University of Silesia in Katowice

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: Data warehouses

Module code: W4-INA-S2-20-F-HDiAM

1. Number of the ECTS credits: 4

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
M_001	The student knows analytical data processing.	K_W09	4
M_002	The student knows the architecture of data warehouses.	K_W02	3
M_003	The student can use tools to prepare data that will feed the warehouse and knows the ETL process.	K_U01 K_W09	4 3
M_004	The student uses tools enabling to perform advanced data analysis, including OLAP.	K_U09 K_W09	4 3
M_005	The student uses specialised tools enabling to create advanced data reports and visualisations.	K_U09	3

3. Module description

Description	The aim of the module is to familiarize students with issues related to architecture of data warehouses, data processing using OLAP technology and advanced reporting tools.
Prerequisites	

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
W_001	Test	Knowledge verification is based on the content presented during lectures. It consists of questions regarding considered issues.	M_001, M_002, M_004

W_002	Raport presentation for laboratory tasks	Student prepare a presentation in specified deadline as a verification of skills acquired during implementation of laboratory tasks.	M_001, M_003, M_004, M_005

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 are presented in verbal form with the use of audiovisual media and other written educational aids. The students are encouraged by asking them questions and giving basic tasks regarding the considered topics.	15	The students familiarise with the subject of lectures by investigating considered topics.	5	W_001
Z_002	laboratory classes	The classes prepare the students for completing laboratory tasks, emphasising the method and the sequence of operations.	30	The students study for the laboratory tasks, complete them individually and prepare the reports.	70	W_002