



## Subject card

Subject name and code	Supervising safety in the company, PG_00059208						
Field of study	Management and Production Engineering						
Date of commencement of studies	February 2023		Academic year of realisation of subject		2023/2024		
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		dr inż. Sławomir Szymański				
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] is aware of the importance and understanding of non-technical aspects and effects of engineering activities, including its impact on the environment, and the related responsibility for decisions made demonstrates knowledge of actions to reduce risk and anticipate the social impact of engineering and manufacturing activities		
	[K7_U01] can obtain information from literature, databases and others sources, also in English or another foreign language recognized as the language of international communication in a given engineering discipline; is able to integrate the obtained information, interpret it, as well as draw conclusions and formulate and justify opinions.		
	[K7_W05] has the knowledge necessary to understand social, economic, legal and other non-technical conditions of activity engineering, including copyright.		
	[K7_W01] knows and understands to a greater extent selected issues in the field of management and quality sciences and mechanical engineering, their location in the field of social sciences and engineering and technical sciences, as well as relationships with related disciplines, and sees the possibility of applying the knowledge in practice.		
	[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
Subject contents	<p>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</p> <p>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.</p>		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	test	60.0%	100.0%
Recommended reading	Basic literature	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	
	Supplementary literature	1. Kosiński R., Grabowski A. "Zastosowanie sztucznych komórkowych sieci neuronowych w inteligentnych systemach bezpieczeństwa", CiOP-PIB 2008 2. Strawiński T. "Zapewnienie bezpieczeństwa użytkownika maszyn metodami sterowania", CiOP-PIB 2008 3. Korzeniowski L.F. Podstawy nauk o bezpieczeństwie. Zarządzanie bezpieczeństwem, Wyd. Difin, Warszawa 2012	
	eResources addresses	Adresy na platformie eNauczanie:	

Example issues/ example questions/ tasks being completed	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.
Work placement	Not applicable