

Area of Interest: Construction and Skilled Trades

Architectural Technology (Co-op and Non Co-op Version)

Ontario College Advanced Diploma Program Code: 0018X03FWO

3 Years

Ottawa Campus

Our Program

Build your career potential with an in-depth understanding of building and construction.

Architectural Technology is the third year of an Ontario College Advanced Diploma program that prepares you for a career in the architectural profession and the construction industry. The program gives you the credentials, the knowledge and the skills necessary to further define your career. Graduates of the two-year Architectural Technician Ontario College Diploma program may consider taking the third year, Architectural Technology program to build on their previous studies.

In the Architectural Technology program, you focus on commercial construction and large buildings. You participate in a team project that brings together all facets of building construction including:

- design and technical resolution with the integration of building and material detailing
- structural and mechanical layout design for a commercial building assembly
- Revit Architecture is used to execute the design and technical resolution for the project

Students also have the option to gain real-world experience through a paid co-operative education (co-op) work term (see Additional Information for more details). Please note that places in the co-op work term are subject to availability and academic eligibility. Please note admission to the co-op program does not guarantee a co-op placement.

Graduates of this program may find work with:

- architects` offices
- contractors in multiple sectors
- engineering offices
- building materials sales representatives
- municipal offices such as the City of Ottawa
- federal and provincial agencies dealing with construction
- drafting service offices using AutoCAD and Revit
- real estate and facilities management companies
- companies that provide construction, maintenance, and planning services

Graduates may also consider applying for advanced standing in several Algonquin College programs such as the Bachelor of Building Science Degree program, the Green Architecture Ontario College Graduate Certificate program or the Building Information Modeling - Lifecycle Management (BIM-LM) Ontario College Graduate Certificate program.



SUCCESS FACTORS

This program is well-suited for students who:

- Are detail-oriented, organized and committed to achieving excellence in their work.
- Are creative and enjoy solving technical problems.
- Thrive in a dynamic and technically-driven environment.
- Think visually and creatively.
- Work well in a team environment.

Employment

Graduates may find employment with architects, engineers and contractors, and in municipal, provincial and federal agencies dealing with construction, real estate and facilities management.

Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Communicate with clients, contractors, other building professionals, and approval authorities.
- Prepare, read, interpret, and revise drawings, and other graphical representations used in building projects.
- Obtain, analyze, prepare, and revise specifications and other project documents used in design and construction.
- Prepare estimates of time, costs, and quantity, and participate in the tendering process.
- Solve technical problems related to building projects through the application of principles of building science and mathematics.
- Collaborate with and coordinate information from structural, mechanical, and electrical building systems professionals.
- Contribute to the design of architectural projects.
- Contribute to the analysis, planning, and preparation of site planning documents.
- Comply with the legal and ethical requirements of an architectural technologist in the practice of building design and construct.
- Assess buildings and their interiors, and make recommendations for their repurposing and renovation.
- Ensure personal safety and contribute to the safety of others in the workplace.
- Participate in sustainable design and building practices.
- Use and evaluate current and emerging technology to support building projects.
- Assist in the planning, scheduling, and monitoring of building.
- Apply business principles to design and building practices.
- Identify and apply discipline-specific practices that contribute to the local and global community through social responsibility, economic commitment and environmental stewardship.

Program of Study



| Level: 01 | Courses | Hours |
|--|--|---|
| ARC8421 | Construction Methods and Materials I | 42.0 |
| ARC8601 | Working Drawings I | 70.0 |
| CAD8407 | Architectural CAD I | 42.0 |
| DSN8401 | Visual Communication I | 42.0 |
| ENG8490 | Mathematics for Architecture | 42.0 |
| ENL1813T | Communications I | 42.0 |
| GED2012 | Achieving Success in the 21st Century | 42.0 |
| Level: 02 | Courses | Hours |
| ARC8422 | Construction Methods and Materials II | 42.0 |
| ARC8602 | Working Drawings II | 70.0 |
| BSC8451 | Environmental Systems I | 42.0 |
| CAD8409 | Architectural CAD II | 42.0 |
| DSN8402 | Visual Communication II | 42.0 |
| GEP1001 | Cooperative Education and Job Readiness | 18.0 |
| HIS8482 | History of Architecture | 42.0 |
| | | |
| Choose one from equivalencies | :: Courses | Hours |
| Choose one from equivalencies GED0018 | General Education Elective | Hours 45.0 |
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| GED0018 | General Education Elective | 45.0 |
| GED0018 Level: 03 | General Education Elective Courses | 45.0 Hours |
| GED0018 Level: 03 ARC8423 | General Education Elective Courses Construction Methods and Materials III | 45.0 Hours 42.0 |
| GED0018 Level: 03 ARC8423 ARC8430 | General Education Elective Courses Construction Methods and Materials III Codes and Standards | 45.0 Hours 42.0 42.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 | General Education Elective Courses Construction Methods and Materials III Codes and Standards Working Drawings III | 45.0 Hours 42.0 42.0 70.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 | Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II | 45.0 Hours 42.0 42.0 70.0 42.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 CAD8414 | Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II Revit I Design I | 45.0 Hours 42.0 42.0 70.0 42.0 42.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 CAD8414 DSN8441 | Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II Revit I Design I | 45.0 Hours 42.0 42.0 70.0 42.0 42.0 42.0 42.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 CAD8414 DSN8441 Choose one from equivalencies | General Education Elective Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II Revit I Design I Courses | 45.0 Hours 42.0 42.0 70.0 42.0 42.0 42.0 Hours |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 CAD8414 DSN8441 Choose one from equivalencies GED0018 | General Education Elective Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II Revit I Design I Courses General Education Elective | 45.0 Hours 42.0 42.0 70.0 42.0 42.0 42.0 Hours 45.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 CAD8414 DSN8441 Choose one from equivalencies GED0018 Co-op: 01 | General Education Elective Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II Revit I Design I Courses General Education Elective Courses | 45.0 Hours 42.0 42.0 70.0 42.0 42.0 42.0 Hours 45.0 |
| GED0018 Level: 03 ARC8423 ARC8430 ARC8603 BSC8452 CAD8414 DSN8441 Choose one from equivalencies GED0018 Co-op: 01 WKT2101A | General Education Elective Courses Construction Methods and Materials III Codes and Standards Working Drawings III Environmental Systems II Revit I Design I Courses General Education Elective Courses Architecture Work Term 1 (Optional) | 45.0 Hours 42.0 42.0 70.0 42.0 42.0 42.0 Hours 45.0 Hours |



| ARC8604 | Working Drawings IV | 70.0 |
|-----------|--|-------|
| CAD8415 | Revit II | 42.0 |
| DSN8442 | Design II | 42.0 |
| ENG8491 | Structures I | 42.0 |
| ENL2019T | Technical Communication for Engineering Technologies | 42.0 |
| Co-op: 02 | Courses | Hours |
| WKT2102A | Architecture Work Term 2 (Optional) | |
| Level: 05 | Courses | Hours |
| ARC8425 | Construction Methods and Materials V | 42.0 |
| ARC8497 | Architectural Project I | 56.0 |
| ARC8511A | Project Administration II | 42.0 |
| ARC8605 | Working Drawings V | 70.0 |
| BSC8453 | Environmental Systems III | 42.0 |
| CAD8416 | Revit III | 21.0 |
| ENG8495 | Structures II | 21.0 |
| Level: 06 | Courses | Hours |
| ARC8426 | Construction Methods and Materials VI | 39.0 |
| ARC8498A | Architecture Project II | 39.0 |
| ARC8606 | Working Drawings VI | 65.0 |
| BIM3000 | Fundamental of Building Information Modeling | 18.0 |
| BSC8454 | Environmental Systems IV | 39.0 |
| ENG8496 | Structures III | 21.0 |
| ENL1001 | Report Advising | 14.0 |
| WKT8400 | Architecture Work Placement | 42.0 |
| | | |

Fees for the 2023/2024 Academic Year

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at $\frac{\text{https://www.algonquincollege.com/fee-estimator}}{\text{https://www.algonquincollege.com/fee-estimator}}$.

Further information on fees can be found by visiting the Registrar`s Office website at https://www.algonquincollege.com/ro.

Fees are subject to change.

Additional program related expenses include:

- Books and supplies cost approximately \$1200 in the first year and \$450 in each of the second and third years and can be purchased from the campus store. For more information



- Books and supplies cost approximately \$1200 in the first year and \$450 in each of the second and third years and can be purchased from the campus store. For more information visit

 $\frac{http://file:///C:/Users/wingraph/AppData/Local/Apps/2.0/85J89O2J.M29/57NR9QLR.4D2/test.-tion_e800ab5aa35904b3_0001.0000_d5a94ace07199376/www.algonquincollege.com/coursematerials$

- Students may be required to purchase CSA-approved safety footwear and safety glasses to participate in site visit activities.

Admission Requirements for the 2024/2025 Academic Year

Program Eligibility

- Students must successfully complete Levels 01 to 04 of the Architectural Technician program with a minimum GPA of 2.30 and must pass ARC8404C (Working Drawing IV), ARC8424 (Methods and Materials IV), ENG8491 (Structure I) and CAD8415 (Revit II) each with a minimum grade of C+. Students cannot fail ARC8404C more than once prior to registering to Level 05 of the Architectural Technology program. Students will be placed on the current program of study associated with Level 05 of the program.

The number of seats in the Technology program is limited. Should the number of students exceed the number of seats, selection will is based on academic performance in the program.

Admission Requirements for 2023/2024 Academic Year

Program Eligibility

- Students must successfully complete Levels 01 to 04 of the Architectural Technician program with a minimum GPA of 2.30 and must pass ARC8404C (Working Drawing IV), ARC8424 (Methods and Materials IV), ENG8491 (Structure I) and CAD8415 (Revit II) each with a minimum grade of C+. Students cannot fail ARC8404C more than once prior to registering to Level 05 of the Architectural Technology program. Students will be placed on the current program of study associated with Level 05 of the program.

The number of seats in the Technology program is limited. Should the number of students exceed the number of seats, selection will is based on academic performance in the program.

Application Information

ARCHITECTURAL TECHNOLOGY (CO-OP AND NON CO-OP VERSION) Program Code 0018X03FWO

The two first years of the three-year Architectural Technology program is the Architectural Technician program. Students must initially apply to 0188X Architectural Technician or 0188W Architectural Technician (weekend offering). Upon completion of the Architectural Technician program, students who want to continue on to Levels 05 and 06 of the Architectural Technology program may apply directly with the Coordinator.

Note: Levels 05 and 06 of the Architectural Technology program are not offered on weekends.

For further information on the admissions process, contact:

Registrar's Office Algonquin College 1385 Woodroffe Ave Ottawa, ON K2G 1V8 Telephone: 613-727-0002 Toll-free: 1-800-565-4723

TTY: 613-727-7766 Fax: 613-727-7632

Contact: https://www.algonquincollege.com/ro

Additional Information

CO-OP INFORMATION:

All applicants apply directly to the co-op version of this program through OntarioColleges.ca or our



International Application Portal. Applicants not wishing to pursue the co-op version will have the opportunity to opt-out after being admitted to the program but prior to the first co-op work term.

Co-operative education (Co-op) allows students to integrate their classroom learning with a real-world experience through paid work terms. Two academic terms prior to the cooperative education work term, students are required to actively participate in and successfully complete the self-directed co-op course, readiness activities and workshops.

Students must actively conduct a guided, self-directed job search and are responsible for securing approved program-related paid co-op employment. Students compete for co-op positions alongside students from Algonquin College and other Canadian and international colleges and universities. Algonquin College's Co-op Department provides assistance in developing co-op job opportunities and guides the overall process, but does not guarantee that a student will obtain employment in a co-op work term. Co-op students may be required to relocate to take part in the co-op employment opportunities available in their industry and must cover all associated expenses; e.g., travel, work permits, visa applications, accommodation and all other incurred expenses.

Co-op work terms are typically 14 weeks in duration and are completed during a term when students are not taking courses. For more information on your program's co-op level(s), visit the courses tab on your program's webpage.

International students enrolled in a co-op program are required by Immigration, Refugees and Citizenship Canada (IRCC) to have a valid Co-op/Internship Work Permit prior to commencing their work term. Without this document International students are not legally eligible to engage in work in Canada that is part of an academic program. The Co-op/Internship Work Permit does not authorize international students to work outside the requirements of their academic program.

For more information on co-op programs, the co-op work/study schedule, as well as general and program-specific co-op eligibility criteria, please visit https://www.algonquincollege.com/coop.

Architectural Technology graduates are eligible to apply to the following Ontario College Graduate Certificate programs: Green Architecture, Building Information Modelling - Lifecycle Management (BIM-LM).

Graduates may also be eligible for Advanced Standing in the Bachelor of Building Science degree program.

Contact Information

Program Coordinator(s)

- Marjan Ghannad, mailto:ghannam@algonquincollege.com, 613-727-4723, ext. 5807

Course Descriptions

ARC8421 Construction Methods and Materials I

Students are introduced to the physical characteristics of building materials used in residential wood-frame construction. Structural components and stair systems are also explored in regard to the Ontario Building Code.

Prerequisite(s): none Corerequisite(s):none

ARC8422 Construction Methods and Materials II

Students further their residential wood-frame knowledge by examining local zoning and building site conditions, masonry and exterior cladding, and basic building science principles in regard to insulation and the building envelope. Students acquire Workplace Hazardous Materials Information System training.

Prerequisite(s): ARC8421 Corerequisite(s):none



Students apply building code requirements and engineered framing systems for Part 9 of the Ontario Building Code, Small Buildings. The fundamental concepts of sustainability are explored as well as alternate construction materials and methods. Construction sequencing and time lines are examined for a typical residential project. Finally, teamwork is emphasized as students work in groups to produce a detailed architectural model.

Prerequisite(s): ARC8422 Corerequisite(s):none

ARC8424 Construction Methods and Materials IV

The construction methods and materials used in commercial construction are introduced. Students review the Building Code Act, Part 10 (Change of Use) and Part 11 (Renovations) of the Ontario Building Code.

Prerequisite(s): ARC8423 Corerequisite(s):none

ARC8425 Construction Methods and Materials V

Students learn the theory and application of commercial building envelope design. Emphasis is on the assembly of building components and systems for buildings under Part 3 of the Ontario Building Code.

Prerequisite(s): ARC8424 Corerequisite(s): ARC8405C

ARC8426 Construction Methods and Materials VI

Students study the methods and materials used in commercial construction with a focus on interior elements and fit-up. Students assemble a Whitepaper on their third year Project incorporating data from Project and Working Drawings.

Prerequisite(s): ARC8425

Corerequisite(s):ARC8606 and ENL1001

ARC8430 Codes and Standards

An introduction to the structure and content of the Ontario Building Code with emphasis on Division B Part 3 "Fire Protection, Occupant Safety and Accessibility" and Part 9 "Housing and Small Buildings" is provided. Students participate in in-class sessions and online worksheets.

Prerequisite(s): ARC8422 Corerequisite(s):none

ARC8497 Architectural Project I

Students gain an understanding of the full scope of the activities of an architectural firm, including pre-design, preliminary design, sustainable practices, project coordination with other disciplines. During this two-term design project, students work in teams to develop a renovation/addition project under Part 3 of the Ontario Building Code.Students define objectives for their project, explore options and make decisions towards meeting their goals. The team performs in-depth research into functional programming and site analysis, then explores innovative and sustainable design.

Prerequisite(s): DSN8442 Corerequisite(s):ARC8605

ARC8498A Architecture Project II

Students build on their understanding of the full scope of activities of an architectural firm, including pre-design, preliminary design, sustainable practices, and project coordination with other



disciplines. Continuing work on the third year project, students perform additional research and data gathering, and finalize their project design. Student teams perform simple energy modeling to explore in their project. Focus is placed on coordination and resolution of the architectural, structural, mechanical, and lighting designs. Project management skills are developed in task scheduling and group management activities. Students present their final project submissions to a review panel of industry professionals.

Prerequisite(s): ARC8497 Corerequisite(s): ARC8606

ARC8510 Project Administration I

An overview of the Architectural, Engineering and construction industry, with a focus on integrated design teams, industry standards, regulations and documentation. Introduction to understanding industry stakeholders, project delivery methodologies, specifications, cost estimating techniques, standard industry contracts and the project manual.

Prerequisite(s): ARC8423 and ENG8490

Corerequisite(s):none

ARC8511A Project Administration II

Students expand their knowledge of the Architectural, Engineering and Construction Industry and the related documentation and processes. Strategies for organizing construction information, specification writing, project management methodologies, cost estimating methodologies, project scheduling methodologies, ethics and professional and construction insurance are explored.

Prerequisite(s): ARC8510 Corerequisite(s):none

ARC8601 Working Drawings I

Manual drafting skills are used to develop a set of basic working drawings for a small, wood-frame house. Drawings include plans, elevations, sections and details. Emphasis is placed on communicating information through the use of best practices and industry graphic standards.

Prerequisite(s): none Corerequisite(s):none

ARC8602 Working Drawings II

Using Computer Aided Drafting(CAD) software, students prepare building permit caliber working drawings for a two-storey wood-frame house. Hand sketching is used to explore and resolve a variety of construction details throughout the project.

Prerequisite(s): ARC8421 and ARC8601 and CAD8407

Corerequisite(s):none

ARC8603 Working Drawings III

Students explore a mixed-use building in a renovation and addition project, including design for new construction assemblies and existing wall construction with respect to the Ontario Building Code. Students apply accessibility and life safety fundamentals to the proposed building and produce a coordinated partial set of working drawings.

Prerequisite(s): ARC8602 and CAD8409

Corerequisite(s):none

ARC8604 Working Drawings IV

Students apply Part 3 of the Ontario Building Code, with a focus on occupant safety and building envelope requirements to examine various commercial building occupancies, construction



assemblies and apply more in-depth building science principles. Students gain an understanding of the relationship and coordination, between architectural, structural, mechanical and electrical systems.

Prerequisite(s): ARC8430 and ARC8603

Corerequisite(s):none

ARC8605 Working Drawings V

Students develop a set of Working Drawings for a renovation/addition to a commercial building project. Working in groups students develop a partial Working Drawing set using 3D modelling software. Students examine existing architectural drawings and develop As-Found building conditions. Typical details for the exterior building envelop assemblies are examined following Part 3 of the Ontario Building Code.

Prerequisite(s): ARC8604 and ENG8491 Corerequisite(s): ARC8425 and ARC8497

ARC8606 Working Drawings VI

Students continue with the project started in Working Drawings VARC8405C to complete a Working Drawing set for a commercial renovation/addition project. Interior and Exterior Detailing and Barrier-Free compliance are developed as per Part 3 of the Ontario Building Code. Students examine structural and mechanical system intergradation as part of the Working Drawing set.

Prerequisite(s): ARC8605

Corerequisite(s):ARC8426 and ARC8498A

BIM3000 Fundamental of Building Information Modeling

Building Information Modeling is a process that involves all stakeholders in a building project from owners/users, designers, consultants, builders, and operation and management groups. It looks at the life of a building from design to construction to operations using a range of software This course will introduce the theory of the BIM process and some of the software that allows a BIM project to take place.

Prerequisite(s): CAD8416 Corerequisite(s):none

BSC8451 Environmental Systems I

Students learn the basic concepts of water flow and heat transfer. Students are introduced to pipe terminology, pipe design logic and pipe systems functions. Students are also introduced to the concepts of building heat loss, the functions of the residential heating systems and the advantage of using one fuel relative to another.

Prerequisite(s): ENG8490 Corerequisite(s):none

BSC8452 Environmental Systems II

Students are introduced to the concepts of ductwork, air conditioning equipment, hydronic heating systems, electrical systems and building protection equipment. Students learn how these interact with the design of a building.

Prerequisite(s): BSC8451 Corerequisite(s):none

BSC8453 Environmental Systems III

Students are introduced to the concepts of heat gain, lighting and acoustics. All examples and calculations are referenced to buildings under Part 3 of the Ontario Building Code.



Prerequisite(s): BSC8452 Corerequisite(s):none

BSC8454 Environmental Systems IV

Mechanical and electrical consultation for an architectural project is offered to the students. Students produce partial mechanical and electrical working drawings.

Prerequisite(s): BSC8453 Corerequisite(s):none

CAD8407 Architectural CAD I

Students are introduced to Computer Aided Drafting (CAD) using AutoCAD software. Students learn the basic principles and understanding to produce two-dimensional architectural drawings.

Prerequisite(s): none Corerequisite(s):none

CAD8409 Architectural CAD II

Further developing the basic principles using CAD software, students expand their knowledge to produce more detailed and complex two-dimensional architectural drawings. Students are introduced to three-dimensional architectural modelling using Revit Software.

Prerequisite(s): CAD8407 Corerequisite(s):none

CAD8414 Revit I

Students learn the basic creation and editing commands for Revit software. Annotating and view controls are also taught as students complete several assignments dealing with residential buildings. A final exam creates a basic residential model and drawing set.

Prerequisite(s): ARC8602 and CAD8409

Corerequisite(s):none

CAD8415 Revit II

Students build on the basic tools and skills learned in Revit I. More advanced features of Revit such as detailing, curtain walls, parametric families, site features and rendering are explored. Students create a Revit model and a partial drawing set for a commercial building project.

Prerequisite(s): CAD8414 Corerequisite(s):none

CAD8416 Revit III

Building on the basic Revit skills learned, students examine more advanced and broader aspects of Revit such as work-sharing, linked files, phasing, and massing. Some aspects of structural and systems tools are also be looked at. Discussions support creation of 3rd year working drawings sets.

Prerequisite(s): CAD8415 Corerequisite(s):none

DSN8401 Visual Communication I

Visual communication and presentation techniques are essential aspects of any architectural project and design to communicate project ideas with clients and other stakeholders. Students are



introduced to a variety of skills necessary to communicate architectural ideas and concepts visually. Emphasis is placed on hand drawing/sketching while developing an understanding of how to analyze and perceive 3-dimensional shapes and forms. Formal presentation techniques and physical model building are also explored.

Prerequisite(s): none Corerequisite(s):none

DSN8402 Visual Communication II

Students further study graphic communication skills for architecture. Emphasis is placed on the creation of simple 3D digital models, as well as architectural graphic presentations using a variety of current software applications.

Prerequisite(s): none Corerequisite(s):none

DSN8441 Design I

Architectural design development is one of the initial steps to a project development. Students are introduced to the theory and concepts of architectural design through an analysis of Form and Space. The fundamental elements of architecture, spatial concepts and organizational principles are explored using built form examples. Students design and prepare an architectural presentation for variety of small-scale design projects and a residential project.

Prerequisite(s): DSN8401 and DSN8402

Corerequisite(s):none

DSN8442 Design II

Project design development and design process requires research and overview from multiple facades. The design process is explored through a series of architectural design problems. Students are introduced to architectural design influences, such as context, zoning, programming, accessibility and aesthetics. Students design and prepare an architectural presentation for a small commercial building.

Prerequisite(s): DSN8441 Corerequisite(s):none

ENG8490 Mathematics for Architecture

Students examine key principles and concepts in algebra, geometry, and trigonometry focusing on its application to building design and construction, through instructor lead examples, in-class work, readings and assignments.

Prerequisite(s): none Corerequisite(s):none

ENG8491 Structures I

The fundamentals, principles and common rules of structural systems for larger commercial type buildings are explored. Students undertake preliminary sizing of structural members, develop structural drawings/details to support their Working Drawings IV course.

Prerequisite(s): ENG8490 Corerequisite(s):none

ENG8495 Structures II

Students explore general common rules design principles and apply those principles in the design a commercial structural system for a student lead project. Weekly group consultations with Professor provide feedback on a structural design which will form part of their Project and Working Drawings



courses.

Prerequisite(s): ENG8491 Corerequisite(s):none

ENG8496 Structures III

Students consult with a professor to finalize their structural design from Structures II. Structural drawings and details will be finalized and submitted.

Prerequisite(s): ENG8495 Corerequisite(s):none

ENL1001 Report Advising

Students draw upon skills acquired in previous communications courses to plan and create a technical report based upon a topic in their field of study.

Prerequisite(s): ENL2019T Corerequisite(s):ARC8426

ENL1813T Communications I

Communication remains an essential skill sought by employers, regardless of discipline or field of study. Using a practical, vocation-oriented approach, students focus on meeting the requirements of effective communication. Through a combination of lectures, exercises, and independent learning, students practise writing, speaking, reading, listening, locating and documenting information and using technology to communicate professionally. Students develop and strengthen communication skills that contribute to success in both educational and workplace environments.

Prerequisite(s): none Corerequisite(s):none

ENL2019T Technical Communication for Engineering Technologies

The ability to communicate effectively in a technically-oriented interdisciplinary workplace is a foundational skill in an innovation-driven economy. Students are exposed to exercises and assignments designed to foster independent and collaborative critical thinking, research, writing, visual communication and presentation skills related to technical topics.

Prerequisite(s): ENL1813T Corerequisite(s):none

GED0018 General Education Elective

Students choose one course, from a group of general education electives, which meets one of the following five theme requirements: Arts in Society, Civic Life, Social and Cultural Understanding, Personal Understanding, and Science and Technology.

Prerequisite(s): none Corerequisite(s):none

GED0018 General Education Elective

Students choose one course, from a group of general education electives, which meets one of the following five theme requirements: Arts in Society, Civic Life, Social and Cultural Understanding, Personal Understanding, and Science and Technology.

Prerequisite(s): none Corerequisite(s):none



GED2012 Achieving Success in the 21st Century

Rapid changes in technology have created new employment and business opportunities that challenge each of us to find our place as citizens in the emerging society. Life in the 21st century presents significant opportunities, creates potential hazards and demands that we face new responsibilities in ethical ways. Students explore the possibilities ahead, assess their own aptitudes and strengths, and apply critical thinking and decision-making tools to help resolve some of the important issues present in our complex society with its competing interests.

Prerequisite(s): none Corerequisite(s):none

GEP1001 Cooperative Education and Job Readiness

Students are guided through a series of activities that prepare them to conduct a professional job search and succeed in the workplace. Through a detailed orientation students learn the cooperative education program policies and procedures related to searching and securing a work term opportunity. Students identify their strengths and transferable skills and participate in workshop-style sessions that focus on cover letter and resume development, interview techniques and job search strategies. Students learn how to navigate a web-based resource centre, which is used to post employment and cooperative education job opportunities. Students reflect on workplace success, ethics and responsibilities.

Prerequisite(s): none Corerequisite(s):none

HIS8482 History of Architecture

Students explore the major cultural trends and technological events which have influenced the development of western architecture, from pre-history to the present day. Students develop a general understanding of the origins of architectural styles and the evolution of building technology.

Prerequisite(s): none Corerequisite(s):none

WKT2101A Architecture Work Term 1 (Optional)

This course includes a work placement, a weekly recording of the activities done in a journal and a final summary report of the overall experience to be submitted before returning to school. The placement has to be in a construction-related industry, preferably architecture. The timing of the placement depends on the progression pattern of the program and cannot be done before completion of the second level of the Architecture Technician program. The placement is monitored by the College. Feedback from the employer is considered in the final evaluation of the course. All assignments (journal entries and final report) must be provided to pass the course. The College Coop office assists in finding a placement however, it is the students responsibility to find, apply and get the work term as if they were applying for a job.

Prerequisite(s): none Corerequisite(s):none

WKT2102A Architecture Work Term 2 (Optional)

This course includes a work placement, a weekly recording of the activities done in a journal and a final summary report of the overall experience to be submitted before returning to school. The placement has to be within the architectural industry. The timing of the placement depends on the progression pattern of the program and can not be done before completion of the fourth level of the Architecture technician program and the student has to have been accepted in the technology program. The placement is monitored by the College. Feedback from the employer is considered in the final evaluation of the course. All assignments (journal entries and final report) must be provided to pass the course. The College Coop office assists in finding a placement however, it is the student responsibility to find, apply and get the work term as if they were applying for a job.

Prerequisite(s): WKT2101A



Corerequisite(s):none

WKT8400 Architecture Work Placement

Students are placed in a related agency to assist with the integration of their academic skills to industry. The theory portion of the course provides guidance in making the transition from the school environment to the workplace.

Prerequisite(s): ARC8605 Corerequisite(s):none