

Area of Interest: Arts and Design

User Experience Design

Ontario College Graduate Certificate

Program Code: 1441X01FWO

1 Year

Ottawa Campus

Our Program

Explore emerging interactive technology and examine human behaviour to design immersive, user-centred products.

The one-year User Experience Design Ontario College Graduate Certificate prepares you for a career in interactive product design. As a professional in this field, you examine the intersection of psychology, human-computer interaction (HCI), emerging technology and business objectives to design data-driven products for complex socio-technical systems.

Working directly with industry partners, you leverage machine learning and large data models to design immersive, extended reality (XR) user-interfaces (UI). Real-world projects utilize quantitative and qualitative research, systems architecture, iterative prototyping and usability testing methodologies to design technology-based products that align with ethics and accessibility standards.

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

- engineering and information technology
- computer software development
- financial services and banking
- human resources and organizational development
- government and public sector
- non-government and not-for-profit sectors
- manufacturing and production
- healthcare and medical services
- media and design

Employment

Graduates may find employment as a(n) interaction designer, user experience researcher, user experience designer, information architect, product designer, service designer, visual designer, communications designer and data visualization designer.

Learning Outcomes

The graduate has reliably demonstrated the ability to:

- Collaborate with cross-functional and multidisciplinary teams to lead and complete human-computer interaction (HCI) and user experience (UX) design projects.
- Conduct research and analyze data to inform design and technology strategies.
- Solicit and incorporate input from users and relevant parties to inform UX project requirements, objectives, and design operations.

- Communicate user experience and interface design strategies and outcomes to elicit support from team members and other interested parties.
- Conduct iterative prototyping and usability testing analysis to develop and refine design solutions that align with project goals.
- Design user-centred technology-based products to support organizational goals and enhance user experience.
- Incorporate accessibility and inclusivity in product design to comply with legal requirements and ethical standards.
- Create hierarchy and structure for complex information and systems to support organizational goals and enhance user experience.
- Use strategies for career and professional development to support work performance and maintain currency with industry.
- Leverage the use of current and emerging technology in UX while managing cybersecurity and privacy risks to protect user and organizational data and systems.
- 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
DSN0101	The Psychology of Ux	42.0
DSN0102	User Experience Research	70.0
DSN0103	Systems Architecture	70.0
DSN0104	Human-Computer Interaction	70.0
DSN0105	Design Operations	42.0
Level: 02	Courses	Hours
DSN0201	Emerging Technology	42.0
DSN0202	Usability Testing and Analysis	70.0
DSN0203	Digital Product Design	70.0
DSN0204	Extended Reality	70.0
DSN0205	Professional Practice	42.0

Fees for the 2026/2027 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 2027/2028 Academic Year

Program Eligibility

- Ontario College Diploma, Ontario College Advanced Diploma, Degree or equivalent.
- Applicants with partial post-secondary education (minimum two years in good academic standing) and relevant work experience may be considered for admission.
- Applicants without the required diploma or degree will be assessed individually and will be required to complete an Eligibility Package.
- Eligibility Package submission details can be found on the Algonquin College Additional Admission Requirements website: <https://www.algonquincollege.com/admissionspackages>.
- Applicants with international transcripts must provide proof of the subject-specific requirements noted above and may be required to provide proof of language proficiency. Domestic applicants with international transcripts must be evaluated through the International Credential Assessment Service of Canada (ICAS) or World Education Services (WES).
- 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; OR Duolingo English Test (DET) Overall 120, minimum of 120 in Literacy and no score below 105.

Application Information

USER EXPERIENCE DESIGN Program Code 1441X01FWO

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

Students currently enrolled in an Ontario secondary school should notify their Guidance Office prior to their online application at <https://www.ontariocolleges.ca/>.

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.my.site.com/myac360/s/>

For further information on the admissions process, please visit:
Admissions - Registrar's Office <https://algonquincollege.com/ro/admissions/>

Contact Information

Program Coordinator(s)

- Jed Looker, <mailto:lookerj@algonquincollege.com>,

Course Descriptions

DSN0101 The Psychology of Ux

UX professionals apply psychological principles to understand how people make decisions, interact, and respond to various stimuli. Students explore cognitive psychology, decision-making heuristics, and environmental influences on human behavior. Key topics include cognitive biases, persuasive design, habit formation, and the impact of physical and digital environments on users' decision-making. Through a combination of lectures, case studies, and hands-on projects, students apply psychological principles to frame the design of digital interfaces, service interactions, and

user journeys.

Prerequisite(s): none

Corerequisite(s):none

DSN0102 User Experience Research

User experience (UX) research is the systematic investigation of users and their requirements, aimed at adding context and insight to inform the design process of products, services, or software. Students examine how people interact with and experience a product or system with the goal of improving usability and informing strategic direction. Working under the purview of Research Ethics Boards (REB), students design and execute a mixed-methods study for a UXD project with an industry partner. Qualitative and quantitative data analysis and visualization methodologies are used to model user experience and position evidence-based and ethical design strategies.

Prerequisite(s): none

Corerequisite(s):none

DSN0103 Systems Architecture

Complex systems can be understood and analyzed by mapping the relationship and interaction between their components. Through lectures and applied activities students examine systems thinking and information architecture (IA) principles to organize and structure usable and findable content for various interactive technologies and organizational structures. Students enhance problem-solving skills and foster a holistic perspective crucial to address complex issues in an increasingly interconnected and networked world.

Prerequisite(s): none

Corerequisite(s):none

DSN0104 Human-Computer Interaction

Human-computer interaction (HCI) examines how people interact with technology. Topics include user-centered design principles, inclusive design and accessibility practices, and responsive design systems for mobile, desktop and large displays. Using industry software and emerging assistive technologies students apply prototyping techniques in the design of interactive outcomes to provide users a valuable and meaningful experience. Through applied projects and case-studies students create intuitive, accessible, and engaging user interfaces for interactive computing systems.

Prerequisite(s): none

Corerequisite(s):none

DSN0105 Design Operations

Design operations (DesignOps) is the practice of optimizing design processes, people, and technologies within an organization or team to facilitate innovation at scale. Students explore key concepts such as workflow optimization, resource management, and multidisciplinary collaboration to enhance the quality and impact of design. Through case studies and practical exercises students take a leadership role in leveraging DesignOps practices that streamline development processes, enhance team productivity, and align design systems with business goals and performance indicators.

Prerequisite(s): none

Corerequisite(s):none

DSN0201 Emerging Technology

It is essential to stay informed on the current and emerging technologies that support the interaction between users and systems to develop meaningful and immersive experiences. Students apply research, critical thinking, and evaluation skills to leverage technology such as artificial intelligence (AI), blockchain, and quantum computing to support the design of inclusive

and accessible user experience. Legal and ethical issues including cybersecurity and privacy are explored. Through case studies and practical experience with a range of digital products, students critique and discuss the role and value of technology in facilitating the design of user experience.

Prerequisite(s): none

Corerequisite(s):none

DSN0202 Usability Testing and Analysis

Usability testing measures how effectively users can interact with a design or system. Students develop test plans and facilitate sessions to observe user behavior, identify pain points and analyze results to enhance product usability. Students audit design outcomes against established accessibility standards and explore various usability testing methods, including moderated and unmoderated scenarios, A/B testing, and heuristic analysis. Through applied projects, students develop knowledge and skills to identify usability issues and iterate solutions that improve user satisfaction and engagement with interactive experience.

Prerequisite(s): DSN0102

Corerequisite(s):none

DSN0203 Digital Product Design

Digital product design combines user experience (UX) and user interface (UI) design, usability principles, and business goals to develop intuitive and valuable digital experiences. Students work with an industry partner to develop strategies that align user needs with business objectives. Consolidating their UX knowledge and skills, students lead industry projects that encompass an entire project lifecycle, from conceptualization and prototyping, to testing and iteration, to implementation and dissemination.

Prerequisite(s): DSN0102 and DSN0103 and DSN0104

Corerequisite(s):none

DSN0204 Extended Reality

Virtual reality (VR), augmented reality (AR), and extended reality (XR) are becoming increasingly significant as immersive media including web, mobile applications, head-mounted displays (HMDs), and glasses increasingly focus on spatial user interfaces and the boundaries between physical and virtual environments. Students explore introductory design, development, and evaluation methods in VR/AR/XR. In small teams, students apply spatial design and development skills through VR/AR/XR prototyping tools and perform evaluations of developed prototypes and communicate results to a variety of audiences.

Prerequisite(s): DSN0104

Corerequisite(s):none

DSN0205 Professional Practice

Strong industry relations are critical to launching a successful design career. Strategies for translating knowledge and skills into real-world impact are explored. Students contribute to public discussion by disseminating research and design outcomes via academic and professional publications and conferences. Emphasis is placed on personal branding and the development of a professional network. Through real-world scenarios, community engagement, and knowledge-sharing with user experience practitioners, students gain valuable insights and tools to launch and advance their career.

Prerequisite(s): none

Corerequisite(s):none