1.	Field of study	Computer Science
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2021/2022 (summer term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

Module: Monographic lecture - Combinatorial machine learning

Module code: W4-INA-S2-20-2-WMwJA

1. Number of the ECTS credits: 2

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
M_001	The student can recognise analogies in the knowledge presented in the lecture and the concepts employed out in other courses.	K_U01 K_W02	4 2
M_002	The student knows the decision rules, decision trees and reducts, and can provide examples of their application to solving real problems.	K_U07 K_W09	4 3
M_003	The student can present an algorithm for construction decision rules, decision trees, and tests.	K_W02 K_W04	3 1
M_004	The student can present the problem of construction rules, trees, and tests as an optimisation problem.	K_U08 K_W02	2 2

3. Module description

Description	The aim is to acquaint students with decision trees, decision rules and tests as tools for discovering knowledge from data. Subsequently, the students will analyse them, study relationships between these objects, and show examples of their applications.
Prerequisites	

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
W_001	Test	The test verifies the knowledge presented during the lectures.	

			M_001, M_002, M_003, M_004
W_002	Completing assignments	The students present, in the specified term, results of completed assignments as verification of skills.	M_003, M_004

5. Forms of teaching

code	form of teaching			required hours of student's own work		assessment of the learning outcomes of the module
	type	description (including teaching methods)	number of hours	description	number of hours	
Z_001	lecture	The lectures have a verbal form using audio-visual media and other written teaching aids, emphasising issues more difficult to understand. The students are encouraged by asking them questions and giving them simple tasks regarding the considered topic.	30	The students get acquainted with the lectures, analyse the discussed content for the links between the studied objects, and complete the tasks related to the lectures.	30	W_001, W_002