

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Risk analysis		Code 1011101121011122936
Field of study Safety Engineering - Full-time studies - First-	Profile of study (general academic, practical) general academic	Year /Semester 1 / 2
Elective path/specialty -	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: 15 Classes: 30 Laboratory: - Project/seminars: -		No. of credits 4
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 100 4% 100 4%
Responsible for subject / lecturer: dr inż. Małgorzata Jasiulewicz-Kaczmarek dr inż. Hanna Gołaś Katedra Ergonomii i Inżynierii Jakości tel. 665 33 64 malgorzata.jasiulewicz-kaczmarek@put.poznan.pl hanna.golas@put.poznan.pl email: malgorzata.jasiulewicz-kaczmarek@put.poznan.pl tel. 616653364 Inżynierii Zarządzania Poznań, ul. Strzelecka 11		Responsible for subject / lecturer: dr inż. Roma Marczevska Kuźma email: roma.marczewska-kuzma@put.poznan.pl tel. 616653364 Inżynierii Zarządzania Poznań ul. Strzelecka 11
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Rudimentary knowledge of probability theory and technology fundamentals
2	Skills	Solving easy exercises in probability
3	Social competencies	Ability to work in a group
Assumptions and objectives of the course: Understanding of certain concepts such as: threat and risk, ability to identify and assess the criticality of events that exist in working environment.; ability to assess risk by means of quality and quantity methods (selection of an appropriate method)		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Knows risk assessment methods - [K1A_W09]		
Skills:		
1. When formulating and solving engineering tasks, a student can discern their systemic and non-technical aspects - [K1A_U10]		
2. Knows safety rules connected with work in an industrial environment - [K1A_U11]		
Social competencies:		
1. Understands the need to make progress, gain knowledge and acquire new skills - [K1A_K01]		
2. Understands the influence of engineering activity on an environment - [K1A_K02]		
Assessment methods of study outcomes		

Formative assessment: a) Classes: current/ongoing evaluation of the tasks b) Lectures: evaluations based on questions relating to the presented materials during the current and previous lectures Collective assessment: a) Classes: reports presentation (based on classes); b) Lectures: written test (4 open questions presented during the lecture; the final test pass equals at least 3.0)		
Course description		
Concepts of risk, misfortunes, initiating events, critical events. Classification of threats. Potential threats. Workplace accidents, failures. Threat assessment and inconveniences in a workplace, industry and services. Occupational risk, process risk, environmental risk. Heuristic methods of risk assessment. Risk estimation. Risk assessment by means of matrix, indicative and graphic methods. Delineating safety loss. Multidimensional risk assessment. Assessment of risk acceptability based on probabilistic methods.		
Basic bibliography:		
Additional bibliography:		
Result of average student's workload		
Activity	Time (working hours)	
1. lecture	15	
2. classes	30	
3. consultation with a lecturer	10	
Student's workload		
Source of workload	hours	ECTS
Total workload	55	4
Contact hours	40	2
Practical activities	30	2