption Document
 - All applicable Director's Orders
 - ASME A17.1/CSA B44 Safety Code for Elevators and Escalators
 - CAN/CSA B311 Safety Code for Manlifts
 - CSA B355 Lifts for Persons with Physical Disabilities
 - CAN/CSA Z256 Safety Code for Material Hoists
 - CAN/CSA Z185 Safety Code for Personnel Hoists
 - ANSI A10.2 Rope Guided Hoist
 - Ontario Electrical Safety Code
 - Elevator Industry Field Employees' Safety Handbook
- Ski Lift Mechanics:
 - Technical Standards and Safety Act, 2000
 - Elevating Devices Regulation, Ontario Regulation 209/01
 - Certification of Elevating Device Mechanics, Ontario Regulation 222/01
 - CSA Z98 Passenger Ropeways and Passenger Conveyors Code
 - Elevating Devices Code Adoption Document
 - All applicable Director's Orders
- Local Knowledge Examination:
 - [Technical Standards and Safety Act, 2000](#)
 - [Elevating Devices Regulation, Ontario Regulation 209/01](#)
 - [Certification of Elevating Device Mechanics, Ontario Regulation 222/01](#)



Amusement Device Mechanic Certification

- All Classifications:
 - Technical Standards and Safety Act, 2000
 - Amusement Devices, Ontario Regulation 221/01
 - Certification of Amusement Device Mechanics, Ontario Regulation 187/03
 - Amusement Devices Code Adoption Document
 - All applicable Director's Orders
 - ASTM – F2007, F2376, F2959, F2374, F2783, F770 & F1193
- Local Knowledge Examination:
 - [Technical Standards and Safety Act, 2000](#)
 - [Amusement Devices, Ontario Regulation 221/01](#)
 - [Certification of Amusement Device Mechanics, Ontario Regulation 187/03](#)

Operating Engineers Certification

- All Classifications:
 - [Technical Standards and Safety Act, 2000](#)
 - [Operating Engineers Regulation, Ontario Regulation 219/01](#), and associated Director's Orders
 - [Boilers and Pressure Vessels Regulation, Ontario Regulation 220/01](#), and associated Director's Orders
 - The Handbook of Formulae and Constants from the PanGlobal Academic Supplement
 - Version 1.0 and Version 2.0 are acceptable for the examination
 - The Steam Tables from the PanGlobal Academic Supplement
 - Version 1.0 and Version 2.0 are acceptable for the examination
 - The CSA Academic Code Extracts, as outlined below:
 - CSA B51
 - Version B52-09 or newer is acceptable for the examination
 - CSA B52
 - Version B52-05 or newer is acceptable for the examination
 - The ASME Academic Extract and supplement
 - Note: the 2007 or 2018 version is acceptable for the examination
 - Important note: ASME IX Welding and ASME B31.3 Process Piping are not provided in the TSSA SOPEEC binders, and candidates are permitted to bring their own materials to the examination.
- Local Knowledge Examination:
 - [Technical Standards and Safety Act, 2000](#)
 - [Operating Engineers Regulation, Ontario Regulation 219/01](#)
 - [Boilers and Pressure Vessels Regulation, Ontario Regulation 220/01](#)

Boilers and Pressure Vessels Certification

- Certificate of Competency:
 - Technical Standards and Safety Act, 2000
 - Boilers and Pressure Vessels Regulation, Ontario Regulation 220/01
 - TSSA Code Adoption Document, All Minister's and Director's Orders
 - CSA-B51, Part 1 – Edition Referenced by the TSSA Code Adoption Document
 - CSA-B52 – Edition Referenced by the TSSA Code Adoption Document