

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Ergonomic analysis of arduous work</b>		Code <b>1011102331011100209</b>
Field of study <b>Engineering Management - Full-time studies -</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>2 / 3</b>
Elective path/specialty <b>Quality Systems and Ergonomics</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>elective</b>
Cycle of study: <b>Second-cycle studies</b>	Form of study (full-time, part-time) <b>full-time</b>	
No. of hours Lecture: <b>15</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>15</b>		No. of credits <b>3</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 <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>100 3%</b> <b>100 3%</b>
<b>Responsible for subject / lecturer:</b>  dr inż. W. Grzybowski email: wieslaw.grzybowski@put.poznan.pl tel. 61 665 3377 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 basic issues related to the evolution of safety and ergonomics
2	<b>Skills</b>	Student has the skills connected with the evaluation work
3	<b>Social competencies</b>	Student is aware of the importance of evaluation and development of working conditions to ensure the safety of employees
<b>Assumptions and objectives of the course:</b> Introduction to methods of identifying and evaluating disruptive factors in the working environment and the rules of safety at work in shaping a comprehensive approach		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Student has knowledge about the subject of science context in relation to management sciences - [K2A_W01]		
2. Student has an expanded knowledge about the human role in shaping occupational safety and ergonomics - [K2A_W06]		
<b>Skills:</b>		
1. Student can correctly interpret and explain the phenomenon of social, legal, economic, and relationships between social phenomena - [K2A_U1]		
2. Student can use theoretical knowledge to describe and analyze the causes and processes and social phenomena and can formulate their own opinions and choose critical data and analysis - [K2A_U2]		
3. Student can forecast and model complex phenomena involving the social processes from different areas of social life (using advanced methods for the assessment of working conditions - [K2A_U4]		
4. Student has ability to use knowledge related to the assessment of the conditions of work - [K2A_U6]		
5. Student has ability to independently propose solutions to a particular problem with the assessment of working conditions - [K2A_U7]		
<b>Social competencies:</b>		

1. Student can see the cause and effect in achieving its objectives and rank importance of alternative or competing tasks - [K2A\_K03]
2. Student can contribute to the preparation of substantive projects related to the evolution of working conditions to ensure the safety of employees - [K2A\_K05]
3. Student is aware of interdisciplinary knowledge and skills needed to solve complex problems related to the analysis and evaluation of working conditions - [K2A\_K06]

<b>Assessment methods of study outcomes</b>		
<p>Forming Rating:                      in the range of lectures based on answers to questions about the material discussed in previous lectures.                      for projects: on the basis of an assessment of the progress of tasks and project presentation</p> <p>Rating summary:                      in the range of lectures: written exam with individual content presented in the lecture.                      for projects: completion of the project on the basis of the prepared written studies on a given topic.</p>		
<b>Course description</b>		
<p>The classification of dangerous, harmful and disruptive means in the workplace. Characteristics of ergonomic methods for the analysis of arduous work. Methodology of comprehensive ergonomic assessment of production systems in the industry. Comparison and synthesis of heterogeneous ergonomic assessments in a comprehensive ergonomic assessment methods. Ergonomic management systems. Ergonomic attestation of machinery and equipment.</p>		
<b>Basic bibliography:</b>		
<b>Additional bibliography:</b>		
<b>Result of average student's workload</b>		
Activity	Time (working hours)	
1. Participation in lectures	15	
2. Participation in the exercises	15	
3. Consultations	10	
4. Self-realization of project tasks	27	
5. Preparing to pass a written exam	15	
6. Final Examination	3	
<b>Student's workload</b>		
Source of workload	hours	ECTS
Total workload	85	3
Contact hours	43	1
Practical activities	15	1