



# Big Data, AI, and Cyber-Security

McMaster University Professional Certificate Course



Few technological innovations have steered as many conversations, ideas, debates, and uncertainty in the digitization of manufacturing and Industry 4.0 as Big Data, AI, and Cyber-Security. Full of promise, potential, and pitfalls, the concept remains mostly unclear and complicated. The Big Data, Al and Cyber Security program aims to remove some of the mystery around these critical topics and turn them into something tangible for participants, making them effective change ambassadors in their organizations.



**HOURS OF TRAINING** 

WEEKS

## WHAT YOU'LL LEARN

**Course Dates & Registration** 

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• Fundamentals of big data, machine learning, AI, and Cyber Security.

- How to connect data to processes and operations and capitalize on it to increase efficiencies and add value to your organization.
- Assess the risks and benefits of deploying IoT technologies, identifying weaknesses and vulnerabilities, and how to mitigate those risks effectively.
- Demonstrate how the connection between people, processes, and experience drives AI and machine learning.

Module 1	Making sense of Big Data, AI, and Cyber Security
Module 2	Case studies and workshops on identifying types of data, what data can and cannot do, understanding network effects.
Module 3	Case study and workshop on identifying risk
Module 4	Case studies and workshops in connectivity, communicating data, data analysis and effective decision making.
Module 5	MES, ERP and supply chain management
Module 6	AI, Machine Learning, Block chain — where it does and does not work. Designing intelligent systems based on the expertise of people.
Module 7	Cyber security — risks, implementation, training personnel.

# What To Expect Each Day

Each day will cover unique topics in 30 to 60-minute burst sessions, and the following is what you might expect during a typical day during the certificate course: **Morning** 

Morning review, introductions

Instruction and in-class group exercises

Afternoon

Lunch break

Guest speakers, discussions

Group work, networking, after action review

# TUITION/ FEES

& Discount Options

McMaster offers a range of subsidies in collaboration with NGEN Supercluster to enable Canadian Businesses. Find out more about discount options by booking a call with our team.

**Regular Cost per Course** 

**\$2,000** cad + HST

**NGEN Canadian Business/ Alumni Cost** \$1500 CAD + HST

**NGEN AMP UP** Canadian **Manufacturing Cost** \$750 CAD + HST

# TAKE THE NEXT STEP

**Contact Us** 

Ready to get started? Got questions about the McMaster certificate course? Our team is here to help.

- Determine if this course is right for you and your goals
- Learn more about McMaster's certificate programs

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