

# Collaborative Specialization in Artificial Intelligence: MASc, MSc

The interdisciplinary graduate specialization provides thesis-based Master's students (in Bioinformatics, Computer Science, Mathematics and Statistics, or Engineering) with a diverse knowledge base in artificial intelligence (AI) methodologies and ethical issues. Students learn from a multidisciplinary team of faculty members, while conducting AI-related research guided by a faculty supervisor.

[uoguelph.ca/ceps/csai](http://uoguelph.ca/ceps/csai)

## Program

Through a combination of online learning, lectures, and experiential learning opportunities, students gain expertise in programming, algorithmic thinking, mathematical foundations and statistical analysis for AI, optimization, and data visualization.

Students enrolled in the specialization must complete at least 2.25 credits in AI-related courses, as well as their home program requirements. Note that some credits in AI-related courses can satisfy both Collaborative Specialization in AI and home program requirements.

## Research Domains

Graduate faculty associated with the Collaborative Specialization in Artificial Intelligence are experts in a variety of research domains, including:

- Natural language processing
- Computer vision
- Human-computer interaction
- Autonomous vehicles
- Automation
- Cybersecurity
- Robotics
- Precision agriculture

## Application Deadline:

Ongoing



2019 Vector Scholarship in Artificial Intelligence winners from the University of Guelph: Wanrong Sun (MSc, Computer Science), Syeda Manjia Tahsien (MASc, Engineering), Arslan Kazmi (MSc, Computer Science) and Hannah Szentimrey (MASc, Engineering)

## Admission Requirements

Prospective students must first meet the admission requirements of a participating home program, which includes Bioinformatics (MSc), Computer Science (MSc), Engineering (MASc), and Mathematics and Statistics (MSc). Once the student is admitted to a home program, their application will be forwarded to the Collaborative Specialization's Graduate Program Coordinator for review.

## Partners

We are a Vector Institute-recognized master's program. Students who are enrolled in the University of Guelph Collaborative Specialization in Artificial Intelligence are eligible to apply for Vector Scholarships in Artificial Intelligence, valued at \$17,500 each. You can find more information at the Vector Institute website: [vectorinstitute.ai/aimasters/#vector-scholarships-in-artificial-intelligence](http://vectorinstitute.ai/aimasters/#vector-scholarships-in-artificial-intelligence)

## ARE YOU INTERESTED IN:

- Artificial intelligence
- Machine learning
- Bioinformatics
- Neural networks / deep learning
- Optimization
- Software engineering
- Image processing

## CAREER OPPORTUNITIES:

- Machine learning researcher
- Computer vision, software or data engineer
- Data scientist
- Statistician

## CONTACT INFORMATION

**Graduate Program Coordinator:**  
Graham Taylor

**Graduate Program Assistant**  
Farrah Trahan

Please direct all inquiries to:  
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