

# Fleming College

## Artificial Intelligence

Ontario College Graduate Certificate ( 2 semesters )

### START IN JANUARY 2024

Classes begin:	January 08, 2024
Offered at:	Sutherland Campus
Program code:	AI
Tuition (Domestic):	\$2,440.71 per semester*
Tuition (International):	\$9,488.45 per semester*

\* Tuition and fees subject to change.

*As the role of automation expands in all industries, Artificial Intelligence professionals are in high demand. This unique, hybrid, two semester post graduate program meets this growing need for talented individuals equipped with the knowledge, skills, and tools to implement AI and machine learning technologies in different industries. Our unique learning environment and hands on training will prepare students for this emerging trend.*

### Program Highlights

Artificial Intelligence (AI) is a two-semester Ontario College Graduate Certificate where students learn how to design and create software by embedding AI into applications that meet industry needs. Modern software design and AI frameworks, machine learning, and big data fundamentals are the basis of this program.

This program will be delivered in a hybrid format with online lectures and face-to-face computer labs where students will apply their knowledge and skills to applied projects. The program also includes applied research and applied learning experiences throughout the curriculum culminating in a second semester capstone project course.

Students will learn to obtain and analyze data sets in deep learning and machine learning applications, work collaboratively using principles of project management, and design and create software to fulfill industry project requirements. All work completed in the program will be in accordance with relevant legal statutes and ethical codes. In addition to gaining technical knowledge, students will expand their skills in project and time management, collaboration, independent initiative, and communication.

### Why are these skills in demand?

Artificial Intelligence is transforming the way we do business, our economy, and our society. It increases the velocity, efficiency and accuracy of human efforts and is being widely adopted across most industries. The Artificial Intelligence sector is one of the fastest growing disruptive technologies in the industry, with projected labour shortages over the next 10 years. Emerging trends in industry include the integration of AI in industry/trades

training, integrated applications, manufacturing, and gaming.

## Why Choose Fleming

You will benefit from our established reputation in related fields of study, as well as strong support from our industry partners. Our state-of-the-art facilities feature the latest software, and leading-edge technology to ensure you will graduate with an advantage.

## Experiential Learning

The program features a workplace applied project in the second semester. This allows you to interact with industry partners, building your collaboration and communication skills at the same time as gaining real-world experience and knowledge in your area of study. Throughout the program, you will gain applied, hands-on experience in our leading-edge labs.

## Career Opportunities

The options for careers in the field are varied across both the private and public sector, and include:

- » AI Engineer / Programmer
- » Business Intelligence Developer
- » Data Analyst
- » Research Scientist / Engineer
- » Software Engineer / Architect
- » Machine Learning Engineer
- » Data Scientist / Analyst / Architect
- » Interactive Media and simulation Developer
- » Game Developer
- » Application Architect
- » Programmer Analyst

## Admission Requirements

Completion of an Ontario College Diploma, Ontario College Advanced Diploma, degree or equivalent with a focus in computer studies, technology, engineering, analytics, mathematics, or statistics, OR an acceptable combination of related work experience and post-secondary education. Proof of English language proficiency will also be required.

## Courses and Descriptions

## Semester 1

Applied Machine Learning	COMP 647	Hours: 60
Cloud Computing for AI	COMP 648	Hours: 60
Data and Ethics	LAWS 333	Hours: 14
Introduction to Data Analysis	COMP 646	Hours: 60
Linear Algebra and Statistics for Machine Learning	MATH 155	Hours: 60
Technical Project Management	BUSN 254	Hours: 21

## Semester 2

AI and ML Capstone Project	APST 180	Hours: 45
Deep Learning	COMP 650	Hours: 60
Machine Vision and Image Processing	COMP 649	Hours: 60
Natural Language Processing	COMP 652	Hours: 60
Social Media Analytics	COMP 651	Hours: 60

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