Area of Interest: Arts and Design

**Interdisciplinary Studies in Human-Centred Design (Co-op and Non Co-op Version)**

Ontario College Graduate Certificate  
1 Year  
Ottawa Campus

**Academic Year:** 2019/2020  
**Program Code:** 1420X01FWO

**Our Program**

This one-year Ontario College Graduate Certificate program prepares students for a career in design research and strategy. Professionals in this field examine the intersection of research, technology, business and design to apply a human-centred approach to solving problems. These professionals work in a variety of fields, including private, public and government organizations, to provide strategic direction for system, product, policy and/or service design. The skills gained in this program complement a myriad of professional backgrounds, from designers, computer programmers and engineers looking to update their skillset to public servants and social scientists looking for new ways to draft policies and model services.

Students collaborate with industry partners in a design studio setting throughout the program to find solutions for real-world issues.

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 version of the program are subject to availability.

Graduates may find employment in a wide range of sectors including:

- media and design
- financial services and banking
- healthcare and medical services
- engineering and technology services
- computer software development
- business and professional services
- human resources and organizational development
- manufacturing
- government, public sector and not-for-profit organizations

**SUCCESS FACTORS**

This program is well-suited for students who:

- Like the challenge of untangling complex problems
- Enjoy trying new things and are not afraid to learn from failure
- Possess excellent interpersonal and human relations skills
- Value and respect the ideas, perspectives and expertise of others
- Have a keen attention to detail and process.
Employment

Graduates may find entry-level employment as a user-experience designer; interaction designer; user-interface designer; visual designer; information architect; content strategist; content writer; communication designer; systems designer; systems administrator; and business designer.

Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Apply a universal, interdisciplinary design approach to overcome complex problems and create intelligent solutions that address social, technological and economic challenges.
- Manage a holistic, human-centred process to deliver design strategies, products, systems and services for government, corporations and non-profit organizations.
- Design collaboratively in an interdisciplinary studio environment to produce communication, products, systems and service projects for a variety of media.
- Apply primary and secondary research methodologies to the design process using a think/make practice model to achieve project outcomes that meet user needs and adhere to industry standards.
- Adhere to the professional practices of a design studio to facilitate and manage the success of design teams in achieving project goals.
- Participate in an iterative, multi-phase design process in order to create testable prototypes and realized products.
- Liaise and negotiate project direction and process with stakeholders to produce strategies and outcomes that align with business objectives.
- Present and defend research results and design outcomes to a diverse audience using effective communication strategies.
- 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

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Fees for the 2019/2020 Academic Year

Tuition and related ancillary fees for this program can be viewed by using the Tuition and Fees Estimator tool at 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.

Admission Requirements for the 2020/2021 Academic Year

Program Eligibility

• Ontario College Diploma, Ontario College Advanced Diploma or degree or equivalent.

• International applicants must provide proof of the subject specific requirements noted above along with proof of either: (IELTS / TOEFL) IELTS—International English Language Testing Service (Academic) Overall band of 6.5 with a minimum of 6.0 in each band; OR

• TOEFL—Internet-based (iBT)—overall 88, with a minimum of 22 in each component: Reading 22; Listening 22; Speaking 22; Writing 22.

• Applicants with international transcripts must provide proof of the subject specific requirements noted above and may be required to provide proof of language proficiency.

Admission Requirements for 2019/2020 Academic Year

Program Eligibility

• Ontario College Diploma, Ontario College Advanced Diploma or degree.

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Applicants with international transcripts must provide proof of the subject specific requirements noted above and may be required to provide proof of language proficiency.

Application Information

INTERDISCIPLINARY STUDIES IN HUMAN-CENTRED DESIGN (CO-OP)
Program Code 1420X01FWO

Applications to full-time day programs must be submitted with official transcripts showing completion of the academic admission requirements through:

ontariocolleges.ca
60 Corporate Court
Guelph, Ontario N1G 5J3
1-888-892-2228

Applications are available online http://www.ontariocolleges.ca/. A $95 fee applies.

Applications for Fall Term and Winter Term admission received by February 1 will be given equal consideration.

Applications received after February 1 will be processed on a first-come, first-served basis as long as places are available.

International applicants please visit this link for application process information: https://algonquincollege.force.com/myACint/ or by contacting the Registrar’s Office.

For further information on the admissions process, contact:
Registrar’s Office
Additional Information

Programs at Algonquin College are Bring Your Own Device (BYOD). To see the BYOD requirements for your program, please visit:  
https://www7.algonquincollege.com/byod/.

CO-OP INFORMATION:

Cooperative 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 online readiness activities and in-person 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 and other Canadian and international colleges and universities. Algonquin College’s Co-op Department provides assistance in developing co-op job opportunities and facilitates 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 re-locate 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.

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 a mandatory part of an academic program.

For more information, please visit https://www.algonquincollege.com/coop.

Successful completion of all courses, including the mandatory cooperative education (Co-op) Work Term(s) is a requirement for graduation.

For more information on this program, please contact the Program Coordinator, Jed Looker, at mailto:lookerj@algonquincollege.com.

Course Descriptions

BUS8020 Business Practices

Product design and business strategy are interwoven. Through market analysis, case studies, and through discussion with industry guest speakers, students align project strategies and outcomes with the business objectives of their industry client. Students manage client expectations and measure the effectiveness of project process and outcomes.

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

DSN8010 Concepts and Contexts I

Design history and theory provide design practitioners the theoretical frameworks and conceptual foundations to position and validate design strategies and outcomes. Students examine, compare and contrast interdisciplinary design issues and human-centred design themes. Referencing academic and professional literature, students structure and defend arguments to create papers for peer-review and presentation.
DSN8011 Design Methods I

Design research is critical to identifying human needs and evaluating project outcomes. Students apply human-centred methodologies and workflows to plan, ideate, prototype and test systems and services. Through collaborative activities, teams ideate solutions to design problems and develop low-fidelity prototypes to facilitate the rapid creation of concepts that are vetted through focus groups and stakeholder feedback.

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

DSN8012 Communication Design

Design requires strong sketching, writing and presentation skills to effectively pitch and defend strategies and concepts. Students apply professional writing standards, graphic design principles and sketching and modelling techniques to create visual and written assets for critical analysis and distribution.

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

DSN8013 Systems and Services

Services are positioned within organizational, social and economic systems. The interaction between people, information and physical or digital artefacts is situated within the broader context of small and large scale processes and interdependencies. Proposed solutions must evolve and scale as an organization grows. Students apply a systems-thinking approach to develop strategic solutions to complex and multifaceted service-related problems.

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

DSN8014 Industry Project I

Industry is in need of professionals who can ideate solutions for complex service-related problems. Working with various industry partners students take an interdisciplinary and human-centred design approach to researching and designing a conceptual solution to a real-world problem. Learning activities are studio based and under the mentorship of a design practitioner.

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

DSN8020 Concepts and Contexts II

Academic and professional literature provides context for the strategies and concepts developed in a major project. Special attention is given to literature with findings that align product design with business and technology themes. Students discuss human psychology and behaviour to identify user needs and frustrations and frame the appropriate strategy and solution.

Prerequisite(s): DSN8010
Corerequisite(s): none

DSN8021 Design Methods II

Students plan, ideate, prototype and test industry projects by applying human-centred methodologies and workflows. Data collected from primary and secondary research identify user needs, and systems thinking and information architecture inform project strategy, scope, content and task flows. Students work collaboratively to apply various design methodologies to ideate strategies and explore concepts. Based on insight from user testing, students iterate the usability
of high-fidelity prototypes. Project outcomes consider a range of interaction models.

Prerequisite(s): DSN8011
Corerequisite(s): none

**DSN8022 Human-Computer Interaction Fundamentals**

As products and services become increasingly digital, designers must understand the technical limitations and inherent possibilities of the technologies they are leveraging in the solutions they propose. Students examine the ways in which people interface with digital technologies, and study the technical frameworks of hardware and software manufacturers. Human factors and usability principles frame discussions around common and emerging technologies, and the connectedness of products, services and networked systems.

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

**DSN8023 Industry Project II**

Working with industry partners, student teams apply an interdisciplinary and human-centred design approach to research and develop product strategies and deliverables. Under the mentorship of a design practitioner, students apply knowledge and skills to provide solutions for a real-world problem. Teams work collaboratively to manage project processes and deliverables, as well as the coordination of external stakeholders and resources.

Prerequisite(s): DSN8014
Corerequisite(s): none

**MGT8010 Team Management**

Design teams can become increasingly complex as they grow to accommodate the scope and requirements of a project throughout development. The effective leadership and management of scalable design teams is critical to project success. Students appraise multidisciplinary collaborative processes, workflows and techniques to direct and evaluate team output and performance and to manage project expectations and deliverables with clients and stakeholders.

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

**WKT8020 Interdisciplinary Studies In Human-Centred Design Co-operative Work Term**

This optional co-op placement provides students with experiential opportunities within the field. Students gain entry-level positions that involve a variety of activities allowing application of principles and concepts developed during previous study.

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