1.	**Field of study**	**Computer Science**
2.	Faculty	Faculty of Science and Technology
3.	Academic year of entry	2019/2020 (summer term)
4.	Level of qualifications/degree	second-cycle studies
5.	Degree profile	general academic
6.	Mode of study	full-time

Module: Security of information systems

Module code: 08-IN-ISI-S2-BSI

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)
BSI -K_1	Student is able to work in a co-ordinated group	K_U02	1
BSI -K_2	Student can specify tasks to perform for data protection	K_K01 K_K03	2 3
BSI -U_1	Student can distinguish various aspects of IT system security.	K_U01 K_U03	2 3
BSI -U_2	Student is able to acquire the information necessary to achieve the right level of protection	K_U01 K_U10	1 4
BSI -U_3	Student can choose solutions for a specific application	K_U08 K_U11 K_U15	2 1 2
BSI -U_4	Student can prepare and present the presentation of the operation of many modern cryptographic algorithms	K_U04 K_U08 K_U12 K_U18	1 1 1 2
BSI W_1	Student knows the basic terminology in the security of information systems	K_W20 K_W21	3 2
BSI W_10	Student knows the mechanisms of the shortcut function.	K_W02	5

BSI W_11	Student knows practical methods of protecting graphic and sound data.	K_W02 K_W14	2 3
BSI W_12	Student learns examples of access control attacks	K_W20	5
BSI W_2	Student knows professional software authentication methods.	K_W10 K_W20	2 3
BSI W_3	Student knows other authentication methods.	K_W11 K_W12 K_W14	1 2 2
BSI W_4	Student knows the issues related to the implementation of authorizations.	K_W10 K_W20	2 3
BSI W_5	Student knows classical cryptography.	K_W02 K_W19	3 2
BSI W_6	Student knows the characteristics of contemporary cryptography.	K_W02 K_W03 K_W20	2 2 1
BSI W_7	Student knows the mechanisms of cryptographic algorithms	K_W02 K_W03 K_W20	2 2 1
BSI W_8	Student knows the issues of digital signatures.	K_W03 K_W13 K_W14	1 2 2
BSI W_9	Student learns the basics of cryptanalysis	K_W02 K_W03 K_W18	2 2 1

3. Module description	
Description	The module provides practical insights into data protection issues
Prerequisites	

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
BSI _w_1	Lecture test	This test verifies your knowledge and, above all, its understanding.	BSI W_1, BSI W_10, BSI W_11, BSI W_12, BSI W_2, BSI W_3, BSI W_4, BSI W_5,

			BSI W_6, BSI W_7, BSI W_8, BSI W_9
BSI _w_2	Laboratory test	Assessment is the result of partial assessments obtained during the semester from relevant tests.	BSI -K_1, BSI -K_2, BSI -U_1, BSI -U_2, BSI -U_3, BSI -U_4
BSI _w_3	Individual project	Design tasks summarize the effects of partial work.	BSI -U_3, BSI -U_4, BSI W_3, BSI W_7, BSI W_9

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	
BSI _fs_1	lecture	It is a presentation of the newest solutions in the field of data security with use of audiovisual aids	10	Student has to analyze the presented ideas, verify their utility and use suggestions.	10	BSI _w_1
BSI _fs_2	laboratory classes	This is a realization of practical solutions by student groups and individually	20	The student carries out design and implementation work in class and at home. More complex tasks are performed in groups. Individual or team work, discussion of complex problems related to the topics discussed at the lecture	20	BSI _w_2, BSI _w_3