AIIC 001: ARTIFICIAL INTELLIGENCE INSTITUTE

AI in Higher Education: Foundations to Practice in Teaching and Learning

Course Overview

This self-directed, asynchronous online micro-credential explores how Generative Artificial Intelligence (GenAI) can be applied responsibly and effectively in higher-education and polytechnic contexts. This micro-credential is designed to support faculty's development of both conceptual understanding and practical strategies for integrating AI into teaching, learning, and professional practice.

The content in the micro-credential progresses through three sequenced modules, moving from foundational concepts to ethical considerations and applied implementation.

Throughout the course, learners engage with curated videos, interactive activities, targeted readings, and reflective exercises. Learners are invited to connect course concepts to their own professional context and translate theory into practical strategies. Optional opportunities are included to create AI-enhanced artifacts or learning resources.

Important: Access to course content is sequential and based on performance. Module 2 becomes available after achieving a score of 70% or higher on the Module 1 quiz. Module 3 becomes available after achieving 70% or higher on the Module 2 quiz. The final test becomes available only after achieving at least 70% on each of the module quizzes.

Module 1: Generative AI Foundations and Applications in Higher Education

This module introduces the fundamentals of GenAI. Key learning includes examining what GenAI is, how it works, and its capabilities and limitations. Additionally, the module includes opportunities to review higher-education use cases, GenAI-supported design frameworks, and effective prompting strategies to develop a foundation for appropriate GenAI integration.

Learning Outcomes

By the end of this module, learners will be able to:

- Identify appropriate opportunities for GenAI support within a higher-education context by analyzing system capabilities and limitations.
- Recognize how GenAI-supported design frameworks are used to support planning, content development, and media tasks across higher-education contexts.
- Distinguish between more or less effective prompt structures by analyzing their clarity, purpose, and contextual alignment.
- Analyze GenAI-supported work using AI literacy dimensions to assess quality, appropriateness, and suitability for professional use.

Module 2: Ethical and Responsible AI Use

This module examines the ethical dimensions of GenAI, including bias, transparency, privacy, academic integrity, and professional accountability. Learning opportunities in this module include analyzing risks and limitations and apply principles for responsible and equitable AI use in the learner's institutional context.

Learning Outcomes

By the end of this module, learners will be able to:

- Identify key ethical risks associated with AI in higher education through case-based analysis
- Articulate ethical principles that guide responsible AI use in professional practice
- Apply practical strategies that support ethical and accountable AI integration

Module 3: Practical Application Using Universal Design for Learning (UDL)

This module focuses on applied practice using Universal Design for Learning as a guiding framework. Learning in this module includes opportunities to design inclusive and accessible educational resources and apply GenAI tools to reduce barriers and support learner variability in teaching and professional settings.

Learning Outcomes

By the end of this module, learners will be able to:

- Explore how generative AI tools can support inclusive lesson design through alignment with Universal Design for Learning (UDL) principles.
- Reflect on the pedagogical, ethical, and accessibility implications of using generative AI in teaching and learning contexts.
- Apply UDL-informed prompting strategies to revise or develop instructional materials that reduce barriers and support learner variability.

Assignments and Assessments

Each module includes:

- Optional case study reflections
- A required end-of-module quiz

After completing all three modules, learners complete a cumulative final online assessment.

Assessment Progression

Modules are released in a fixed sequence:

- Module 1 must be completed before Module 2 is available.
- Module 2 must be completed before Module 3 is available.
- All modules must be completed before the final test can be accessed.

Passing Requirements

To earn the micro-credential, a learner must achieve:

- A minimum score of **70%** on each end of module quiz
- A minimum score of **80%** on the final test

What the Learner Will Develop

By completing this micro-credential, learners will be able to:

- Describe core concepts, capabilities, and limitations of GenAI
- Analyze ethical and practical considerations related to AI use in higher education
- Integrate AI tools into professional practice in purposeful and responsible ways
- Evaluate ethical issues with attention to equity and accountability
- Apply UDL principles to design inclusive learning environments
- Create a professional task demonstrating appropriate AI use
- Optionally develop an AI-enhanced artifact aligned with your institutional role

Time Commitment and Access

- The estimated time commitment is **20–26 hours**. Learners will work at their own pace while completing modules in sequence. All course content remains accessible throughout the program.
- Optional activities are not formally assessed but are designed to produce practical resources for professional use.
- Access to the course will be removed once successful completion has been achieved or after 100 days from your initial access, whichever comes first.
- Learners will have 50 days from initial access to drop the course. After this period, the course will remain active, and if not completed, it will appear as an “Incomplete” on their record.

Course Completion and Micro-Credential Award

The course and micro-credential are awarded once the learner submits a declaration confirming successful completion of all requirements. To qualify, the learner must complete every module with a minimum score of 70% on each end-of-module quiz and achieve at least 80% on the final test.

After earning a minimum score of 80% on the final test, the learner will gain access to the declaration form. The form appears automatically once the final test is successfully completed.

Questions and Support

For questions at any point during the course, please contact:
Innovativelearning@humber.ca Your inquiry will be directed to an Innovative Learning team member for assistance.