

ENGAGE.EU Winter School *AI and Societal Challenges*

Academic programme

Academic coordinator	Professor Laurent Perrussel, UT Capitole
Lecturers	Moncef Garouani, Associate Professor, UT Capitole Dan-Richard Knudsen, Associate Professor, NHH Professor Xavier Vilasís Cardona, URL
Language of instruction	English
Course level	Bachelor's level (minimum 60 ECTS completed)
ECTS	3

Contents

Large Language Models: Understanding, Prompting, and Responsible Human-Centered Use
Moncef Garouani, Associate Professor, Toulouse Capitole University
Artificial Intelligence has become a transformative force in society, influencing education, business, healthcare, public policy, and everyday life. Large Language Models (LLMs) such as ChatGPT have made AI accessible to millions of users, yet understanding how these systems work and how to use them responsibly remains a major societal challenge. This course provides an accessible introduction to data-driven AI, progressing from the foundations of Machine Learning to Generative AI and Large Language Models. Students will discover the principles behind data-driven AI systems, learn how LLMs generate content, and develop practical prompting skills to effectively interact with AI assistants. Particular attention will be given to the societal implications of Generative AI, including misinformation, bias, privacy, and regulatory challenges. Through interactive activities and a multidisciplinary student challenge, participants will acquire both technical understanding and critical thinking skills necessary for the responsible use of AI technologies.

AI, Management Control and Organisational Adaptation: Managing Societal Challenges in the Age of Intelligent Systems
Dan-Richard Knudsen, Associate Professor, Norwegian School of Economics
Artificial Intelligence (AI) is transforming how organisations make decisions, govern activities, and respond to current complex societal challenges. As AI systems become embedded in the management control systems (MCS) in organisations, traditional approaches to management, accountability, and governance are being reconfigured. This course introduces students to the opportunities and challenges arising from AI-driven decision-making, examining how systems influence MCS, organisational adaptation, transparency, and societal outcomes. Drawing perspectives from management control and information systems, the course explores how organisations balance data-driven recommendations with human judgment, accountability, and

ethical responsibility. It explores how organisations balance the perceived need of rapid AI-adoption while ensuring sufficient control. Students will analyse and interactively discuss real-world cases of AI implementation and investigate how organisations redesign management systems to operate in environments characterised by uncertainty, swift technological change, and growing societal expectations. This equips the students with conceptual tools to understand the consequences of organisational AI-adoption.

Social aspects of AI: Impact, Fairness, Governance, and Beyond

Professor Xavier Vilasís Cardona, Ramon Lull University

This course explores the profound societal, philosophical, and structural shifts driven by Artificial Intelligence. Tailored for an interdisciplinary cohort of upper-level bachelor students in Social Sciences and AI, the module unpacks how automated systems redefine human agency, knowledge, and power. Students will critically analyse the roots of algorithmic bias and the mathematical trade-offs of technical fairness. Moving from theory to practice, the course examines how AI transforms organisational workflows, decision-making structures, and institutional governance. Finally, it navigates the evolving landscape of digital ethics and hard regulations, such as the EU AI Act. Through interactive lectures and a collaborative case-study challenge, students from diverse academic backgrounds will develop the conceptual toolkits and actionable methodologies required to critically audit, govern, and shape socially responsible AI systems in an increasingly automated world.

Additional information

Format

- Blended intensive programme (BIP)
- Online kick-off session: tbd
- On-campus programme: 15-19 February, 2027