

HONOURS BACHELOR OF TECHNOLOGY (CONSTRUCTION MANAGEMENT) (BRIDGING) PROGRAM (T317)

PROGRAM NAME	Honours Bachelor of Technology (Construction Management)	TUITION	\$10,492.00 * †
COURSE CODE	T317	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	† Fees for this program do not include the cost of the work term.	
LOCATION	Casa Loma Campus		
DURATION	5 semesters (plus 1 Field Placement semester)		
EXPERIENTIAL LEARNING	Mandatory Work Term		
STARTING MONTH	May		
CREDENTIAL	Honours Bachelor's Degree		
YEAR OF STUDY	2019-2020		
METHOD OF STUDY	FT		
APPLY TO	Ontario Colleges ¹		

T317 – Honours Bachelor of Technology (Construction Management) is a degree completion pathway designed for graduates of an Ontario college advanced (three-year) diploma program in Civil Engineering Technology who wish to pursue a degree in Construction Management. Students completing this pathway are required to complete Year 3 and Year 4 of the program to obtain their bachelor's degree in Construction Management.

The Honours Bachelor of Technology (Construction Management) program provides a dynamic curriculum that integrates theory, applied research, field study and hands-on practical education. Recognizing that today's successful construction manager must possess both technical and managerial competencies, the curriculum combines studies in construction science and technology with studies in business and management methods as applied to construction.

Students obtain the knowledge and skills to manage the functions and processes of construction projects from start to finish. They master construction-related technical disciplines and soft skills that are critical to completing projects on time and within budget. Graduates of this program are entitled to the academic credential designation of **Hons. B.Tech. (Construction Management)**.

The Honours Bachelor of Technology (Construction Management) program is well recognized by the construction industry, and is fully accredited by the Canadian Institute of Quantity Surveyors (CIQS), the Chartered Institute of Building (CIOB), and the Royal Institution of Chartered Surveyors (RICS). Graduates of this program are qualified to obtain professional memberships in various construction management associations. Professional memberships are based on the candidate's education, training and work experience.

With the completion of this degree program, graduates will have satisfied all academic requirements for professional membership of the Chartered Institute of Building (CIOB), the Canadian Institute of Quantity Surveyors (CIQS), and the Royal Institution of Chartered Surveyors (RICS). Memberships in these associations must be applied for separately.

Graduates also will have completed all academic requirements towards their Gold Seal Certification (GSC) offered by the Canadian Construction Association (CCA) to become certified Superintendents, Estimators, Project Managers, Construction Managers and Construction Safety Coordinators.

PART TIME STUDY OPTIONS

Part time studies are not available for this program.

EXPERIENTIAL LEARNING

Mandatory Work Term

YOUR FIELD STUDY OPTIONS

WORK TERM



An integral component of the Honours Bachelor of Technology (Construction Management) degree program is a mandatory field study or Work Term offered in the Spring/Summer of the third year of the program. The Work Term is jointly facilitated through the Angelo DelZotto School of Construction Management and the Centre for Construction and Engineering Technologies (CCET)'s Industry Liaison Office (ILO).

Prior to the Work Term, students participate in job preparation courses that cover areas such as workplace communication practices, resume writing, job search strategies and interview practice to enable them to communicate clearly and effectively. In the field settings, students practice team building, managing and tracking project resources, analyzing project performance, preparing technical proposals and reports, and improving their construction project management skills.

Students are required to complete a minimum of 14 weeks of full-time work experience, or part-time equivalent of no less than 420 hours of verifiable work experience, in the field of construction management in order to fulfill the Work Term requirement.

Students are allowed to complete the Work Term requirement through the following pathways:

Field Placement: Students register in the Work Term course (TCOP 1001), secure field placement in a relevant construction field, obtain a minimum of 14 weeks of full-time field work experience, or part-time equivalent of no less than 420 hours of relevant field work experience, and pass the course.

Prior Learning Assessment Recognition (PLAR): Students who have prior work experience equivalent to the minimum requirement (that is, minimum of 14 weeks of full-time or part-time equivalent of no less than 420 hours of relevant work) can seek to complete the Work Term requirement of the program through the PLAR process.

WORK/STUDY ABROAD OPPORTUNITIES

There is also a work/study abroad opportunity that will allow a limited number of students to complete one month of field studies at Shanghai Urban Construction College (SUCC) in China, including two weeks of studies and two weeks of work. SUCC is a multidivisional college that serves 6,000 students with over 400 faculty members.

THE INDUSTRY

The industrial, commercial and institutional (ICI) construction sector drives the success of the Honours Bachelor of Technology (Construction Management) degree. Here's what sector leaders had to say about our program:

"The introduction of the Construction Management program at George Brown College is the next stage of development of professionalism in the construction industry. For the first time, the industry has its own degree-specific program which brings together the two most important elements identified by leading construction executives – the science of construction and the science of management."

Temple Harris, Vice-Chairman, Gillam Group

"In order to provide the necessary leadership, we need to staff our projects with construction professionals. Therefore, we believe the four-year degree program in Construction Management at George Brown College is an important component to ensure our continual requirement for construction professionals will be met."

Christopher Rick, PCL Constructors, Canada Inc.

"As the industry expands and continues to change, it is imperative that individuals overseeing and managing construction projects are properly trained in all facets of the business."

James Zippel, General Manager, Electrical Service & Projects, Ainsworth

"Producing future graduates who already have the necessary construction-specific skills as they start their careers will only help strengthen the long-term success of our industry."

Greg Kozicz, President, Alberici Constructors, Ltd.

"In our opinion, there continues to be a real need for improved and advanced education and training in the construction sector and an improved method of attracting and retaining the best and brightest of our future generations. We submit that this program is a significant step in the right direction towards achieving these goals and believe that successful graduates of an effective four-year degree program will help to raise the bar in terms of the knowledge and capabilities of companies involved in the construction industry."

Michael George, President, Trisura Insurance

"The urgency for a program of this nature is fuelled by the rapid change in our construction industry and the fact that it is becoming more technology-driven each day. Having graduates of such competency enter the industry with refined skills on both the technical and managerial aspects of construction will not only fill a void that currently exists, but bring immeasurable promise to the future of project managers, site superintendents and construction management in general."

Mike Van Volsen, Operations Manager, Access Suspended Platforms Inc.

PROGRAM STANDARDS AND LEARNING OUTCOMES

The graduate has reliably demonstrated the ability to:

1. Use relevant media to communicate all manner of information related to a construction project.
2. Analyze past performance of construction projects to predict and improve the execution of future projects.
3. Manage construction projects in a compliant, safe, ethical and sustainable manner.
4. Apply management tools and techniques to execute construction projects on time and within budget.
5. Recognize and value diversity of opinions, processes, and approaches in executing construction projects.

6. Incorporate effective leadership strategies to develop high-functioning, multidisciplinary and multicultural teams and work groups.
7. Apply the principles and practices of leadership development and human resources to manage and develop people in the construction industry.
8. Analyze technical problems encountered in construction projects and develop appropriate solutions in accordance with the principles and practices of construction science and management.
9. Apply business, accounting and financial principles and practices to effectively manage construction project costs.
10. Apply the principles and practices of construction management in assessing the key performance indicators of construction projects.
11. Evaluate potential risks impacting construction projects and devise appropriate risk mitigation strategies.
12. Create technical documents relevant to the design, procurement and execution of construction projects and manage documentation flow effectively.
13. Behave in a fair, ethical and responsible manner consistent with professional codes of conduct, laws, policies, and contracts.

REQUIRED COURSES

Code	Course Name
BLDG2095	Construction Estimating 1 (1st 7 weeks)
BLDG2105	Construction Estimating 2 – Pricing (2nd 7 weeks)
BLDG2204	Commercial Construction Technology
BSCI2101	Foundations in Building Science 1 (1st 7 weeks)
Liberal Studies Elective	

SEMESTER 5

Code	Course Name
BLDG1152	Introduction to Building Information Modeling
BLDG3025	Construction Estimating 3 – Bidding
BLDG3045	Heavy Construction Management Practices 1
BLDG3108	Workplace Communications 2
BSCI3101	Applications in Building Science
MGMT3120	Construction Quality Management (Online)
Liberal Studies Elective	

SEMESTER 6

Code	Course Name
BLDG2111	Highrise Construction Technology
BLDG3040	Building Codes and Regulations 2
BLDG3148	Construction Safety Management Practices (online)
BLDG3150	Construction Estimating 4 – Cost Control
BLDG3175	Heavy Construction Management Practices 2
MGMT3150	Construction Project Management 2 – Contract Administration
MGMT4055	Labour Relations and Human Resources Management (hybrid)

SUMMER WORK TERM SEMESTER

Code	Course Name
TCOP1001	Work Term (14 weeks)

SEMESTER 7

Code	Course Name
BLDG3152	Economics of Project Development
BLDG3164	Capstone Industry Research 1
BLDG3170	Preconstruction Cost Planning
BLDG3203	Building Information Modeling - Management
MGMT4049	Construction Risk Management
MGMT4050	Construction Project Procurement
Liberal Studies Elective	

SEMESTER 8

Code	Course Name
BLDG3151	Case Studies in Construction Management
BLDG4050	Sustainable Construction Management Practices
BLDG4150	Capstone Industry Research 2
MGMT4051	Leadership Development For Construction Managers
MGMT4052	Project Financial Monitoring
MGMT4053	Practicum in Construction Project Management
MGMT4054	Ethics for Construction Managers (online)

*An additional field placement fee applies for the work semester.

The program is continuously reviewed and adjusted to meet the needs of the construction industry and therefore may be subject to change.

If you are a George Brown College student graduating with a grade point average of 3.0 or higher from the three-year Construction Engineering Technology program (T105), the three-year Architectural Technology program (T109), the three-year Interior Design Technology (T170), the three-year Building Renovation Technology program (T148) or the three-year Civil Engineering Technology program (T164), or you are graduating from a program comparable to the four programs above at another Ontario college, you

may be eligible to enter a degree completion pathway to this program. The Centre for Construction and Engineering Technologies regularly hosts "Diploma-to-Degree" information sessions. You are invited to attend if you wish to learn more about the diploma-to-degree application process and the evaluation criteria. For more information, call 416-415-5000, ext. 4398, email construction_degree@georgebrown.ca, or visit georgebrown.ca/T312_Diploma_to_Degree.

CAREER OPTIONS

The Honours Bachelor of Technology (Construction Management) program prepares graduates to assume leadership roles in all aspects of the construction industry. Career options available to graduates of this program may include, but are not limited to, the following:

- construction manager
- project manager
- project coordinator
- field engineer
- site superintendent
- estimator
- project monitor
- building science specialist
- building condition assessor
- construction sales manager
- construction claims specialist
- construction quality control specialist
- construction health and safety specialist
- construction cost consultant
- developer
- project controls specialist
- site inspector
- contractor
- subcontractor

YOUR CAREER

CONSTRUCTION MANAGERS NEED SPECIALIZED SKILLS TO SUCCEED

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.

In this rapidly changing and growing industry, more and more highly trained construction managers are needed – managers who can effectively function within multidisciplinary teams of owners/developers, project managers, architects, engineers, planners, government authorities, contractors and trade contractors. In addition, the industry needs construction managers with a comprehensive knowledge of construction safety and quality management systems and sustainable construction practices. The construction industry also requires professionals who possess a broad technical and business management background that allows them to coordinate multidisciplinary teams and liaise with various stakeholders.

Construction managers plan, organize, lead and control construction projects from start to finish, according to design, regulatory compliance requirements, contracts, specifications, budgets and schedules, with a focus on sustainable construction techniques and practices.

CONSTRUCTION MANAGERS:

- Conduct feasibility studies for project development and prepare cost planning and budget analysis for building designs.
- Identify sustainable alternatives for building design and construction via value analysis.
- Prepare estimates for project bidding and procurement.
- Prepare construction schedules and milestones for project.
- Monitor construction progress and produce project control reports.
- Prepare contracts and negotiate design changes with architects, consultants, and suppliers.
- Develop and implement safety and quality control plans in construction projects.
- Manage the procurement of construction labour, materials and equipment.
- Analyze projects for constructability.
- Implement appropriate construction technology for efficient execution of construction projects.
- Select sustainable methods of construction.
- Contract and manage subcontractors and supervise their activities.
- Represent the employer in union contract negotiations.
- Manage documentation for project procurement and construction.
- Manage information and construction processes through Building Information Modeling (BIM).
- Manage construction and construction-related businesses.
- Provide expertise in selecting an appropriate method of delivery for construction projects.
- Provide project loan monitoring expertise to lenders.
- Apply practical solutions and innovations to construction project management.
- Conduct property condition assessment and prepare reserve fund studies.
- Provide building science expertise for sustainable projects.

ACADEMIC ACCREDITATIONS

The Honours Bachelor of Technology (Construction Management) program is fully accredited by the Canadian Institute of Quantity Surveyors (CIQS), the Chartered Institute of Building (CIOB), and the Royal Institution of Chartered Surveyors (RICS).

Graduates of the Hons. B.Tech. (Construction Management) program are qualified to obtain professional memberships in various construction management associations. Professional memberships are based on the candidate's education, training and work experience.

With the completion of this degree program, graduates will have completed all academic requirements for professional membership at the Chartered Institute of Building (CIOB), the Canadian Institute of Quantity Surveyors (CIQS), and the Royal Institution of Chartered Surveyors (RICS). Memberships in these associations must be applied for separately. Members of the CIOB (MCIOB) are entitled to use the descriptor of Chartered Construction Manager or Chartered Builder. Members of the CIQS obtain the Professional Quantity Surveyors (PQS) or Construction Estimator Certified (CEC) designation. Members of the Royal Institution of Chartered Surveyors (RICS) obtain the designation of Chartered Surveyor.

Graduates also receive 50 credits out of the total 100 credits required to obtain the Gold Seal Certification (GSC) offered by the Canadian Construction Association (CCA). The Gold Seal Certification in the Canadian construction industry is available for Superintendents, Estimators, Project Managers, Owner's Construction Managers and Construction Safety Coordinators. Gold Seal Certification is based on the candidate's education, training and professional work experience.

FUTURE STUDY OPTIONS

Graduates of the Honours Bachelor of Technology (Construction Management) program qualify to pursue graduate studies in relevant fields of study. They need to directly contact universities to explore what qualified graduate school opportunities exist.

ADMISSION REQUIREMENTS

Only graduates of an Ontario College Advanced (three-year) diploma in Civil Engineering Technology will be considered for this program.

Graduates must have a GPA of 3.0 or higher.

George Brown has been granted a consent by the Minister of Advanced Education and Skills Development to offer this applied degree for a 7-year term starting May 7, 2018. The college shall ensure that all students admitted to the above-named program during the period of consent will have the opportunity to complete the program within a reasonable time frame. An application for renewal of the consent has been submitted and the current consent remains in effect until a decision on the renewal application is made.

CONTACT US

Angelo DelZotto School of Construction Management

Phone: 416-415-5000, ext. 4398

Email: construction_degree@georgebrown.ca

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

The Centre for Construction and Engineering Technologies (CCET) regularly hosts "Diploma-to-Degree" information sessions. You are invited to attend if you wish to learn more about the diploma-to-degree application process and evaluation criteria. For more information, contact us at the phone number or email address listed above, or visit georgebrown.ca/T312_Diploma_to_Degree.

For general 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 Session².

LINKS REFERENCE

¹<https://www.ontariocolleges.ca/en/programs?q=t317&page=0>

²http://www.georgebrown.ca/tours_technology/

George Brown College is continually striving to improve its programs and their delivery. The information contained in this calendar is subject to change without notice. It should not be viewed as a representation, offer or warranty. Students are responsible for verifying George Brown College admission, graduation, and fee requirements as well as any requirements of outside institutions, industry associations, or other bodies that may award additional designations concurrently with, or after completion of, a George Brown College program.