

Artificial Intelligence (AI) at Trent

Artificial Intelligence (AI) is a branch of computer science focused on creating systems capable of performing tasks that typically require human intelligence. AI developers and engineers design, train, and deploy intelligent systems that can analyze large data sets, make decisions, and adapt to new information. These systems involve developing and training machine learning models, natural language processing, computer vision, and robotics to interact with the physical world. Since AI solutions are complex and dynamic, AI developers must work across multiple levels of abstraction and employ rigorous methodologies to create robust, scalable, and ethical AI systems.

When you study Artificial Intelligence, you will shape the future by creating intelligent systems that power applications and potential uses from healthcare research to autonomous vehicles. The AI field prepares you for a career blending cutting-edge technologies like machine learning, neural networks, and data analytics with considerations of ethics, law, and societal impacts in an ever-evolving technological landscape. Learning AI involves both theoretical studies and practical experiences for hands-on projects during co-op work terms where you can apply your skills and knowledge in real-world environments.

Artificial Intelligence (AI) Co-op

Co-op provides students with a valuable opportunity to gain work-integrated experiential learning that helps them build a strong foundation for their careers. The Artificial Intelligence Co-op program empowers students to gain a competitive edge by acquiring hands-on experience across diverse industries. Specifically, co-op allows students to obtain 12 months of practical, real-world experience in AI-related roles, refine or expand their technical skills, explore various career paths within the field of AI, and build professional networks with leading organizations and experts.

Artificial Intelligence Co-op is a competitive direct-entry program with a limited number of spaces

Program Requirements for Admittance into Co-op:

- Minimum 80% cumulative average
- Six Ontario Grade 12 4U or 4M courses including ENG4U and MHF4U (BSc only)
- ENG4U with a minimum 60%

To remain in the co-op, students must:

- Successfully complete the required Co-op courses (COOP 2000H, 4000H) with a grade of 65%+
- Maintain a minimum 75% cumulative average throughout their study terms
- Complete the single 12-month work term experience (COOP 2100P, 3100P, 4100P)
- Receive satisfactory evaluations during their co-op work term

Artificial Intelligence Co-op Work Term Schedule

	Fall	Winter	Summer
Year 1	Study Term 1	Study Term 2	Off
Year 2	Study Term 3	Study Term 4	Off
Year 3	Study Term 5	Study Term 6	Work Term
Year 4	Work Term	Work Term	Off
Year 5	Study Term 7	Study Term 8	Off

Students in the Artificial Intelligence Co-op follow the co-op continuing model where they complete one 12-month work term with a single employer.

All co-op students are encouraged to meet with an Academic Advisor for degree mapping and to ensure they are meeting all their program requirements. You can book an appointment on the Student Experience Portal (trentu.ca/sep) or by calling 905-435-5100 x5158.

Please Note: Co-op is meant to prepare students for the real-world job application process and as such, the co-op process is competitive and dependent upon many factors including market conditions, the student's efforts to secure a work term, and the academic performance of a student. Every effort is made to find a suitable 12-month work term for students, but a work term cannot be guaranteed for every student. Co-op students will secure their position through successful participation in the co-op interview process and/or their own job search activities. Withdrawal from the co-op program will not normally be approved while a student is on a work term.

Students who are unable to obtain a suitable co-op opportunity are expected to continue with their academic program on a full-time basis. The missed work term experience would be delayed to the Fall of Year 4 if a student is unable to secure their work term. If a co-op student is unable to complete their 12-month continuous co-op work term yet otherwise fulfills degree requirements, they will be awarded an Honours Bachelor of Arts or Honours Bachelor of Science in Artificial Intelligence.

Students do not pay tuition during each work term. Students are required to pay co-op fees plus ancillary fees and levies. The Co-op Assistance Program is available to support students in financial need with co-op expenses. For more information, please reach out to coop@trentu.ca.

International Students who are required to complete co-op work terms that are integral to their academic program will require a co-op work permit. They will apply when applying for their study permit and it will be issued to them when they receive their study permit. If you have questions around your co-op work permit or need further support, please reach out to internationaladvising@trentu.ca.

Students with Disabilities are strongly encouraged to register with Student Accessibility Services (SAS). Please contact durhamsas@trentu.ca for more support.

Sample Work Term Areas for AI:

- Data Analysis & Data Visualization
- Artificial Intelligence Research
- Machine Learning & Model Training
- Computer Vision and Robotics

Potential Career Paths for an AI Graduate:

- AI Product Specialist/Manager
- Machine Learning Engineer/Developer
- AI Ethicist
- Algorithm Developer
- Prompt Engineer

