

CONSTRUCTION ENGINEERING TECHNICIAN PROGRAM (T161)

PROGRAM NAME	Construction Engineering Technician	TUITION	\$4,280.00 *
COURSE CODE	T161	ADDITIONAL COST	
SCHOOL	Angelo DelZotto School of Construction Management		* Amounts listed are the total of tuition, materials, student service and ancillary fees for the first two semesters of programs starting in Fall 2018. Fees are subject to change for programs starting in Fall 2019 and at later dates.
CENTRE	Construction Engineering Technology		
LOCATION	Casa Loma Campus		
DURATION	2 years (4 semesters)		
FIELD EDUCATION	Experiential Learning		International students: Visit the International Fees and Related Costs ² page for more information.
STARTING MONTH	September, January		
CREDENTIAL	Ontario College Diploma		
YEAR OF STUDY	2019-2020		
METHOD OF STUDY	FT		
APPLY TO	Ontario Colleges ¹		



The Construction Engineering Technician program studies the characteristics of various building types with an appreciation for the latest energy and environmental technologies. The program also focuses on areas that include:

- Interpretation of construction documents
- On-site building engineering and safety
- Quantity surveying (estimating labour, materials and equipment required for a project)
- Building codes and construction contracts
- Site management practices

Laboratory courses provide practical building layout surveys and quality control testing of various building materials. You will also gain extensive computer experience, working with general business and **Building Information Modeling (BIM)** software and specialized construction management and estimating software.

*If you enrol in the program in January, you are required to complete semester 2 in the summer (May to August) of the same year in order to continue into semester 3 in the fall.

PART TIME STUDY OPTIONS

Part-time study options are not available for this program; however, our Continuing Education department offers evening courses and part-time certificate programs in Building/Construction Technologies. See coned.georgebrown.ca

FIELD EDUCATION OPTIONS

Purpose and Definition of Field Experience

Field experience combines classroom learning with hands-on work experience structured to meet specific curricular outcomes. This approach to education relies upon a three-way partnership: the student, the institution and industry. Success depends upon the co-operative efforts of each party. It forms the basis for students' experiential learning which is achieved when the cycle of experience, reflection, and learning is completed. It is a mandatory component of the T161 Construction Engineering Technician program. Field experience positions can be paid or unpaid. Both fulfill the academic requirement as well as strengthen students' resumes, positioning them more effectively for future employment.

The field experience requires students to accumulate 100 hours of construction industry-related experience over the course of their third and fourth semesters. The field experience is facilitated through the Angelo DelZotto (ADZ) School of Construction Management, via collaborative efforts from the academic supervisors, program coordinators and the chair.

THE INDUSTRY

According to the 2015 Build Force Canada report 420,000 workers in the 34 core construction and trades occupations will be needed to replace existing workers and meet new labour market demand between now and 2024.

PROGRAM STANDARDS AND LEARNING OUTCOMES

The graduate has reliably demonstrated the ability to:

1. Develop and use strategies to enhance professional growth and ongoing learning in the construction engineering field.
2. Comply with workplace health and safety practices and procedures in accordance with current legislation and regulations.
3. Complete duties in compliance with contractual obligations, applicable laws, standards, bylaws, codes and ethical practices in the construction engineering field.
4. Carry out sustainability practices in accordance with contract documents, industry standards and environmental legislative requirements.
5. Collaborate with and facilitate communication among project stakeholders to support construction projects.
6. Collect, process and interpret technical data to produce written and graphical project-related documents.
7. Contribute to the collecting, interpreting and applying of survey/geomatics and layout information to implement construction projects.
8. Identify and use industry-specific electronic and digital technologies to support the design and construction of projects.
9. Contribute to the resolution of technical problems related to the design and implementation of construction projects by applying engineering concepts, basic technical mathematics and building science.
10. Assist in the scheduling and monitoring of the progression of construction projects by applying principles of construction project management.
11. Assist in the preparation of accurate estimates of time, cost, quality and quantity, tenders and bids.
12. Perform quality control testing and monitoring of equipment, materials and methods involved in the implementation and completion of construction projects.
13. Apply teamwork, leadership and interpersonal skills when working individually or within multidisciplinary teams to complete work on construction projects.

REQUIRED COURSES

SEMESTER 1

Code	Course name
BLDG1025	Construction Field Practices
BLDG1026	Introduction to Residential Construction
BLDG1074	Fundamentals of Building Architecture
GSCI1022	Building Science and the Environment
COMM1007	College English**
MATH1136	Mathematics for Building Technologies 1

SEMESTER 2

Code	Course name
BLDG1042	Construction Materials and Methods
BLDG1043	Quantity Surveying
BLDG1073	Construction Materials Testing
BLDG1076	Building Code 1
BLDG1077	Construction Health and Safety
BLDG1078	Introduction to 3D Modeling
GHUM1106	History of Architecture
MATH1146	Mathematics for Building Technologies 2

SEMESTER 3

Code	Course name
BLDG1084	Timber Construction Technology
BLDG1165	Introduction to Building Science
BLDG1201	Work Preparation
BLDG1202	Field Experience 1
BLDG2076	Building Code 2
BLDG2019	Estimating – Small Buildings
BLDG2045	Construction Site Management, Supervision and Inspection
COMM1113	Professional Communications for Building Technologies
GNED	General Education Elective

SEMESTER 4

Code	Course name
BLDG2021	Construction Planning and Scheduling
BLDG2046	Mechanical & Electrical Installations
BLDG2090	Principles of Construction Law
BLDG2091	Steel Construction Technology
BLDG2130	Field Experience 2
BLDG3004	Pricing Construction Works
GNED	General Education Elective

**Based on the results of your placement test, you may be required to take COMM1003 (English Skills) or CESL1003 (English Skills – ESL) before progressing to COMM1007. COMM1003/CESL1003 does not count as a course required for graduation, and you will be charged for this extra course. Please visit <http://assessment.georgebrown.ca> for more information.

General Education Electives

YOUR CAREER

Graduates find employment in a variety of jobs leading to supervisory positions in the construction industry. Opportunities may be found with:

- Home builders
- General contracting firms
- Subcontractors
- Consulting firms
- Sales roles with manufacturing and supply companies (related to the building industry)
- Government agencies

FUTURE STUDY OPTIONS

Students in this program are eligible to transfer with advanced standing into semester 5 of the Construction Engineering Technology advanced diploma program (T105)³.

TRANSFER OPTIONS

If you are transferring from another Ontario college Construction Engineering program, you may be eligible for advanced standing. Please consult the Transfer Guide⁴ website.

EDUCATIONAL/DEGREE PATHWAY

Pathways to the Honours Bachelor of Technology (Construction Management) degree program are also available after completing the three-year Construction Engineering Technology program.

For more information, see georgebrown.ca/transferguide.

ADMISSION REQUIREMENTS

Applicants are selected on the basis of their academic achievement, including the required courses, and any other selection criteria outlined below.

- Ontario Secondary School Diploma or equivalent**
- Grade 12 English (C or U)
- Grade 11 Math (M or U) or Grade 12 (C or U)

** MATURE STUDENT STATUS (19 YEARS OF AGE OR OLDER AND NO OSSD)

Mature Students may take the Admissions Assessment⁵ for English and Math, OR may consider upgrading to achieve the credit(s) needed in English⁶ and Math⁷.

Please note that George Brown is committed to ensuring that applicants will succeed in their program of choice and meeting the minimum requirements does not guarantee admission to the program. Applicants may be required to have grades higher than the minimum requirements stated.

COURSE EXEMPTIONS

College or university credits may qualify you for course exemptions. Please visit georgebrown.ca/transferguide for more information.

INTERNATIONAL STUDENTS

Visit the International Admissions⁸ page for more information.

CONTACT US

Angelo DelZotto School of Construction Management

Phone: 416-415-5000, ext. 4398

Email: construction_eng@georgebrown.ca

Our office hours are 8 a.m. - 4 p.m., room E228.

For more information about George Brown College, you may also call the Contact Centre at 416-415-2000 (TTY 1-877-515-5559) or long distance 1-800-265-2002.

VISIT OUR CAMPUS

Do you have questions about this program or your career options? Join us for an on-campus Information Session. You'll have the opportunity to meet our friendly instructors and staff, ask questions and experience what it's like to be in a George Brown College classroom. Sign up for an Information Session⁹.

LINKS REFERENCE

¹<https://collegeapply.ontariocolleges.ca/?collegeCode=GBTC&programCode=T161&lang=en>

²<http://www.georgebrown.ca/international/futurestudents/tuitionfees/>

³<http://www.georgebrown.ca/programs/construction-engineering-technology-program-t105/>

⁴<http://www.georgebrown.ca/transferguide/>

⁵<http://www.georgebrown.ca/assessment/admi-pre/>

⁶<http://www.georgebrown.ca/upgrading-credits/english-diploma/>

⁷<http://www.georgebrown.ca/upgrading-credits/math-diploma/>

⁸<http://www.georgebrown.ca/international/futurestudents/applynow/>

⁹http://www.georgebrown.ca/tours_technology/

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