ARCHITECTURAL TECHNICIAN

Program: ARTC
Credential: Ontario College Diploma, Co-op
Delivery: Full-time
Work Integrated Learning: 2 Co-op Work Terms
Length: 4 Semesters, plus 2 work terms
Duration: 2 Years
Effective: Fall 2023
Location: Barrie

Description

Students in this program prepare to work alongside architects, designers and project managers. While developing skills in architectural drafting and design as well as an understanding of the building design and construction process, students take courses in computer-aided drafting and project design, building codes, contracts and specifications. Teamwork and project-based learning is emphasized. This program is common with the first four semesters of the Architectural Technology program and graduates may choose to continue into the third year of that program.

Career Opportunities

Graduates may find work in the private sector as architectural and civil draftspersons, working in the teams that prepare design or working drawings. They may also find careers as sales representatives and technicians in building products manufacturing firms and in government departments. They may also find employment as assistants in architectural construction field offices.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. communicate with clients, contractors, other building professionals, and approval authorities;
2. assist in the preparation, reading, and interpretation of drawings, and other graphical representations used in building projects;
3. read and assist in the preparation of specifications and other project documents used in design and construction;
4. assist in the preparation of estimates of time, costs, and quantity;
5. assist in solving technical problems related to building projects through the application of principles of building science and mathematics;
6. collaborate with members of the building team;
7. assist in the development of architectural designs;
8. review and assist in the preparation of site planning documents;
9. comply with the legal and ethical requirements of an architectural technician in the practice of building design and construction;
10. assist in the assessment of buildings related to repurposing and renovation projects;
11. ensure personal safety in the workplace;
12. identify sustainable design and building practices;
13. use current and emerging technology to support building projects;
14. assist in the administration of the construction phase of building projects;
15. apply basic entrepreneurial strategies to identify and respond to new opportunities.

Practical Experience

All co-operative education programs at Georgian contain mandatory work term experiences aligned with program learning outcomes. Co-op work terms are designed to integrate academic learning with work experience, supporting the development of industry specific competencies and employability skills.

Georgian College holds membership with, and endeavours to follow, the co-operative education guidelines set out by the Co-operative Education and Work Integrated Learning Canada (CEWIL) and Experiential and Work-Integrated Ontario (EWO) as supported by the Ministry of Colleges and Universities.

Co-op is facilitated as a supported, competitive job search process. Students are required to complete a Co-op and Career Preparation course scheduled prior to their first co-op work term. Students engage in an active co-op job search that includes applying to positions posted by Co-op Consultants, and personal networking. Co-op work terms are scheduled according to a formal sequence that alternates academic and co-op semesters as shown in the program progression below.

Programs may have additional requirements such as a valid driver's license, strong communication skills, industry specific certifications, and ability to travel. Under exceptional circumstances, a student may be unable to complete the program progression as shown below. Please refer to Georgian College Academic Regulations for details.

International co-op work terms are supported and encouraged, when aligned with program requirements.

Further information on co-op services can be found at www.GeorgianCollege.ca/co-op (https://www.georgiancollege.ca/co-op/)

External Recognition

This program is accredited by the Canadian Association for Co-operative Education.

Program Progression

The following reflects the planned progression for full-time offerings of the program.

Fall Intake

- **Sem 1:** Fall 2023
- **Sem 2:** Winter 2024
- **Work Term 1:** Summer 2024
- **Sem 3:** Fall 2024
- **Work Term 2:** Winter 2025
- **Sem 4:** Summer 2025

Articulation

A number of articulation agreements have been negotiated with universities and other institutions across Canada, North America and internationally. These agreements are assessed, revised and updated on a regular basis. Please contact the program co-ordinator for specific details if you are interested in pursuing such an option. Additional information can be found on our website at https://

Admission Requirements

OSSD or equivalent with

- Grade 12 English (C or U)
- Grade 12 Mathematics (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/academic-regulations/ (https://www.georgiancollege.ca/admissions/academic-regulations/)

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 for Prior Learning website for details: www.georgiancollege.ca/admissions/credit-transfer/ (https://www.georgiancollege.ca/admissions/credit-transfer/)

Graduation Requirements

27 Program Courses
2 Communications Courses
3 General Education Courses
2 Co-op Work Terms

Graduation Eligibility

To graduate from this program, the passing weighted average for promotion through each semester, from year to year, 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

The following reflects the planned course sequence for full-time offerings of the Fall intake of the program. Where more than one intake is offered contact the program co-ordinator for the program tracking.

Semester 1		Hours
Program Courses		
ARCH 1000	Architectural Design - Fundamentals	42
ARCH 1001	Quantity Surveying 1	42
ARCH 1005	Architectural Drafting 1	42
CONS 1005	Construction Technology - Structures	42
ENVR 1008	Architecture and the Environment	42
MATH 1028	Mathematics for Constructions	42
SURV 1002	Surveying	42
Communications Course		
Select 1 course from the communications list during registration.		42
	Hours	**336**
Semester 2		
Program Courses		
ARCH 1002	Architectural Design - Residential	42
ARCH 1003	Quantity Surveying 2	42
ARCH 1006	Architectural Drafting 2	42
ARCH 1007	Drawing for Architecture	42

ARCH 2002	Architectural Codes and Standards 1	42
CONS 1006	Construction Technology: Interiors	42
MGMT 1002	Productivity Tools	42
Communications Course		
Select 1 course from the communications list during registration.		42
	Hours	**336**
Semester 3		
Program Courses		
ARCH 2000	Architectural Design - Commercial	42
ARCH 2004	Architectural Drafting 3	42
ARCH 2005	Architectural Codes and Standards 2	42
CONS 2005	Construction Technology: Building Envelope	42
CONS 3005	Building Services	42
MENG 2016	Statics	42
General Education Courses		
Select 2 courses from the general education list during registration.		84
	Hours	**336**
Semester 4		
Program Courses		
ARCH 2003	History of Architecture	42
ARCH 2006	Architectural Design - Sustainable Solutions	42
ARCH 2008	Building Information Modeling 1	42
BLDG 2000	Ontario Building Code and Provincial Standards	42
CONS 2006	Building and Materials Reuse	42
MENG 2017	Strength of Materials	42
MGMT 2025	Project Management	42
General Education Course		
Select 1 course from the general education list during registration.		42
	Hours	**336**
	Total Hours	**1344**

Co-op Work Terms		Hours
COOP 1013	Technology Work Term 1 (occurs after Semester 2)	640
COOP 2009	Technology Work Term 2 (occurs after Semester 3)	560
	Hours	**1200**
	Total Hours	**1200**

Graduation Window

Students unable to adhere to the program duration of two years (as stated above) may take a maximum of four 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.

Disclaimer: *The information in this document 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.*

Program outlines may be subject to change in response to emerging situations, in order to facilitate student achievement of the learning outcomes required for graduation. Components such as courses, progression, coop work terms, placements, internships and other requirements may be delivered differently than published.