GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Supervising safety in the company, PG_00059208		
Field of study	Mechanical Engineering		
Date of commencement of studies	February 2024	Academic year of realisation of subject	2024/2025
Education level	second-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Institute of Manufacturing and Materials Technology -> Faculty of Mechanical Engineering and Ship Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Sławomir Szymański	
	Teachers		

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	30.0	0.0	0.0	0.0	0.0	30

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	30	0.0	0.0	30

Subject objectives

Acquiring knowledge in the field of threats and methods of safety assessment in the workplace.
The ability to determine the degree of risk at the workplace..
The ability to draw up a safety management plan in the workplace

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K7_K02] correctly identifies professional problems and is able to define the priorities and hierarchy using knowledge in solving problems	The student is able to assess the threats at the workplace. Student is able to assess the degree of risk on the workplace. The student knows how apply legal norms to creating jobs.	[SK2] Assessment of progress of work
[K7_K71] is able to explain the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	The student is able to apply knowledge in the field of employee protection against hazards at the workplace	[SK2] Assessment of progress of work
[K7_W11] possesses organized knowledge useful in understanding ex-technical conditioning connected with performing the profession of an engineer and taking it into consideration in engineering practice; possesses well-established knowledge within the range of intellectual property, management and organization of manufacturing processes, including the management and life-cycle of a product	The student has knowledge of safety and legal standards on risk assessment and security at the post The student knows how develop a safety plan in the enterprise industrial.	[SW1] Assessment of factual knowledge
[K7_K03] understands the importance of the necessity of solving dilemmas connected with practicing a profession and providing safe working conditions in manufacturing processes and in operation of machines and devices	The student can do it in the event of an accident implement a protection system employee against the threat.	[SK5] Assessment of ability to solve problems that arise in practice

<table>
<tr><td>Subject contents</td><td>Functional safety and work safety.
Human error and its consequences in technology and industry. Rules of maintaining safety at work.
Methods of occupational risk assessment in industry: methods according to PN-N-18000: three-stage and five-stage,
Risk Score method, accident risk assessment procedures

Development of a security plan in an industrial enterprise.
Management functions in relation to safety in the enterprise: planning, organizing,
motivating and controlling.
Safety management and quality management in an enterprise. Building a management system work safety in the enterprise.
Organizational methods of increasing safety in the enterprise.
IT techniques supporting the process of risk assessment, analysis and documentation.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>test</td><td>60.0%</td><td>100.0%</td></tr>
</table></td></tr>
<tr><td>Recommended reading</td><td><table>
<tr><td>Basic literature</td><td>1. Lis T., Nowacki K.: Zarządzanie bezpieczeństwem w zakładzie przemysłowym, Wydawnictwo Politechniki Gliwickiej, Gliwice 2005
2. Karczewski J.T.: Systemy zarządzania bezpieczeństwem pracy. ODDK Gdańsk 2001</td></tr>
<tr><td>Supplementary literature</td><td>1. Kosiński R., Grabowski A. "Zastosowanie sztucznych komórkowych sieci neuronowych w inteligentnych
systemach bezpieczeństwa", CiOP-PIB 2008
2. Strawiński T. "Zapewnienie bezpieczeństwa użytkowania maszyn metodami sterowania", CiOP-PIB 2008
3. Korzeniowski L F. Podstawy nauk o bezpieczeństwie. Zarządzanie bezpieczeństwem, Wyd. Difin, Warszawa 2012</td></tr>
<tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:</td></tr>
</table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>1. Determine occupational risks using the Risk score method for a selected workplace (e.g. milling machine operator)
2. List the dangers at the selected workplace (e.g. welder's position)
3. List and characterize the basic methods of risk assessment in the position.
4. List and characterize the sources of threats in a selected industry or in a selected process.
5. Characterize the levels and areas of systemic safety management for the selected one position or process.</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
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