

GAS TECHNICIAN

Program: GAST

Credential: Ontario College Certificate

Delivery: Full-time

Length: 3 Semesters

Duration: 1 Year

Effective: Fall 2019

Location: Barrie (evenings and weekends only), Owen Sound

Description

Students train on the theoretical and practical skills required to obtain the Technical Standards and Safety Authority (TSSA) Gas Technician 3 (G.3) and Gas Technician 2 (G.2) certifications. Students study workplace safety, tools, characteristics of natural gas, codes/regulations, basic electricity, technical specifications, customer relations, basic piping systems, and an introduction to gas appliances. Further on, students study advanced piping/tubing systems, electricity, controls, systems, appliances, gas meters, pressure regulators, gas-fired refrigerators, conversion burners, water heaters, forced warm air heating systems, hydronic heating systems, space heating, venting practices, forced air add-on devices, and air handling.

Career Opportunities

Graduates are primarily prepared for a career as a gas technician. Employment may also be found in the areas of technical support and sales within the industry. There are also a number of apprenticeships that graduates may pursue in areas such as sheet metal, refrigeration, plumbing, and pipe fitting. For those who want to work in these trades, an apprenticeship is required after graduation. By the end of the program students are eligible to write their TSSA Gas Technician 3 (G.3) and Gas Technician 2 (G.2) exams in order to become fully qualified and licensed technicians.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. use industry specific customer relations practices in order to relate effectively to coworkers and customers;
2. complete all work in accordance with applicable acts, regulations, legislation, and codes to ensure personal safety and enhance the safety of the public;
3. promote safe handling, combustion, and efficiency with natural gas and propane as well as their related appliances;
4. adhere to proper sequences of operations for heating systems and associated components by referencing and following technical manuals, specifications, schematics, drawings, and graphs;
5. select and use hand tools and operate test equipment for their intended purposes;
6. employ the basic electrical skills required in order to install, service, and troubleshoot gas appliances;
7. solve problems related to the installation and servicing of heating appliances by drawing on an understanding of mechanical systems within a building envelope;
8. install, service, maintain, and troubleshoot heating systems and their related components;

9. identify and incorporate strategies for ongoing personal and professional development that will lead to enhanced work performance and career opportunities, and keep pace with industry changes;
10. employ environmentally sustainable practices within the profession;
11. apply basic entrepreneurial strategies to identify and respond to new opportunities.

The Program Progression

Fall Intake

- **Sem 1:** Fall 2019
- **Sem 2:** Winter 2020
- **Sem 3:** Summer 2020

Barrie campus delivered evenings and weekends only

Admission Requirements

OSSD or equivalent with

- Grade 12 English (C or U)

Mature students, non-secondary school applicants (19 years or older), and home school applicants may also be considered for admission. Eligibility may be met by applicants who have taken equivalent courses, upgrading, completed their GED, and equivalency testing. For complete details refer to: www.georgiancollege.ca/admissions/policies-procedures/ (<http://www.georgiancollege.ca/admissions/policies-procedures/>)

Applicants who have taken courses from a recognized and accredited post-secondary institution and/or have relevant life/learning experience may also be considered for admission; refer to the Credit Transfer Centre website for details:

www.georgiancollege.ca/admissions/credit-transfer/ (<http://www.georgiancollege.ca/admissions/credit-transfer/>)

Additional Information

Gas Technician work in Ontario requires Gas Technician license (Ontario Certificate of Qualification), which is governed by Technical Standards and Safety Authority (TSSA). The college facilitates Gas Technician 3 (G.3) and Gas Technician 2 (G.2) Ontario Certificate of Qualification Examinations on campus at the end of the first and third semesters, respectively.

The cost of each examination is not included in the tuition fee. Gas Technician 3 (G.3) and Gas Technician 2 (G.2) Ontario Certificates of Qualification are not graduation requirements for this program.

Gas Technician (GAST) program students wanting to transfer to the Heating, Refrigeration and Air Conditioning (HRAC) program are required to:

- meet graduation requirements of the Gas Technician (GAST) program
- meet the admission requirements of the Heating, Refrigeration and Air conditioning (HRAC) program including a 12C or U math course or equivalent
- complete and submit a request for program change form

Successful applicants will be exempted from the first 3 semesters of the Heating, Refrigeration and Air Conditioning (HRAC) program.

add or delete programs, options, courses, timetables or campus locations subject to sufficient enrolment, and the availability of courses.

Graduation Requirements

- 13 Program Courses
- 2 Communications Courses
- 2 General Education Courses

Graduation Eligibility

To graduate from this program, the passing weighted average for promotion through each semester, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

Program Tracking

Semester 1		Hours
Program Courses		
ELEC 1010	Introduction to Electricity	70
GAST 1003	Introduction to Gas Appliances	70
GAST 1013	Professional Practices	28
GAST 1014	Piping and Tubing Systems	28
Communications Course		
Select 1 course from the communications list during registration.		42
General Education Course		
Select 1 course from the general education list during registration.		42
Hours		280
Semester 2		
Program Courses		
ELEC 1011	Basic Electricity and Controls	56
FITN 1002	Fitness and Wellness	42
GAST 1015	Gas Appliances	70
GAST 1017	Venting	28
GAST 1020	Buildings and Air Handling	28
Communications Course		
Select 1 course from the communications list during registration.		42
Hours		266
Semester 3		
Program Courses		
ELEC 1012	Electrical Troubleshooting Applications	28
GAST 1016	Piping, Forced Air and Space Heating	84
GAST 1018	Water Heaters and Hydronic Heating	84
GAST 1019	Gas Code Applications	14
General Education Course		
Select 1 course from the general education list during registration.		42
Hours		252
Total Hours		798

Graduation Window

Students unable to adhere to the program duration of one year (as stated above) may take a maximum of two years to complete their credential. After this time, students must be re-admitted into the program, and follow the curriculum in place at the time of re-admission.

Information contained in College documents respecting programs is correct at the time of publication. Academic content of programs and courses is revised on an ongoing basis to ensure relevance to changing educational objectives and employment market needs. The college reserves the right to