GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Applications of AI methods in enterprise, PG_00045376
Field of study	Data Engineering

Date of commencement of studies	October 2023	Academic year of realisation of subject	2026/2027
Education level	first-cycle studies	Subject group	Optional subject group Subject group related to scientific research in the field of study
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	4	Language of instruction	English
Semester of study	7	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	exam

Conducting unit	Department of Informatics In Management -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology

Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Jakub Chabik
	Teachers	dr inż. Jakub Chabik

Lesson types	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	30.0	0.0	0.0	45
	E-learning hours included: 0.0						

Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
	Number of study hours	45	4.0	51.0	100

Subject objectives	The aim of the course is to acquaint students with the possible applications of artificial intelligence in the enterprise

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_K03] Knows how to cooperate or work in a project team and take managerial or executive functions.	Student is able to collaborate or work in the project team and takes managerial or executive.	[SK1] Assessment of group work skills
	[K6_U01] programs in procedural, object, functional and logic programming languages, codes programs at the processor instruction level, runs and tests programs.	The student is able to create technological and business solutions using artificial intelligence	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools
	[K6_W06] Knows the criteria and concepts of artificial intelligence, understands the operation of algorithms for intelligent computing, the concept of descriptive logic, combinatorial optimization algorithms, methods of construction, analysis and evaluation of algorithms, including discrete ones and problems of resolving conflicts in non-algorithmic decision making.	Student potrafi analizować i oceniać procesy biznesowe pod kątem możliwości zastosowania sztucznej inteligencji, stosując metody i techniki analityczne do projektowania oraz oceny rozwiązań wspierających podejmowanie decyzji w przedsiębiorstwie.	[SW3] Assessment of knowledge contained in written work and projects

Subject contents	Course content – lecture 1.What is AI? Why is it important to apply AI in enterprise? 2.AI state of the art and its prospects 3.Delivering value. Business models and their applicability with AI. 4.Data sources. Importance of data quality. Data bias and limitations of data. 5.AI governance and roadmapping. 6.Financing innovative startups. 7.Building smart, innovative enterprise.
	Course content – laboratory Building concept of innovative, AI-driven enterprise Desinging business model canvas Designing architecture Prepareing business case Public presentation and defense

Prerequisites and co-requisites	No requirements

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Reports	60.0%	50.0%
Exam	60.0%	50.0%

Recommended reading

Basic literature	Marek Tłuczek, "Jak sztuczna inteligencja zmieni twoje życie", Helion2024 Feliks Kurp, "Sztuczna inteligencja od podstaw", Helion 2024 Yuval Noah Harari, "Nexus. A Brief History of Information Networks from the Stone Age to AI", Sandycove 2024
Supplementary literature	Ethan Mollick, "Co-Intelligence: Living and Working with AI", Ebury 2024 Aleksandra Przegalińska, Tanilla Trantioro "Przenikanie umysłów", Wyd. Campus AI
eResources addresses	

Example issues/ example questions/ tasks being completed	Proposing an AI-based business model - Creating a financial plan - Developing competitive advantages - Defining data management - Final presentation

Practical activites within the subject	Not applicable

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