SYLLABUS 2025-2026
Digital Tools and Generative AI

MODULE SPECIFICATION

Module Code	2526_SCM_1_EN_013
Campus	Oxford
Department(s)	Supply Chain Management and Digital Management
Level / Semester	Undergraduate Year 1 (U1); Equivalent to FHEQ level 4 Semester 02
Language of Instruction	English
Teaching Method	☒ In-person (face-to-face) ☐ Distance learning (live online) ☐ e-Learning (asynchronous) ☐ Hybrid: _____
Pre-requisite(s)?	Be familiar with basic digital tools (e.g. Google Workspace, Microsoft Office).
ECTS *Reminder: 1 ECTS = between 20 and 30hr- student workload*	3
Equivalent FHEQ credits	6
Study Hours	60 hours which comprise of 28 directed learning and 32 independent learning/assessment hours

MODULE DESCRIPTION

Module Aims	This module is an introduction to digital tools and generative artificial intelligence, focusing on their practical use in academic and professional settings. Students will learn to use essential productivity tools to manage their workflows and information. The module provides a foundational understanding of generative AI and its key

	models, such as ChatGPT and DALL-E, equipping students to create new content. Through practical exercises and discussions of ethical issues, this module aims to develop students' skills to use these technologies in their future work while thinking critically about their impact.
Teaching Arrangement	The module will be delivered through examples, exercises, case studies, discussions, and a project and oral presentation.
Learning Outcomes	By the end of this module, students should be able to: 1. Describe the different types of digital tools, including those used for productivity and content creation. 2. Apply digital tools to complete a given task within a business context. 3. Identify and explain the key risks and challenges associated with using digital tools, including generative AI.
Competency Goals *(Knowledge, expertise and interpersonal skills)*	PGE_U_CG05 - Innovate to adapt to its environment
	PGE_U_CG07 - Improve performance through digitalisation
	PGE_U_CG06 - Evolve in a globalised world
Alignment with Programme Learning Goals	PGE_U_CG05_LO04 - Develop decision-making support tools
	PGE_U_CG01_LO01 - Identify opportunities, analyse situations, co-create solutions and achieve collective performance

SESSION TOPICS / MODULE SCHEDULE

(Please note, a session/sequence may be more than one scheduled class)

Session 1: Digital Tools and Digital Ethics
Content:
- General introduction of the module and objectives
- Overview of digital productivity tools (Google Workspace, Notion, Microsoft 365)
- Organisation and collaboration in digital environments
- Digital security, GDPR, data sovereignty
- Guided debate: "Can we trust digital tools?"

References:
- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics*, *Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
- European Commission (2024) *AI Act enters into force*, *European Commission*. Available at: https://commission.europa.eu/news-and-media/news/ai-act-enters-force-2024-08-01_en.
- Strubell, E., Ganesh, A. and McCallum, A. (2019) *Energy and policy considerations for deep learning in NLP*, *Cornell University*. Available at: https://arxiv.org/abs/1906.02243.

Session 2: Understanding AI and Generative AI

Content:
- Key concepts: machine learning, deep learning, generative AI
- Presentation of models: GPT, DALLE-E, Midjourney, etc.
- How the modules work (language, image, audio)
- Introduction to human-centred AI
- Multi-sectional case studies (health, education, marketing, etc.)

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- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics, Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
- European Commission (2024) *AI Act enters into force, European Commission*. Available at: https://commission.europa.eu/news-and-media/news/ai-act-enters-force-2024-08-01_en.
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Session 3: Content Creation with Generative AI

Content:
- Hands-on workshops with ChatGPT, DALL-E, Midjourney, Descript
- Creation of texts, visuals, and videos for academic and professional cases
- Ethics (bias, hallucinations, misinformation, plagiarism)
- Intellectual property and generative models

References:
- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics, Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
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Session 4: Integration of AI in Professional Practices

Content:
- Task automation (Zapier, Notion AI, AI in CRM/ERP)
- Introduction to prompt engineering
- Ethical design of AI interactions
- Responsible AI approach: accountability, transparency, explainability

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- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics, Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
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Session 5: AI and the Environment – Carbon Footprint and Sustainability

Content:
- Key figures on the ecological impact of digital technology and AI
- Notions: Green IT, digital sobriety, eco-design
- Comparison: ecological cost of the cloud, local computing, LLMs
- Workshops: assessing the carbon footprint of AI use

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- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics*, *Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
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Session 6: Governance and Regulation of AI

Content:
- Detailed presentation of the European AI Act
- Types of risks: unacceptable, high, limited, minimal
- GDPR, ethics by design, auditability
- Case study: classifying an AI system according to the AI Act

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- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics*, *Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
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Session 7: Group Project Design

Content:
- Launch of projects (e.g. AI assistant, AI campaign, smart portfolio)
- Technical, ethical, and environmental specifications
- Coaching for each group by the lecturer
- Preparation of presentation materials

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- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
- Müller, V.C. (2025) *Ethics of artificial intelligence and robotics*, *Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
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Session 8: Defences and Prospective Synthesis

Content:
- Oral presentation of the projects by groups

- Collective feedback and cross-criticism
- Synthesis of the concepts covered throughout the module
- Final discussion: is the future of AI desirable?

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- Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
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- Strubell, E., Ganesh, A. and McCallum, A. (2019) *Energy and policy considerations for deep learning in NLP*, *Cornell University*. Available at: https://arxiv.org/abs/1906.02243.

KEY TEXTS

1. Shneiderman, B. (2022) *Human-centered AI*. Oxford, United Kingdom: Oxford University Press.
2. Müller, V.C. (2025) *Ethics of artificial intelligence and robotics*, *Stanford Encyclopedia of Philosophy*. Available at: https://plato.stanford.edu/entries/ethics-ai/.
3. European Commission (2024) *AI Act enters into force*, *European Commission*. Available at: https://commission.europa.eu/news-and-media/news/ai-act-enters-force-2024-08-01_en.
4. Strubell, E., Ganesh, A. and McCallum, A. (2019) *Energy and policy considerations for deep learning in NLP*, *Cornell University*. Available at: https://arxiv.org/abs/1906.02243.

SUPPLEMENTARY TEXTS

1. N/A

MODES OF ASSESSMENT

Continuous Assessment (40%)	Group project
Final Exam (60%)	Closed book written exam

MODULE DESIGN TEAM

- Author: *Youssef Tliche*
- Reviewer: *David Oparah*
- External Reviewer: *Andreia Areal*

Last reviewed: 11/09/2025