



Subject card

Subject name and code	Information Security Management, PG_00048285						
Field of study	Informatics						
Date of commencement of studies	February 2023	Academic year of realisation of subject			2023/2024		
Education level	second-cycle studies	Subject group			Optional subject group Subject group related to scientific research in the field of study		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	2	Language of instruction			Polish		
Semester of study	3	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Software Engineering -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. inż. Rafał Leszczyna					
	Teachers	dr hab. inż. Rafał Leszczyna dr inż. Andrzej Wardziński					
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	15.0	0.0	30
	E-learning hours included: 0.0						
Learning activity and number of study hours	Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours		Self-study		SUM
	Number of study hours	30	6.0		39.0		75
Subject objectives	The objective of this module is to develop understanding and to acquire knowledge related to information security and privacy issues from the perspective of system analyst						
Learning outcomes	Course outcome	Subject outcome			Method of verification		
	[K7_W43] Knows and understands, to an increased extent, the formal, technical and social aspects of the operation of complex information systems in the information society and in the global information infrastructure.	Student understands the nature of information security threats and privacy threats, understands the interrelationships between trust and security, usability and the tradeoffs between safety, security and privacy			[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[K7_W41] Knows and understands, to an increased extent, the standards, production methods, life cycle and development trends of software as well as information systems and applications.	Student understands the concept of security lifecycle and the need of process based approach to security assurance. He/she also has knowledge about the objectives and scope of main security related standards, in particular the standards of ISO 27000 and IEC 62443 series.			[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[K7_U02] can perform tasks related to the field of study as well as formulate and solve problems applying recent knowledge of physics and other areas of science	Student understands basic concepts related to security risk analysis and protection against security threats and can use these concepts while analysing a concrete IT system			[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools [SU2] Assessment of ability to analyse information		
Subject contents	1. Information assets and their importance 2. Information and information security 3. Trust and security 4. Usable security 5. Information assets classification and labelling 6. Security threats and vulnerabilities 7. Selected security risk management techniques 8. Information Security Management System (ISMS) 9. Selected security risk analysis techniques - attack trees 10. ISO/IEC 27001:2013 – scope, requirements and compliance assessment 11. Privacy management 12. Security vs Safety vs Privacy 13. Development of secure software 14. Security of Industrial Automation and Control Systems (IACS)						
Prerequisites and co-requisites	Previous participation in the module <i>Requirements Engineering</i>						

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Project	45.0%	45.0%
	Written exam	45.0%	45.0%
	Activity/presence	10.0%	10.0%
Recommended reading	Basic literature	1. Standard ISO/IEC 27001(http://minf.vub.ac.be/marc/medinf/iso-27001-2013.pdf) 2. Standardy IEC/ISA 62443 (http://isa99.isa.org/ISA99%20Wiki/WP_List.aspx) 3. Ross Anderson, Security Engineering, 2-nd edition, Wiley 2008 (online: http://www.cl.cam.ac.uk/~rja14/book.htm)	
	Supplementary literature	1. Standard NIST SP 800-53 (http://nvlpubs.nist.gov/nistpubs/SpecialPublications/NIST.SP.800-53r4.pdf)	
	eResources addresses	Adresy na platformie eNauczanie: Zarządzanie bezpieczeństwem informacji - specjalność ISI -2024 - Moodle ID: 35301 https://enauzanie.pg.edu.pl/moodle/course/view.php?id=35301	
Example issues/ example questions/ tasks being completed			
Work placement	Not applicable		