

**Subject card**

<b>Subject name and code</b>	An introduction to mathematics, PG_00143528						
<b>Field of study</b>	Informatics						
<b>Date of commencement of studies</b>	October 2024	<b>Academic year of realisation of subject</b>			2024/2025		
<b>Education level</b>	undergraduate studies	<b>Subject group</b>			Obligatory subject group in the field of study		
<b>Mode of study</b>	full-time studies	<b>Mode of delivery</b>			at the university		
<b>Year of study</b>	1	<b>Language of instruction</b>			Polish		
<b>Semester of study</b>	1	<b>ECTS credits</b>			5.0		
<b>Learning profile</b>	academic	<b>Assessment form</b>					
<b>Conducting unit</b>							
<b>Name and surname of lecturer (lecturers)</b>	<b>Subject supervisor</b>		dr hab. Jerzy Topp				
	<b>Teachers</b>		dr inż. Monika Rosicka dr hab. Jerzy Topp				
<b>Lesson types</b>	<b>Lesson type</b>	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	<b>Number of study hours</b>	30.0	30.0	0.0	0.0	0.0	60
	E-learning hours included: 0.0						
<b>Learning activity and number of study hours</b>	<b>Learning activity</b>	Participation in didactic classes included in study plan		Participation in consultation hours		Self-study	SUM
	<b>Number of study hours</b>	60		0.0		65.0	125
<b>Subject objectives</b>	non applicable						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[INFL3_W02] has knowledge of discrete mathematics and probabilistic methods and statistics	The student has knowledge of the basic concepts of propositional calculus, set theory, describes the basic properties of the set of natural numbers, functions and relations	[SW4] test/exam - oral or written
	[INFL3_U01] can apply mathematical knowledge to formulate, analyze and solve problems related to computer science	After completing the Introduction to Mathematics course, a student is able to:  apply mathematical knowledge (the language of logic and set theory, properties of functions, inductive reasoning, properties of relations) to formulate, analyze and solve problems related to computer science	[SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written [SU8] observation of student's independent or team work
	[INFL3_U03] can design and analyze algorithms for their correctness and computational complexity using appropriate algorithmic techniques and data structures	design and analyze algorithms in terms of their correctness and computational complexity, using the language of set theory, relations and inductive reasoning	[SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written [SU8] observation of student's independent or team work
[INFL3_U02] can precisely formulate questions to deepen one's understanding of a given topic or find missing elements of reasoning	precisely formulate questions to deepen your understanding of the basics of mathematics and their connections with the basics of computer science; can conduct and analyze evidence and find missing elements of reasoning	[SU1] oral statement/conversation/discussion [SU4] test/exam - oral or written [SU8] observation of student's independent or team work	
Subject contents	non applicable		
Prerequisites and co-requisites	Knowledge of mathematics at secondary school level.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	homework and tests	0.0%	50.0%
	exam	0.0%	50.0%
Recommended reading	Basic literature	non applicable	
	Supplementary literature	non applicable	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		

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