

MBS Summer School 2025, Module 1: Artificial Intelligence in Business

Content:

Part 1: Knowledge Input

- Introduction to the fundamental ideas of AI and its disruptive potential
- The different types of machine learning as foundational concepts of AI
- Sources of data for machine learning within and outside of organizations
- Tools and Techniques for applying AI to solve business problems
- Simple coding and prompting of specific AI models for non-programmers (e.g., Generative AI)
- The societal, ethical, and legal implications of applying AI in business

Part 2: Team Work

- Examination of a real-world business problem
- Investigation of possible ways and types of AI to apply for solving the business problem
- Development of a detailed AI solution to the business problem in a team

Part 3: Final Presentation

- Competitive pitch presentation of the suggested solution and discussion of the results

Learning outcomes:

Artificial intelligence (AI) is rapidly emerging as the most important and transformative digital technology of our time. Recent advances (e.g., Large Language Models) have led to a rapid proliferation of new approaches that are changing the competitive landscape for companies in almost all industries. Hence, it is important for future managers to understand this technology.

At the end of this module students will therefore have basic knowledge of the foundations of AI and its strategic implications for businesses. They understand the different types of machine learning as fundamental concepts of AI (e.g., deep learning, neural networks). They are able to develop strategies to leverage AI for value creation in business settings and apply related tools and techniques. Students are aware of the limitations, pitfalls and potential countermeasures when using AI. They are also able to discuss the societal, ethical, and legal implications of using AI in business.

In this course, students will be grouped into heterogeneous teams of 3-6 students. Within these teams, they will learn to develop their own strategy to solve a real-world business problem leveraging AI. The final outcomes will compete against the other's teams solutions in a pitch to the stakeholders of the problem.

Prerequisites:	A basic understanding of organizational processes and information systems in firms.
Contact hours:	30
ECTS:	3
Form of assessment:	Presentation of AI strategy and implementation plan (100 %)
Duration of module:	June 30, 2025 – July 04, 2025
Lecturer:	Prof. Dr. Dennis Steininger, Giuliano Ciavarrella, M.Sc., Lena Erber, M.Sc.
Language:	English
Range of application:	Graduate and advanced undergraduate students