1.	Field of study	Computer Science
2.	Academic year of entry	2016/2017 (summer term)
3.	Level of qualifications/degree	second-cycle studies
4.	Degree profile	general academic
5.	Mode of study	full-time

Module: Security of Information Systems

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

1. Number of the ECTS credits: 3

2. Learning outcomes of the module

code	description	learning outcomes of the programme	level of competence (scale 1-5)
BSI -K_1	Can work in a team with tasks coordination	K_2_A_I_K01 K_2_A_I_K03	2 3
BSI -K_2	Is able to define tasks for realizing data security	K_2_A_I_K05 K_2_A_I_K06	3 2
BSI -U_1	Student can differentiate various aspects of computer system security.	K_2_A_I_U01 K_2_A_I_U03	2 3
BSI -U_2	Is able to gather information necessary to realize appropriate level of protection	K_2_A_I_U01 K_2_A_I_U10	1 4
BSI -U_3	Can select solutions for a definite usage.	K_2_A_I_U08 K_2_A_I_U12 K_2_A_I_U16	2 1 2
BSI -U_4	Is able to prepare and give a presentation of various modern cryptographic algorithms operation	K_2_A_I_U04 K_2_A_I_U08 K_2_A_I_U13 K_2_A_I_U19	1 1 1 2
BSI W_1	Knows basic terminology in the field of information systems security	K_2_A_I_W20 K_2_A_I_W21	3 2

BSI W_10	Knows mechanisms of hash function.	K_2_A_I_W02	5
BSI W_11	Knows practical methods of graphic and audio data protection.	K_2_A_I_W02 K_2_A_I_W14	2 3
BSI W_12	Knows example attacks connected with access control	K_2_A_I_W20	5
BSI W_2	Learns professional software methods of authentication.	K_2_A_I_W10 K_2_A_I_W20	2 3
BSI W_3	Learns other methods of authentication.	K_2_A_I_W11 K_2_A_I_W12 K_2_A_I_W14	1 2 2
BSI W_4	Knows issues connected with implementation of authorization.	K_2_A_I_W10 K_2_A_I_W20	2 3
BSI W_5	Knows classical cryptography.	K_2_A_I_W02 K_2_A_I_W19	3 2
BSI W_6	Learns characteristics of modern cryptography.	K_2_A_I_W02 K_2_A_I_W03 K_2_A_I_W20	2 2 1
BSI W_7	Learns mechanisms of cryptographic algorithms operation	K_2_A_I_W02 K_2_A_I_W03 K_2_A_I_W20	2 2 1
BSI W_8	Knows the issues of digital signatures.	K_2_A_I_W03 K_2_A_I_W13 K_2_A_I_W14	1 2 2
BSI W_9	Learns basics of cryptanalysis	K_2_A_I_W02 K_2_A_I_W03 K_2_A_I_W18	2 2 1

3. Module description	
Description	Module enables practical familiarization with issues connected with data protection
Prerequisites	

4. Assessment of the learning outcomes of the module

code	type	description	learning outcomes of the module
BSI _w_1	Lecture credit	The credit verifies possessed knowledge, emphasizing its understanding. It is indicated by tests.	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 class credit	The grade is a result of partial grades obtained in the course of semester from appropriate tests	BSI -K_1, BSI -K_2, BSI -U_1, BSI -U_2, BSI -U_3, BSI -U_4
BSI _w_3	Project works	Project tasks sum up the effects of partial works	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	15	Student has to analyze the presented ideas, verify their utility and use suggestions.	10	BSI _w_1
BSI _fs_2	laboratory classes	It is the realization of practical solutions by groups of students and individually	30	Student realizes project and implementation works during classes and at home. More complex tasks are performed in teams. Individual or team work, discussion over complex problems connected with issues presented during a lecture	35	BSI _w_2, BSI _w_3