GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	LOGIC, PG_00061387
Field of study	Engineering Management

Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study Humanistic-social subject group
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	1	ECTS credits	4.0
Learning profile	general academic profile	Assessment form	assessment

Conducting unit	Department of Social Sciences and Philosophy -> Faculty of Management and Economics

Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Andrzej Lisak
	Teachers	dr hab. Andrzej Lisak

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	16.0	8.0	0.0	0.0	0.0	24
	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	24	5.0	71.0	100

Subject objectives	Formulates solutions to complex problems using basic laws and techniques of logic

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_U04] formulates logical solutions to complex or unstructured problems	selects optimal decision variants using basic logical operations: classifying, defining and reasoning	[SU3] Assessment of ability to use knowledge gained from the subject
	[K6_W02] demonstrates advanced preparation in the methods and techniques of formulating and solving problems	analyzes any theorems in terms of their logical and argumentative correctness	[SW1] Assessment of factual knowledge

Subject contents	What is logic? Logic and language Functions of language. logic and meaning Name and concept Definitions and division Propositions and judgments and their forms Sentential calculus Rules of sentential calculus Predicate calculus Basic notions of set theory Syllogistic logic. Deductive, reductive and inductive reasoning The meaning of logic for solving scientific questions Logic in economics. Logic and rethoric Discussions of chosen logical dilemmas and solving problems
Prerequisites and co-requisites	

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Presenting chosen subjects	100.0%	20.0%
	Homeworks	60.0%	15.0%
	Oral exam	60.0%	65.0%

Recommended reading	Basic literature	K. Ajdukiewicz, Zarys logiki. PZWS, Warszawa, 1957 L. Borkowski, Elementy logiki formalnej. PWN, Warszawa, 1974 B. Stanosz, Wprowadzenie do logiki formalnej. PWN, Warszawa, 1985 Z. Ziembiński, Logika praktyczna. PWN, Warszawa, 1998

	Supplementary literature	Mała encyklopedia logiki, Wrocław. Warszawa, Kraków, Ossolineum, 1970 Ch. Perelman, Retoryka a sztuka argumentacji. PWN, Warszawa, 2003
	eResources addresses	Adresy na platformie eNauczanie: Logika (Z I NSTAC) - Moodle ID: 34098 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=34098
Example issues/ example questions/ tasks being completed	Examine given sentences and give its conclusion	
Work placement	Not applicable	