BIG DATA ANALYTICS

Program: BDAT
Credential: Ontario College Graduate Certificate
Delivery: Full-time + Part-time
Length: 2 Semesters
Duration: 1 Year
Effective: Fall 2018, Winter 2019, Summer 2019
Location: Barrie

Description

Big Data allows users to visualize past, present, and future patterns by linking and presenting information in meaningful ways. Data Analytics offers deeper insight into the meaning of data sets by telling the story behind the information. This enables stakeholders to make more informed decisions, predict trends and better understand the needs and sentiments of customers. This program provides students with a unique blend of theoretical knowledge and applied skills. Students learn how to collect, curate, manipulate, encode, and store data sets so they can be analyzed and mined in such a way that they can be reused and repurposed to solve challenges that don't yet exist.

Career Opportunities

Graduates of this program are able to collect, organize and correlate data for a wide range of industries including government, applied research, human resources, health care, and sales and marketing. Leveraging prior background, skills, and experience, students may be employed in roles such as Data Analyst, Data Visualization Developer, Business Intelligence (BI) Specialist, Analytics Specialist, BI Solutions Architect or Business Analytic Specialist.

Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

1. collect, manipulate and mine data sets to meet an organizational need;
2. recommend different systems architectures and data storage technologies to support data analytics;
3. design data models that meet the needs of a specific business process;
4. develop software applications to manipulate data sets, correlate information and produce reports;
5. design and present data visualizations to communicate information to business stakeholders;
6. apply business analytics and business intelligence tools to support evidence-based decision making;
7. employ environmentally sustainable practices within the field of data analytics;
8. apply basic entrepreneurial strategies to identify and respond to new opportunities.

The Program Progression

Fall Intake

- **Sem 1:** Fall 2018
- **Sem 2:** Winter 2019

Winter Intake

- **Sem 1:** Winter 2019
- **Sem 2:** Summer 2019

Summer Intake

- **Sem 1:** Summer 2019
- **Sem 2:** Fall 2019

Admission Requirements

- Post-secondary diploma, degree or equivalent. It is recommended that the applicant have a specialty in science, technology, engineering, mathematics, or business.

Graduation Requirements

12 Program Courses

Graduation Eligibility

To graduate from this program, a student must attain a minimum of 60% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester. The passing weighted average for promotion through each semester and to graduate is 60%.

Program Tracking

Semester 1		**Hours**
Program Courses		
BDAT 1000	Data Manipulation Techniques	42
BDAT 1001	Information Encoding Standards	42
BDAT 1002	Data Systems Architecture	42
BDAT 1003	Business Processes and Modelling	42
BDAT 1004	Data Programming	42
BDAT 1005	Mathematics for Data Analytics	42
	Hours	252
Semester 2		
Program Courses		
BDAT 1006	Data Visualization	42
BDAT 1007	Social Data and Mining Techniques	42
BDAT 1008	Data Collection and Curation	42
BDAT 1009	Enterprise Analytics	42
BDAT 1010	Business Intelligence	42
BDAT 1011	Data Analytics Project	42
	Hours	252
	Total Hours	504

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