

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Security management in information systems		Code 1010331471010334974
Field of study Information Engineering	Profile of study (general academic, practical) (brak)	Year /Semester 4 / 7
Elective path/specialty Safety of Computer Systems	Subject offered in: polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 2 Classes: - Laboratory: - Project/seminars: 1		No. of credits 5
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art technical sciences		ECTS distribution (number and %) 75 100%
Responsible for subject / lecturer: dr inż. Anna Grocholewska-Czuryło email: anna.grocholewska-czurylo@put.poznan.pl tel. 61-665 35 31 Wydział Elektryczny ul. Piotrowo 3A 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	K_W01: Has basic knowledge in the area of mathematics covering algebra, analysis, logic, probabilistic and elements of discrete and applied mathematics. K_W15: Has structured knowledge based on a theoretical foundation in the area of teleinformatics, protocols and services in telecommunication networks.
2	Skills	K_U01: Is able to search for information in literature, databases and other sources; is able to integrate acquired information, interpret it, draw conclusions and formulate and argument opinions. K_U02: Is able to work alone or in a team; is able to estimate the time needed to complete the assigned project; is able to develop and carry out a schedule ensuring that deadlines are met.
3	Social competencies	K_K02: Is aware of the importance and understands non-technical aspects and effects of computer science engineer performance and associated responsibility for the decisions taken
Assumptions and objectives of the course: As part of the course students will be familiarized with teleinformatics security management system design in a modern company, so carrying out a risk analysis and proposing suitable security measures and incident prevention based on norms and standards.		
Study outcomes and reference to the educational results for a field of study		
Knowledge: 1. Has structured knowledge based on a theoretical foundation in the area of data protection and information systems security. - [-] 2. Have basic knowledge of administering IT systems - [-]		
Skills: 1. Is able to apply appropriate data protection methods and ensure security of the information system. - [-] 2. Is able to prepare documentation on engineering task realization and is able to prepare a paper describing the results of the realized task. - [-]		
Social competencies: 1. Is aware of the importance and understands non-technical aspects and effects of computer science engineer performance and associated responsibility for the decisions taken. - [-]		
Assessment methods of study outcomes		
Written or/and oral examination based on lecture,		

Course description		
<p>Threats classification of network, cryptographic and operational threats. Risk analysis and management. Defining and discussing methods of reaching and maintaining a complex level of confidentiality, integrity, accessibility, accountability, authenticity and reliability, based on norms and project guidelines, and operation of such systems. Designing integrated security management systems based on the knowledge of preceding courses on protection mechanisms. During the course students will design components of security management system.</p>		
<p>Basic bibliography:</p> <p>1. 1. Bezpieczeństwo informacji i usług w nowoczesnej instytucji i firmie, Białas A., WNT, Warszawa 2006</p> <p>2. 2. Teoria bezpieczeństwa systemów komputerowych, Pieprzyk J., Hardjono T., Seberry J., Helion, 2003</p>		
<p>Additional bibliography:</p> <p>1. 11. Firewalle i bezpieczeństwo w sieci (Firewalls and Internet Security), Chestwick W. R. , Bellovin S.M. , Rubin A.D., Helion, Gliwice, 2003</p>		
Result of average student's workload		
Activity		Time (working hours)
Student's workload		
Source of workload	hours	ECTS
Total workload	115	5
Contact hours	35	1
Practical activities	40	2