

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Formation the safety of articles		Code 1011101241011124338
Field of study Safety Engineering - Full-time studies - First-	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 4
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 15 Classes: 30 Laboratory: - Project/seminars: 30		No. of credits 7
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 Technical sciences		ECTS distribution (number and %) 100 7% 100 7%
Responsible for subject / lecturer: dr inż. Marcin Butlewski email: marcin.butlewski@put.poznan.pl tel. 605883000 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Knowledge of production technique
2	Skills	Group discussion
3	Social competencies	Possesses the ability to search for sources of knowledge
Assumptions and objectives of the course: The main objective of the course is to acquaint the students with the problems connected with developing products safety. A student gets acquainted with the means of identification, criteria and categories of hazardous products		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. has orderly, theoretically supported general knowledge of technical security - [K1A_W08] 2. knows the latest development trends and best practices in technology and normalization - [K1A_W15] 3. has basic knowledge of products, equipment, objects and technical systems? lifecycle - [K1A_W19] 4. knows some basic notions connected with reliability and security in relation to maintaining technical appliances, objects and technical systems - [K1A_W20] 5. knows basic methods, techniques and materials used in technology, including the ones designed for improving quality - - [K1A_W23]		
Skills:		

<p>1. can make use of analytic, simulation and experimental methods to formulate and solve engineering problems - [K1A_U01]</p> <p>2. can apply various techniques in order to communicate in occupational environment and other environments - [K1A_U02]</p> <p>3. . can create, both in English and Polish language, a well- documented report of problems within Security Engineering - [K1A_U03]</p> <p>4. can prepare and give oral presentation relating to detailed issues within the realm of Security Engineering in Polish and other foreign language - [K1A_U04]</p> <p>5. has self-study ability and comprehends it - [K1A_U05]</p> <p>6. can conduct a critical analysis of the ways in which technical solutions function and assess, by means of Security Engineering, the existing technical solutions, in particular machines, equipment, objects, systems, services and processes - [K1A_U13]</p> <p>7. can identify and formulate the specification of simple engineering tasks, that are of practical nature, typical of Security Engineering - [K1A_U14]</p> <p>8. . can, according to a given specification, design and operate simple equipment, object, system or a process, typical for Security Engineering, by means of appropriate methods, techniques and tools - [K1A_U16]</p>
<p>Social competencies:</p> <p>1. . understands the need and knows means how to self-study (first, second and third cycle studies, postgraduate studies, qualification courses)- improving professional, personal and social competence; can argument the need to learn for the whole life - [K1A_K01]</p> <p>2. Student is fully aware of the responsibility that he has taken for his own work and expresses readiness to comply with the rules of team work as well as responsibility for mutually realized and completed tasks - [K1A_K03]</p>

Assessment methods of study outcomes		
<p>Formative assessment: In regards to practicals, current check of the acquired knowledge and skills learnt during exercises- discussion, Regarding project work, presentation of the achieved results</p> <p>Collective assessment: In respect to practicals, average of the scores achieved during classes, Considering a project, presentation of the final project. Considering a lecture, test based exam during exam session</p>		
Course description		
<p>Definitions of products security. Applied security marks of various products and authorities responsible for their compliance. Features of hazardous products. Procedures which improve products security and issues dealing with imaging potential threats tat lead to dangerous situation. Tools that ensure safety of different product groups. Reliability and ways to reserve. Products security in terms of a project approach. Product security of particular stages of their existence. Institutions and authorities responsible for supervision over products security.</p>		
Basic bibliography:		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
1. lecture	15	
2. practicals	30	
3. project	30	
4. individual work	25	
Student's workload		
Source of workload	hours	ECTS
Total workload	140	7
Contact hours	75	4

Practical activities	50	2
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