Specialized Graduate Programs

Graduate Certificate in Data Science, Applied AI and Organizational Leadership

McMaster University | DeGroote School of Business

AACSB ACCREDITED

Graduate Certificate in Data Science, Applied AI and Organizational Leadership

Lead with Data and Applied AI

The Graduate Certificate in Data Science, Applied AI and Organizational Leadership equips professionals with the skills to turn data and AI into meaningful business value. Through three courses, you will build practical knowledge across AI, data analytics, responsible AI and organizational leadership, while developing strategies that align emerging technologies with organizational goals.

The program combines synchronous and self-paced learning with hands-on projects, case studies and industry-aligned content. Designed to be completed in four months, the certificate offers a flexible hybrid format with online learning and a two-day in-person residency in January or September. The May intake is fully virtual.

Who is this program for

- Managers looking to improve team productivity and decision-making through practical AI and analytics.
- Professionals transitioning into data-informed roles who want to build confidence and leadership skills in an AI-driven workplace.

Admissions

Chohort start dates

- January
- May
- September

Length of study

Four months

Tuition

$4,999

Application deadlines

January 2027 cohort:
January 5, 2027

May 2027 cohort:
March 31, 2027

September 2027 cohort:
August 31, 2027

4 MONTHS

Course 1

Strategic Leadership with Data and AI
Build a practical data and AI strategy, align teams using OKRs and KPIs, redesign workflows and evaluate AI use cases across industries. Includes a two-day residency at the Ron Joyce Centre.

Required course

Course 2

Leveraging AI for Organizational Leadership
Use generative AI and AI assistants for productivity, apply AI to real organizational challenges and build the leadership skills needed to guide AI-driven change.

Required course

Course 3

Elective courses (select one)

Business Data Fundamentals on Cloud Computing Services
Develop data skills, including using cloud platforms and dashboards, managing different types of data and building fluency with modern data tools.

AI Foundations for Business
Explore AI strategy, model design, deployment and governance while gaining hands-on experience evaluating AI and machine learning solutions.

Complete three two-unit courses, each requiring approximately 20 hours, within a single term.

View Graduate Certificate course details

Application requirements

- Completion of an Honours Bachelor's degree from a recognized university
- Recommended B- average (McMaster 7.0 GPA out of 12) or higher

All applications are considered

What sets this program apart

Turn AI knowledge into business value
Build a practical data and AI roadmap you can put to work immediately in your organization.

Lead with confidence in an AI-driven workplace
Use AI and analytics to make smarter decisions, improve productivity and lead meaningful change.

Applied AI in practice
Adopt AI responsibly and gain the knowledge to implement AI with confidence, balancing innovation with ethical and responsible practices.

Hands-on experience
Get hands-on experience with modern AI and data tools, dashboards, real-world projects and proven change-leadership approaches.

Advance your expertise in just four months
Earn a university-accredited graduate certificate through a flexible format designed to fit alongside your career.

2026 class profile

Academic background

47% Business, Finance, Management
18% Science, Health & Pharmacy
12% Mathematics & Analytics
12% Technology & Engineering
11% Arts, Media, & Communications

**Cohort starting in September, 2026*

37%
identify as female

63%
identify as male

Meet

Keith Fraser

Founder,
Danoke Corporation

The program changed the way I think about AI by showing me that it is much more than a technology tool — it is a powerful business enabler. I now see AI as a way to augment human decision-making, improve project outcomes, increase productivity and uncover insights from data that can lead to better business decisions and innovation. It also reinforced the importance of combining technical capabilities with strong leadership to successfully drive AI adoption within organizations.

Program options at DeGroote

Undergraduate Programs

- Commerce
- Integrated Business and Humanities (IBH)

MBA Programs

- Full-Time MBA and Full-Time MBA with Co-op
- Accelerated MBA
- Blended Learning Part-Time (BLPT) MBA
- Executive MBA in Digital Transformation (EMBA)

Graduate Programs

- Master of Management in Applied AI and Data-Driven Decision-Making (MAIDM)
- Master of Management in AI and Analytics (MMAIA)
- Master of Finance (MFin)
- PhD
- Graduate Diploma in Professional Accountancy

Interdisciplinary Graduate Programs

- MSc in eHealth
- Master of Health Management
- MSc in Global Health

Executive Programs

- Custom Programs for Organizations
- The Directors College
- Health Leadership Academy

Certificates

- Graduate Certificate in Data Science, Applied AI and Organizational Leadership

View all programs

AACSB ACCREDITED

DeGroote School of Business
Main Campus
1280 Main Street West,
Hamilton, Ontario, L8S 4M4

Ron Joyce Centre
4350 South Service Road,
Burlington, Ontario, L7L 5R8

degroote.mcmaster.ca

GRAD26_09-23