



Technical Data Analytics

School of Information Technology

TDA1/TDA2 - Technical Data Analytics

This program has been permanently suspended.

Program Description

The Technical Data Analytics post-graduate program emphasizes foundational and advanced technical skills for data analysis focusing on IT infrastructure, high-performance computing and enterprise-level data management. Students gain proficiency in programming languages such as Python, R, and SQL, as well as advanced database design concepts tailored for large-scale data operations. The program also explores big data technologies, machine learning and AI applications with hands-on training in a unique, high-end dedicated server environment that supports large-scale data processing, predictive modelling, statistical analysis and data visualization. By the end of the program, graduates will be equipped to navigate the complexities of modern data ecosystems, making them well-suited for careers in data engineering, IT infrastructure management, and advanced analytics within high-performance computing environments.

Document of Recognition

Technical Data Analytics Ontario College Graduate Certificate

Program Type/Credential

Ontario College Graduate Certificate Program

Learning Outcomes

N/A

Career Opportunities

Fanshawe's Technical Data Analytics program graduates can expect to be hired as the following:

- Data Scientist - uses advanced analytics technologies to support the identification of trends, scrape information from unstructured data sources and provide automated recommendations
- Data Analyst - designs, develops and administers data management solutions, develops and implements data administration policies, standards and models
- Business Intelligence Analyst - gathers, cleans and analyzes data like sales revenue, market information and consumer engagement metrics of a business

**Admission Requirements**

Ontario College Diploma, Ontario College Advanced Diploma, Degree or equivalent in computer science/information technology

Approximate Costs

Fee details are available at www.fanshawec.ca/fees

Contact

School of Information Technology - 519-452-4430

Campus Codes and Intakes

- Program Code: TDA1 and TDA2
- Campus Code: LC (LC - London)
- Intakes: Summer, Fall, Winter
- TDA1 - 45 weeks, TDA2 - 30 weeks
- Academic Calendars available at www.fanshawec.ca/academicdates

Applicant Selection Criteria

Where the number of eligible applicants exceeds the available spaces in the program, the Applicant Selection Criteria will be:

1. Preference for Permanent Residents of Ontario
2. Receipt of Application by February 1st (After this date, Fanshawe College will consider applicants on a first-come, first-served basis until the program is full)
3. Achievement in the Admission Requirements

English Language Requirements

Applicants whose first language is not English will be required to demonstrate proficiency in English by one of the following methods:

- TOEFL iBT - Score 88
- IELTS Academic - Overall score of 6.5 with no score less than 6.0 in any of the four bands
- CAEL - Overall score of 70 with no score less than 60 in any of the four bands
- PTE Academic - Score 59
- Cambridge English - Overall score of 176 with no language skill less than 169
- ESL4/GAP5 - Minimum grade of 80% in Level 9, 75% in Level 10
- Duolingo - Overall score of 120, with no score lower than 105
- LANGUAGECERT - Overall score of 70 with no score less than 65 in any of the four skills



Program Pathways

For information about Program Pathways visit www.fanshawec.ca/programpathways.

Program Curriculum - TDA1

Level 1

Take all of the following Mandatory Courses:

- CANS-6002 Citizenship & Immigration in Canada - Credits 3
- DEVL-6035 The Canadian Workplace - Credits 3
- COMM-6046 Canadian Workplace Communications - Credits 3
- FINA-6032 Personal Finance in Canada - Credits 3
- COMM-6052 Office Apps & Tools of the Cdn Workplace - Credits 3
- COOP-1020 Co-operative Education Employment Prep - Credits 1

Level 2

Take all of the following Mandatory Courses:

- INFO-6174 Intro to Data Analytics - Credits 3
- INFO-6185 Data Modeling and Schema Design - Credits 4
- INFO-6175 Statistical Analysis 1 - Credits 3
- INFO-6176 ETL Processes and Data Integration - Credits 4
- INFO-6177 Introduction to Data Warehousing - Credits 3
- INFO-6184 Data Technology and the Business - Credits 4

Level 3

Take all of the following Mandatory Courses:

- INFO-6179 Data Mining and Predictive Modeling - Credits 4
- INFO-6180 Statistical Analysis 2 - Credits 3
- INFO-6181 Big Data & Advanced Analytics - Credits 4
- INFO-6182 Text & Social Media Analytics - Credits 3
- INFO-6183 Machine Learning Fundamentals - Credits 4
- INFO-6178 Big Data Systems - Credits 4

Program Residency

Students Must Complete a Minimum of 15 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program.

Program Curriculum - TDA2

Level 1

Take all of the following Mandatory Courses:

- COOP-1020 Co-operative Education Employment Prep - Credits 1

- INFO-6174 Intro to Data Analytics - Credits 3
- INFO-6185 Data Modeling and Schema Design - Credits 4
- INFO-6175 Statistical Analysis 1 - Credits 3
- INFO-6176 ETL Processes and Data Integration - Credits 4
- INFO-6177 Introduction to Data Warehousing - Credits 3
- INFO-6184 Data Technology and the Business - Credits 4

Level 2

Take all of the following Mandatory Courses:

- INFO-6179 Data Mining and Predictive Modeling - Credits 4
- INFO-6180 Statistical Analysis 2 - Credits 3
- INFO-6181 Big Data & Advanced Analytics - Credits 4
- INFO-6182 Text & Social Media Analytics - Credits 3
- INFO-6183 Machine Learning Fundamentals - Credits 4
- INFO-6178 Big Data Systems - Credits 4

Program Residency

Students Must Complete a Minimum of 11 credits in this program at Fanshawe College to meet the Program Residency requirement and graduate from this program.