



Brief Course Outline

Course Title: **Digital Transformation & Sustainability**

Course Number and Section

MOS

4490B 550

Instructor Name(s): Mohammad Taleghani

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Disclaimer: Information in the brief course outline is subject to change. The syllabus posted on OWL Brightspace is the official and authoritative source of information for the course.

Course Description:

This course examines the intersection of digital transformation and sustainability. It explores how digital tools and strategies influence sustainability efforts, from reducing the environmental footprint of IT infrastructure to enabling more sustainable organizational practices. Topics include emerging technologies, sustainable business models, data-driven decision-making, ethical dimensions of digital innovation, and the management of shared-resource challenges.

Learning Outcomes: one outcome per entry

Understand the principles of digital transformation and its implications for sustainable development.

Analyze the role of emerging technologies in promoting sustainability.

Evaluate sustainable business models in the digital age.

Critically assess ethical and societal impacts of digital transformation initiatives.

Examine the dynamics of shared-resource challenges and how digital systems can influence their outcomes.

Apply digital tools to design solutions for sustainability challenges.

Textbooks and Course Materials:

Required Case Studies:

- Hahn, R. (2010). Host Europe: Advancing CSR and Sustainability in a Medium-Sized IT Company. Ivey Case Study, (9B10M042). \$5.45
- Carrillo, M., Davis, J. (2024). Minespider: Building Responsible Battery Supply Chains with Blockchain (W36086). \$5.45

Optional textbook:

- Sundberg, N. (2022). Sustainable IT Playbook for Technology Leaders: Design and implement sustainable IT practices and unlock sustainable business opportunities. Packt Publishing Ltd.

E-textbook \$60.99, Print \$75.99

Methods of Evaluation: one assignment per entry

Assignment	Due Date mm/dd/yy	Weight - %
Class Participation & Assignments		30
Midterm Exam #1 (In-person assessment)		30
Group Project		20
Midterm Exam #2 (In-person assessment)		20

In solidarity with the Anishinaabe, Haudenosaunee, Lūnaapéewak, and Chonnonton peoples on whose traditional treaty and unceded territories this course is shared.

Thursday, December 4, 2025

Huron Brief Course Outline

In-course Costs	\$012.50
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For Textbooks and Course Materials (below), you are required to include the cost of each textbook or other learning material.

Note whether there are any restrictions that would prevent a student from using a second-hand copy. Here is some suggested text:

- Required textbook: [author, title, edition, publisher, date]. Cost: [insert amount].
 - Or include the weblink of the textbook's publisher site that includes the cost information.
- Students need to purchase this edition. Second-hand or older editions will not be sufficient.
- OR Students are welcome to purchase second-hand or earlier editions of this textbook.
- This course has an optional field trip that costs [insert amount].
- This course has a required field component that costs [insert amount].