

SUSTAINABLE URBAN & TRANSPORTATION PLANNING (UBS)

About the Program

Beginning its first intakes in September 2023 and January 2024, this two-semester graduate certificate program prepares students for planning roles that focus on ensuring urban areas are sustainable, inclusive, and equitable. In addition to utilizing the technical skills from the program, students will integrate economic, social-cultural, political and environmental considerations to imagine creative solutions to for urban and transportation projects.

This program will help students better understand land development and environmental and social issues through the analysis and review of case studies. Further, it will familiarize graduates with the legal basis for land use planning. Graduates will also be introduced to legislation and current policies used to develop sustainable communities and enhance urban infrastructure and transportation facilities. Graduates will learn and work with the most up-to-date technologies, including Geographical Information System (GIS). They will learn the fundamentals of urban planning, planning policy frameworks and the structure of planning practices.

The program offers an enhanced flexible delivery model which will allow working professionals to upgrade their skills in the sector. Students may also opt to work online, allowing for a flexible, remote learning environment while continuing to maintain other priorities or work full time.

Graduates of this program may be eligible to pursue the Registered Professional Planner (RPP) designation with the Ontario Professional Planners Institute (OPPI) through the Professional Standards Board for the Planning Profession in Canada (PSB)'s Prior Learning Assessment and Recognition (PLAR) (<https://psb-planningcanada.ca/certification-process/application-process/prior-learning-assessment-plar/>) process, which opens opportunities for more senior positions, after five years of in-field work experience.

Credential Awarded

Ontario College Graduate Certificate

Duration

2 Semesters (8 Months)

Starts

January, September

Program and Course Delivery

This program is offered in Seneca's flexible delivery format, with some courses delivered online. For courses offered in the flexible delivery format, professors use innovative learning spaces and technology to teach students in a classroom or lab and broadcast in real time to students attending remotely. In flexible courses, students have the choice of coming on campus or learning online.

Skills

Throughout this program you will develop the following skills:

- Create development plans for urban planning and transportation projects
- Analyze environmental impact assessments
- Interpret, analyze, and manage urban infrastructure assets using Geographic Information Systems
- Conduct environmental assessments and environmental impact studies
- Transportation and land planning for Indigenous communities
- Spatial data acquisition and analysis
- Stakeholder negotiation
- Case study review and analysis
- Urban projects management
- Planning policy frameworks
- Planning justification reports

Work Experience

This program will not offer a co-op; however, students will engage in experiential learning through the completion of a series of industry-related capstone projects. Examples of experiential learning methods could include studio-based projects, field trips and guest speakers.

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Your Career

Graduates of the program can explore the following career options:

- Urban planners
- Transportation planners
- Land-use planners
- Environmental planners

Affiliations/Associations

- Ontario Professional Planners Institute (OPPI)

Program of Study

Course Code	Course Name	Weekly Hours
Semester 1		
UBS201	History and Theories of Community Planning	3
UBS202	Land Use Planning Principles and Policy Framework	3
UBS203	Communication and Leadership	3
UBS204	Infrastructure and Transportation Planning	4
UBS205	Geographic Information Systems and Data Visualization	4

UBS206	Planning Research Methods and Analysis (Studio) - Spatial Data Acquisition and Analysis	5
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Semester 2

UBS301	Community Well-being Planning	3
UBS302	Planning Legislation and Governance	3
UBS303	Sustainability and Applied Ecology for Urban Planners	4
UBS304	Advanced Transportation Planning	4
UBS305	Urban Design and Landscape Design	4
UBS306	Advanced Planning Studio	5

Program Learning Outcomes

This Seneca program has been validated by the Credential Validation Service as an Ontario College Credential as required by the Ministry of Colleges and Universities.

As a graduate, you will be prepared to reliably demonstrate the ability to:

- Create development plans for urban planning and transportation projects in accordance with municipal, provincial and federal legislation.
- Analyze environmental impact assessments to develop sustainable solutions in adherence with policy, regulations, and standards.
- Interpret, analyze and manage urban infrastructure assets using Geographic Information Systems to complete multi-phase urban and transportation planning projects.
- Negotiate with stakeholders to facilitate decision making to meet the needs of all parties.
- Adhere to the unique planning processes of Indigenous communities to address the needs of these specific communities.
- Use current and emerging theories and best practices to justify the rationale for planning decisions in contemporary urban environments.
- Formulate urban planning and transportation recommendations and justification reports in alignment with planning legislation, frameworks, and appeal processes in Ontario.
- Design innovative solutions and policy recommendations to problems identified during development site projects.

- Evaluate transit planning and traffic engineering technical reports to provide policy and design recommendations.

Admission Requirements

Ontario university/college degree, college diploma, advanced diploma or equivalent with a specialization in civil or environmental fields

Applicants with an equivalent combination of partial postsecondary and/or three years of related work experience may be considered for admission. A relevant resume and references must be provided

English proficiency (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/english-proficiency.html>) for graduate certificates

Canadian citizens or permanent residents educated outside of Canada must provide a World Education Services (WES) or ICAS Canada credential evaluation.

International Student Information

International admissions requirements vary by program and in addition to English requirements (<https://www.senecapolytechnic.ca/international/apply/how-to-apply/admission-requirements/english-requirements.html>), programs may require credits in mathematics, biology, and chemistry at a level equivalent to Ontario's curriculum, or a postsecondary degree or diploma, equivalent to an Ontario university or college. Program-specific pre-requisite courses and credentials are listed with the admission requirements on each program page. To review the academic requirements please visit: Academic Requirements - Seneca, Toronto, Canada ([senecapolytechnic.ca](https://www.senecapolytechnic.ca/international/apply/how-to-apply/admission-requirements/academic-requirements.html)) (<https://www.senecapolytechnic.ca/international/apply/how-to-apply/admission-requirements/academic-requirements.html>).

Pathways

As a leader in academic pathways, we offer a range of options that will allow you to take your credential further in another Seneca program or a program at a partner institution.

To learn more about your eligibility, visit the Academic Pathways (<https://www.senecapolytechnic.ca/pathways.html>) web page.

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