

Subject:

Artificial Intelligence in Business

ECTS Credits	3
Course Status	Elective
Final Assessment	Project
Prerequisites	None

Field of Study:

MANAGEMENT / ECONOMICS / ACCOUNTING AND FINANCE

Study Profile	General Academic
Level and Form of Study	SL
Semester	Winter / summer
Language of Instruction	English

Instructor:

Department	Department of Economics and Food Economy
Coordinator	

Learning Outcomes:

Code of Learning Outcome Component	Description	Reference to (Code)	
		Directional Effect	Academic Discipline
KNOWLEDGE – knows and understands:			
AIB_W1	– Basic concepts and classifications of artificial intelligence tools used in business.		SL
AIB_W2	– Potential and actual applications of AI in market analysis, finance, agriculture, marketing, and management.		
AIB_W3	– Main ethical and regulatory challenges related to the use of AI in business activities.		
SKILLS – can:			
AIB_U1	– Develop a simple concept for implementing an AI tool in a selected area of business, taking into account functional, organizational, and ethical aspects.		SL
AIB_U2	– Evaluate and verify the usefulness of different AI agents for specific business purposes.		
AIB_U3	– Collaborate within a project team to develop and present a proposal for the application of AI in business.		
SOCIAL COMPETENCES – is ready to:			
AIB_K1	– Make a critical assessment of the possibilities and limitations of artificial intelligence in the context of professional ethics.		SL
AIB_K2	– Independently develop skills in modern technologies based on artificial intelligence.		

Course Content:

Exercises	30	godz.
Course Topics	1. Introduction to AI in Business Basics of AI with a focus on generative models (ChatGPT). Applications in answering business questions, idea generation, and task automation.	

	<ol style="list-style-type: none"> 2. Fundamentals and the Role of Data Explanation of AI system types (rule-based, machine learning, NLP), the importance of data in training models, and its impact on result quality. 3. AI Ethics and Regulation Discussion on responsible AI use, plagiarism prevention, legal compliance, and ethical and academic standards. 4. Popular AI Applications Hands-on testing of tools like Canva, Grammarly, and ChatGPT. Evaluation of their features and use cases in education and business. 5. AI in Economics Application of AI in market trend analysis, economic forecasting, competitor research, and automation of SWOT/PESTLE analysis. 6. AI in Management and HR Creating professional CVs, automating recruitment processes, analyzing candidate competencies, and simulating interviews. 7. AI in Agriculture and Agribusiness Use of AI for environmental data analysis, yield prediction, farm management, and supply chain optimization. 8. AI in Business Operations and Financial Forecasting AI for task automation (via for example Zapier), customer support (via for example Tidio), and financial forecasting (via for example QuickBooks AI). 9. AI in Market Analysis and Competitor Research Using tools like Crayon and Delve AI to analyze competitors, track market trends, and build customer profiles. 10. AI in Marketing and Consumer Opinion Research AI for sentiment analysis, content creation, campaign personalization, and survey design and analysis. 11. AI in Business Project Planning and Presentation Creating business plans and presentations using tools like Upmetrics, LivePlan, or Beautiful.ai. Generating ideas, forecasts, and investor pitch decks. 12. Student Presentations Final presentations of AI-supported business plans, including strategies, tools, financial forecasts, and market analysis.
Learning Outcomes	AIB_W1, AIB_W2, AIB_W3 AIB_U1, AIB_U2, AIB_U3 AIB_K1, AIB_K2
Assessment Methods, Rules, and Criteria	<p>Methods of Learning Outcome Verification: During computer lab sessions, students collaboratively work through topics related to the use of artificial intelligence tools in business - from testing popular AI applications to specific applications in areas such as economics, management, agribusiness, and marketing. At the end of the course, student teams prepare a final project that expands on a chosen topic from sections 5 to 11. The project should be based on a real business problem and include:</p> <ul style="list-style-type: none"> – a brief description of the problem, – an overview of available AI tools that could be applied, – a documentation of an attempt to apply these tools in practice (using own or publicly available data), – final conclusions.

	<p>Projects are presented by teams during the final session, and their evaluation constitutes the basis for passing the course.</p> <p>Team Project (70%):</p> <ul style="list-style-type: none"> – evaluation of AI tool selection, – analysis quality, – result interpretation, – report structure and clarity, – and adherence to academic ethics. <p>Project Presentation (30%):</p> <ul style="list-style-type: none"> – clarity of communication, – use of AI-supported visuals, – teamwork, – and explanation of project rationale. <p>Passing Criteria: At least 50% total from both components and project submitted on time.</p> <p>Grading Scale:</p> <table> <tr> <td>90–100%</td><td>5.0 (Very Good)</td></tr> <tr> <td>80–89.9%</td><td>4.5 (Good Plus)</td></tr> <tr> <td>70–79.9%</td><td>4.0 (Good)</td></tr> <tr> <td>60–69.9%</td><td>3.5 (Satisfactory Plus)</td></tr> <tr> <td>50–59.9%</td><td>3.0 (Satisfactory)</td></tr> <tr> <td><50%</td><td>2.0 (Fail)</td></tr> </table>	90–100%	5.0 (Very Good)	80–89.9%	4.5 (Good Plus)	70–79.9%	4.0 (Good)	60–69.9%	3.5 (Satisfactory Plus)	50–59.9%	3.0 (Satisfactory)	<50%	2.0 (Fail)
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50–59.9%	3.0 (Satisfactory)												
<50%	2.0 (Fail)												

Literature:

Primary	<p>Books:</p> <ol style="list-style-type: none"> 1. "Artificial Intelligence: A Modern Approach" by Stuart Russell, Peter Norvig, Pearson education, 2025 2. "Intelligent Automation: Learn how to harness Artificial Intelligence to boost business & make our world more human" by Pascal Bornet, Ian Barkin, Jochen Wirtz, Independent publication, 2020 3. "The Business Case for AI: A Leader's Guide to AI Strategies, Best Practices & Real-World Applications" by Kavita Ganesan, Opinions Analytics Publishing, 2022
Supplementary	<ol style="list-style-type: none"> 1. Harvard Business Review Articles (2025): <ul style="list-style-type: none"> – "How People Are Really Using Gen AI" by Marc Zao-Sanders – "Agentic AI Is Already Changing the Workforce" by J. Stave, R. Kurt, J. Winsor 2. Report: McKinsey & Company „Superagency in the workplace: Empowering people to unlock AI's full potential" https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/superagency-in-the-workplace-empowering-people-to-unlock-ais-full-potential-at-work

Structure of Learning

Outcomes:

Academic Discipline – SL	3	ECTS*
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Student Workload:

Contact hours with instructor	35	hrs.	1.4	ECTS*
In it:	lectures	hrs.		
	exercises/seminars	30	hrs.	
	consultations	3	hrs.	

	research participation	hrs.		
	mandatory internships and traineeships	hrs.		
	participation in the final assessment	2 hrs.		
	Distance learning classes	hrs.		
	Independent work	40 hrs.	1.6	ECTS*

)* - Given with an accuracy of 0.1 ECTS, where 1 ECTS = 25–30 hours of coursework.