

BUSINESS ANALYTICS (BAN)

About the Program

This one-year graduate certificate program will provide you with the skills to identify and collect meaningful data, prepare data for analysis, conduct analysis of data sets and present results in a meaningful format to help inform business decisions across the enterprise. Key topics of study include: statistics needed for analytics, programming languages for data analysis, security and privacy for the field of business analytics, data predictive analytics and leadership in the business environment.

Note: This program is available for all students in the in-person, hybrid and flexible formats. Domestic students also have the option of taking the program online.

Credential Awarded

Ontario College Graduate Certificate

Duration

2 Semesters (8 months)

Starts

January, May, September

Program and Course Delivery

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

Skills

Throughout this program you will develop the following skills:

- Business analytics to support evidence-based decision-making
- Development of software applications related to data management and manipulation
- Entrepreneurial strategies to identify new business opportunities

Your Career

As a graduate of this program, you may find employment in corporations and government organizations that have large, rich data sets and the resources to mine data. You may pursue future career options, such as:

- Business analyst
- Business consultant
- Data analyst
- Computer system analyst
- Information systems business analyst

Program of Study

Course Code	Course Name	Weekly Hours
Semester 1		
BAN100	Statistics for Analytics	3
BAN110	Data Preparation and Handling	3
BAN120	Analytics Case Studies	3

BAN130	Programming for Analytics	3
BAN140	Introduction to Data Visualization	3
BAN150	Strategic Leadership in Business Analytics	3

Semester 2		
BAN200	Sentiment Analysis and Text Mining	3
BAN210	Predictive Analytics	3
BAN220	Security, Privacy and Ethics for Business Analytics	3
BAN230	Applied Data Mining and Modelling	3
BAN240	Business Analytics Consulting Capstone Project	3

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:

- Extract, manipulate, and mine data sets from various sources to meet organizational needs.
- Apply business analytics and business intelligence tools as a business process to support evidence-based decision-making.
- Design statistical models using data mining techniques to meet the needs of a specific business process.
- Develop software applications to manipulate data sets, correlate information, and produce reports.
- Create and present data visualizations to communicate information to business stakeholders using multiple forms of communication.
- Apply basic entrepreneurial strategies to identify and respond to new business opportunities.
- Adhere to ethical and legal guidelines to ensure data security, integrity, and confidentiality when presenting analytical information.
- Apply interpersonal, teambuilding, and leadership skills when participating in diverse environments.
- Recommend business solutions for various business domains by utilizing research (findings) and analytical skills.

Admission Requirements

- Ontario university/college degree, college diploma, advanced diploma or equivalent.
- Applicants with a combination of partial postsecondary and/or significant relevant work experience that is the equivalent of the above may be considered. A relevant resume and references must be provided.
- English proficiency (<https://www.senecapolytechnic.ca/registrar/canadian-applicants/admission-requirements/english-proficiency.html>) at the postsecondary level.

Applicants with credentials from outside of Canada must provide a "document-by-document" credential assessment from a recognized agency such as WES (World Education Services) or ICAS (International Credential Assessment Service)

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](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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