

HONOURS BACHELOR OF INFORMATION TECHNOLOGY DESIGN AND MANAGEMENT (BDM)

Important: This program is unavailable for the Fall 2024 start date.

About the Program

The Honours Bachelor of Information Technology Design and Management degree program will prepare you to design, implement and manage information technology systems and networks to ensure they are secure and operating with optimal performance.

Throughout the eight-semester program, you will build a solid foundation in management areas such as finance, marketing and ethics. You will also gain advanced technical skills in information technology infrastructure and administration such as cloud services, operating systems and security. The program is designed to enhance communication and interpersonal skills for collaboration with a variety of stakeholders.

It merges theory with hands-on learning across all semesters, with an industry-relevant capstone project. The four-year program includes a mix of in-person and online courses. Two mandatory four-month work-integrated learning experiences will prepare you for your career.

Credential Awarded

Honours Bachelor Degree

Duration

8 Semesters (4 Years)

Starts

September

Program and Course Delivery

This program is offered in Seneca's hybrid delivery format. Some coursework is online and some must be completed in person. Students will need to come on campus to complete in-person learning requirements.

Skills

Throughout this program you will develop the following skills:

- Problem-solving, reasoning and critical thinking skills to engage in evidence informed decision-making
- Self-management skills that demonstrate initiative, ethical practice and accountability to work in the field of infrastructure design and management

- Communication and negotiation skills to work in diverse inter-professional group environments
- Collaborating in groups and working independently

Work Experience

Mandatory Degree Co-op

A work experience that includes at least one term in a formal work environment. In most cases the work term(s) is a paid position that is completed between two academic semesters and requires a minimum of 420 hours of work. Students must be in good standing and meet all identified requirements prior to participating in the work experience. The successful completion of the co-op work term(s) is required for graduation. Eligibility for participation does not guarantee that a work position will be secured. Additional fees are required for those participating in the mandatory co-op stream regardless of success in securing a work position.

Your Career

When you graduate from this program, these are the types of career options you can explore:

- healthcare organizations
- information technology consulting companies
- research and development firms
- financial institutions
- not-for-profit organizations
- government agencies

Program of Study

Course Code	Course Name	Weekly Hours
Semester 1		
DCN120	Networking Technologies	4
ENG106	Writing Strategies	3
ISM115	Design Thinking	3
OPS105	OS-Unix	4
OPS110	OS-Windows	4
Semester 2		
BAB140	Introduction to Financial Accounting	3
BTC240	Interpersonal Communications in Organizations	3
DCN220	Traditional Networks	4
OPS205	Open Systems Servers	4
OPS210	Proprietary Server Administration	4
Semester 3		
BTB520	Canadian Business Environment	3
BTC440	Business and Technical Writing	3
OPS305	Open Systems Application Server	4
OPS310	Cloud Platform Management	4
SPR100	Introduction to Security	4
Semester 4		
BAB210	Business Statistics	3
BAB240	Management Accounting	3
DCN430	Data Comm: Wireless and Mobile	4
OPS405	Open System Automation	4

SPR530	Advanced Security Integration	4
Semester 5		
BAB235	Introduction to Marketing	3
DCN530	Trends in Technology	4
HST400	Operations Management	3
LSP400	Presentation Skills	3
OPS410	Advanced Cloud Administration	4
RIS330	Data Services and Management	4
Semester 6		
BAB905	Project Management	3
DCN630	Network Design	4
LSP700	Applied Research Methodology	3
SRT411	Digital Data Analytics	4
WTP200	Work Term Preparation	1
plus: Liberal Studies Course (1)		3
Work-Integrated Learning Term 1		
BDM771	Design and Management, Co-op	35
Semester 7		
BMT855	Leadership for Managers	3
HST430	Organizational Behaviour	3
REA750	Research Project	4
SRT751	Ethics and Law	3
plus: Liberal Studies Course (1)		3
Work-Integrated Learning Term 2		
BDM772	Design and Management, Co-op II	35
Semester 8		
BMT850	Strategic Management	3
BTM800	Technology Planning and Acquisition	3
REA850	Research Project Implementation	4
plus: Liberal Studies Course (1)		3

Seneca has been granted a consent by the Minister of Colleges and Universities to offer this degree for a seven-year term starting May 9, 2022. In conformity with the Minister's criteria and requirements, Seneca will submit an application for the renewal of the consent for this program 12 months prior to the expiration of the consent. Seneca shall ensure that all students admitted to the above-named program during the period of consent will have the opportunity to complete the program within a reasonable time frame.

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:

- Apply IT protocols, standards, theories, and fundamentals to systematically approach IT problems.
- Implement and manage network infrastructure and components to meet the technical and business requirements of the organization.
- Design optimal solutions that mitigate risks using operating systems, security protocols, and integrated network services to solve complex open-ended problems.

- Employ Interpersonal, teambuilding, and leadership skills to resolve challenges independently and in diverse teams.
- Communicate complex information using a variety of formats to audiences with different levels of technical knowledge.
- Analyze business problems to make sustainable and ethical strategic decisions.
- Evaluate the scope, cost, timing, and quality of the project to successfully meet deliverables.
- Utilize reflective practices to identify and pursue opportunities for personal and professional development.
- Assess current trends and emerging technologies to evaluate their impact on businesses and network infrastructures.

Admission Requirements

- Ontario Secondary School Diploma (OSSD) or equivalent, including six Grade 12 U or M courses with a minimum overall average of 65%, or a mature applicant (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/mature-applicants.html>).
- Required courses with minimum final grade of 65% in each:
 - English: Grade 12 ENG4U
 - Mathematics: any Grade 12 U

Learn about Seneca's free English upgrading course (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/upgrading-options/english-12u-equivalency.html>) and math upgrading course (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/upgrading-options/math-12u-equivalency.html>) for applicants who don't meet the high school requirements, as well as recommended upgrading for applicants who don't meet their academic subject requirements. (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/upgrading-options.html>)

Notes

Although not required for admission, Grade 12 Mathematics of Data Management (MDM4U) is strongly recommended. As well, courses in English, communications, and computer studies are recommended for success in the program.

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)) (<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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