

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Identification of threats and risk assessment</b>		Code <b>1011104241011123821</b>
Field of study <b>Safety Engineering - Part-time studies - First-</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>2 / 4</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time,part-time) <b>part-time</b>	
No. of hours Lecture: <b>8</b> Classes: <b>8</b> Laboratory: <b>-</b> Project/seminars: <b>8</b>		No. of credits <b>4</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b> Adam Górny email: adam.gorny@put.poznan.pl tel. 61 665 3407 Wydział Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		<b>Responsible for subject / lecturer:</b> - Joanna Sadłowska-Wrzesińska email: -joanna.sadlowska-wrzesinska@put.poznan.pl tel. -61 665 33 64 -Wydział Inżynierii Zarządzania -ul. Strzelecka 11, 60-965 Poznań
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Student knows the risks occurring in the working environment and the ways to identify them.
2	<b>Skills</b>	The student is able to apply in practice the methods of identification and risk assessment in the work environment.
3	<b>Social competencies</b>	The student is aware of the role and importance of risk assessment related to their work in order to ensure work safety.
<b>Assumptions and objectives of the course:</b> The student acquires skills to develop safe work performance and the evaluation of the risks in the working environment. Acquiring the skills to run risk assessment analysis of risk using statistical and computing methods.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Has systematized, theoretically supported general knowledge of threats, their consequences, risk and monitoring, identification and criticality assessment that are present in working environment - [K1A_U09]		
2. Knows the basic concepts related to the reliability and safety regarding exploitation of technical equipment, facilities and technical systems - [K1A_W20]		
3. Knows methods of risk assessment, threats modelling, actions that are taken in the face of threats and accidents, assessment methodology of accidents criticality, determining the cause of accidents in working environment and/or human life and health and safety costs - [K1A_W21]		
<b>Skills:</b>		

1. Can acquire, integrate, interpret data from literature, database or other properly matched sources, both in English or other foreign language accepted as an international language of communication within Safety Engineering, as well as to draw conclusions, formulate and justify opinions - [K1A\_U01]
2. Can acquire, integrate, interpret data from literature, database or other properly matched sources, both in English or other foreign language accepted as an international language of communication within Safety Engineering, as well as to draw conclusions, formulate and justify opinions - [K1A\_U03]
3. Has the self-study ability and comprehends it - [K1A\_U05]
4. Can conduct a critical analysis of the ways in which technical solutions function and assess, by means of Safety Engineering, the existing technical solutions, in particular machines, equipment, objects, systems, services and processes - [K1A\_U13]
5. Can assess the utility of routine methods and tools that are designed for solving simple engineering tasks of practical nature, characteristic to the safety engineering as well as choose and apply an appropriate method and tools and also use it effectively - [K1A\_U15]

**Social competencies:**

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]
2. 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]

**Assessment methods of study outcomes**

Formative assessment:

Classes: on the basis of assigned tasks

Projects: on the basis of work progress on a given project

Lectures: evaluations based on questions relating to the presented materials during the current and previous lectures

Collective assessment:

Classes: average of partial exercises; credits given for completing a report

Projects: evaluation of the project

Lectures: written test, where at least one answer is correct (scored 0 or 1), and written answers to open questions (answers are scored on a scale of 0 to 3); credits will be given after obtaining at least 51% of possible gained points.

**Course description**

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**Basic bibliography:**

1. Horst W. (red.), Ergonomia z elementami bezpieczeństwa pracy (Ergonomics with elements of occupational safety), Wydawnictwo Politechniki Poznańskiej, Poznań, 2006
2. Romanowska-Słomka I., Słomka A., Zarządzanie ryzykiem zawodowym (Managing occupational risk), Wydawnictwo TARBONUS, Tarnobrzeg, 2005
3. Karczewski J.T., System zarządzania bezpieczeństwem pracy (Occupational safety management systems), Wyd. ODDK, Gdańsk, 2000
4. Koradecka D. (red.), Bezpieczeństwo pracy i ergonomia (Occupational safety and ergonomics), t. I i II, Centralny Instytut Ochrony Pracy, Warszawa, 1997
5. Pietrzak L., Zarządzanie bezpieczeństwem pracy i ryzykiem (Managing occupational safety and risk), Centralny Instytut Ochrony Pracy, Warszawa, 2001
6. Smoliński D., Ocena ryzyka zawodowego (Occupational risk assessment), Wyd. ODDK, Gdańsk, 1999
7. Górny A., Zarządzanie ryzykiem zawodowym (Occupational risk management), Wydawnictwo Politechniki Poznańskiej, Poznań 2011

**Additional bibliography:**

1. Koradecka D. (red.), Nauka o pracy - bezpieczeństwo, higiena, ergonomia (About work- safety, hygiene, ergonomics), cz. 1 - 8, Centralny Instytut Ochrony Pracy, Warszawa, 2000

<b>Result of average student's workload</b>		
<b>Activity</b>	<b>Time (working hours)</b>	
1. Participation in lectures	8	
2. Participation in classes	8	
3. Participation in project classes	8	
4. Preparation for classes	20	
5. Preparation for written test (based on lectures)	15	
6. Preparation of a project	15	
7. Overview of an exam	2	
8. Preparation of reports (based on classes)	4	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	100	4
Contact hours	62	2
Practical activities	45	2