University of Silesia in Katowice

1.	Field of study	Computer Science
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2020/2021 (summer term), 2021/2022 (winter term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	part-time

Module: Cloud computing technologies

Module code: W4-IN-N2-20-F-TCO

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	Student has basic skills for implementation of cloud services.	K_U09	1
		K_W02	1
M_002	Student has knowledge of cloud computing service models.	K_W03	1
M_003	Student has ability to implement the concepts in real world applications of cloud computing.	K_U09	1

3. Module description	
Description	The module objective is to give students a knowledge, which is necessary to create scalable and reliable applications in cloud environments. The presented topics are related to architecture of cloud computing platforms, models of cloud services, virtualization, data security in the cloud, dedicated programming methods, hardware solutions, and migration of existing applications to cloud computing. Students will gain the abilities to manage the cloud services.
Prerequisites	

4. Assessment of the learning outcomes of the module			
code	type	description	learning outcomes of the module
W_001	Final test	Two-hour test with closed and open questions.	M_001, M_002
W_002	Reports	Presentation of the reports and discussion of the developed projects.	M_001, M_003

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	Lectures supported by multimedia presentations and e-learning	15	Self-study of literature and materials presented during lectures	25	W_001
Z_002	laboratory classes	Assignments in the form of design projects with use of computational cloud services	30	Solving project assignments and preparing presentations	50	W_002