



Subject card

Subject name and code	, PG_00059513						
Field of study	Mechanical Engineering						
Date of commencement of studies	February 2022	Academic year of realisation of subject	2022/2023				
Education level	second-cycle studies	Subject group					
Mode of study	Part-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	20.0	0.0	0.0	0.0	0.0	20
	E-learning hours included: 0.0						
Nadzorowanie bezpieczeństwa w przedsiębiorstwie - Moodle ID: 25659 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=25659							
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	20	0.0	0.0	20		
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_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 the employee against the threat.	[SK5] Assessment of ability to solve problems that arise in practice
	[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_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_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 assess the risks at the workplace. Student can assess the degree of risk workplace. The student can apply legal standards to creating jobs.	[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 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	<p>1. Lis T., Nowacki K.: Zarządzanie bezpieczeństwem w zakładzie przemysłowym, Wydawnictwo Politechniki Gliwickiej, Gliwice 20052. Karczewski J.T.: Systemy zarządzania bezpieczeństwem pracy. ODDK Gdańsk 2001</p>	

	Supplementary literature	<p>1. Kosiński R., Grabowski A. "Zastosowanie sztucznych komórkowych sieci neuronowych w inteligentnych systemach bezpieczeństwa", CiOP-PIB 20082. Strawiński T. "Zapewnienie bezpieczeństwa użytkownika maszyn metodami sterowania", CiOP-PIB 20083. Korzeniowski L F. Podstawy nauk o bezpieczeństwie. Zarządzanie bezpieczeństwem, Wyd. Difin, Warszawa 2012</p>
	eResources addresses	
Example issues/ example questions/ tasks being completed	<p>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.</p>	
Work placement	Not applicable	