

# DATA ANALYTICS (DAGC)

## Advance your career with the power of data.

This graduate certificate program empowers professionals to elevate their analytical skills and confidently lead data-informed decision-making in any industry. Build on your creative problem-solving abilities with this program that combines computer science and technology courses with databases, research methods, marketing, and communications studies.

You'll learn to pull meaningful insights from large, complex data sets that organizations need to predict trends and make informed decisions.

As a data storyteller, you'll learn to simplify complex data, ensuring that decision-makers can grasp the insights without getting lost in technical details. Your ability to present data in a clear and concise manner will add tremendous value to the decision-making process.

Designed with working professionals in mind, the program offers maximum flexibility. You can study full-time or part-time, in person or fully online—whatever suits your schedule and lifestyle. Whether you're in the office, at home, or on the go, you can build the skills you need to thrive in a data-centric world.

## Program highlights

- Flexible learning options allow you to study full- or part-time, in person or completely online – whatever fits your schedule
- Seven-week capstone project or placement in the final semester to make you connected with industry partners
- Co-curricular activities, field trips, and guest speakers offer networking opportunities
- Build skills in a wide array of tools including advanced ArcGIS, Power BI, Tableau and Python programming, R statistics, SQL database, and Microsoft Office and Excel

## Program of study for the 2026-27 Academic Year

| Semester 1              |                                    | Credits   |
|-------------------------|------------------------------------|-----------|
| ANA 7302                | Foundations of Data Analytics      | 3         |
| ANA 7303                | Data Collection and Ethics         | 3         |
| ANA 7310                | Programming for Analytics          | 3         |
| ANA 7312                | GIS and Data Visualization         | 3         |
| DBA 7310                | Structured Data Management         | 3         |
| QMM 7310                | Statistics for Data Analytics      | 3         |
| <b>Credits</b>          |                                    | <b>18</b> |
| Semester 2              |                                    |           |
| AIE 7301                | Machine Learning Foundations       | 3         |
| ANA 7304                | Dashboards and Data Modelling      | 3         |
| ANA 7311                | Storytelling with Data             | 3         |
| BTA 7300                | Connected Data                     | 3         |
| MKT 7300                | Data Mining and Mkt Analytics      | 3         |
| QMM 7311                | Advanced Stats for Analytics       | 3         |
| <b>Credits</b>          |                                    | <b>18</b> |
| Semester 3              |                                    |           |
| ANA 7305<br>or ANA 7306 | Analytics Capstone<br>or Placement | 6         |
| <b>Credits</b>          |                                    | <b>6</b>  |
| <b>Total Credits</b>    |                                    | <b>42</b> |

## Admission requirements

Applicants must be graduates of a diploma, advanced diploma, or degree program from an Ontario College or equivalent.

OR

Applicant must possess five years of work experience in a related field (or combination of education and work experience) as judged by the College to be equivalent. Applicants must submit a resume detailing their related experience and a cover letter outlining their competencies and preparedness for the program (any and all postsecondary transcripts must still be submitted).

## Additional admissions requirement

### Recommendations

- Proficiency in Microsoft Excel
- Any grade 12 mathematics (C) or (U) (MCT4C is highly recommended)
- Students who do not possess the foundational math will need to take the bridging course(s) prior to registration. Please contact the program coordinator to discuss upgrading options.

## Program Delivery

### 2026-27

#### Fall term start

SEMESTER 1: Fall 2026  
SEMESTER 2: Winter 2027  
SEMESTER 3: Spring 2027

#### Winter term start

SEMESTER 1: Winter 2027  
SEMESTER 2: Spring 2027  
SEMESTER 3: Fall 2027

## Specific program pathways

### College or university degree opportunities

If you are a graduate from this program, you may continue your studies at a college or university and you may receive credit(s) for your prior college education. Refer to Cambrian's college and university agreements (<https://cambriancollege.ca/supports-services/articulation-agreements/universities-in-canada/>) details for further information.

## Employment opportunities

Business analysts and data analytics professionals may work independently or with various teams, collecting and mining data from primary and secondary sources, analyzing and interpreting results, pinpointing and predicting trends, providing concise reports, and designing, creating, and maintaining databases.

They work for a wide range of industries, including technology, business, government, healthcare, applied research, public safety, human resources, sales, and marketing.

Graduates are prepared for employment opportunities as:

- Data or business analysts
- Database administrators
- Project managers
- Software developers
- Implementation coordinators

- Data scientists
- Business intelligence consultants
- Decision support specialists
- Data miners
- Data storytellers

## Contacts

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Program Coordinator

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