



Subject card

Subject name and code	Safety Regulations and Ergonomics, PG_00064112						
Field of study	Mechanical and Medical Engineering						
Date of commencement of studies	October 2024	Academic year of realisation of subject				2024/2025	
Education level	first-cycle studies	Subject group				Obligatory subject group in the field of study Subject group related to scientific research in the field of study	
Mode of study	Full-time studies	Mode of delivery				at the university	
Year of study	1	Language of instruction				Polish	
Semester of study	1	ECTS credits				1.0	
Learning profile	general academic profile	Assessment form				assessment	
Conducting unit	Department of Machine Design and Vehicles -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Ryszard Woźniak				
	Teachers		dr inż. Sławomir Sommer				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	15.0	0.0	0.0	0.0	0.0	15
	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	15		1.0		9.0	25
Subject objectives	Acquisition of basic knowledge in the area of work safety and ergonomics BPiE.						
Learning outcomes	Course outcome		Subject outcome			Method of verification	
	[K6_K02] is aware of importance of professional dealing and to fulfill ethics obligations, he/she understands other (nontechnical) abilities of mechanical engineering professional, their influence on the society and security of environment, he/she is aware of importance of social cooperation		The student explains the concepts ergonomics. It describes its goals and application area. Defines man-machine system - surroundings. Designs the environment human work taking into account design principles. Applies different human models. Presents safety and reliability of the human-system machine - environment. To introduce informativeness of machines.			[SK5] Assessment of ability to solve problems that arise in practice	
	[K6_U05] has skills to work in industry and follow the rules of safety regulations, he/she is able to analyze basic economics problems to delineate the direction of solution by using engineering methods		The student explains the concepts ergonomics. It describes its goals and application area. Defines man-machine system - surroundings. Designs the environment human work taking into account design principles. Applies different human models. Presents safety and reliability of the human-system machine - environment. To introduce informativeness of machines.			[SU3] Assessment of ability to use knowledge gained from the subject [SU1] Assessment of task fulfilment	

Subject contents	Definitions of ergonomics, their purposes and application area. Description of man - machine - environment configuration. Conception of balanced development. Environmental management system. Model of man and it's characteristics. Man capabilities versus industrial processes. Environment of working man - circle conditions. Designs principles of environment of working man. Safety and reliable man - machine - environment configuration. Information acquisition of machines.		
Prerequisites and co-requisites	Knowledge of Physics (High School level).		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	No requirements	50.0%	100.0%
Recommended reading	Basic literature	1. Koradecka D.: "Bezpieczeństwo pracy i ergonomia", tom I i II. CIOP, Warszawa, 1997. 2. Hempel L.: "Człowiek i maszyna - techniczny model współdziałania", materiały własne, 1984. 3. Wykowska M.: "Ergonomia", Wyd Akademii Górniczo-Hutniczej w Krakowie, Kraków, 1994.	
	Supplementary literature	No requirements	
	eResources addresses	Adresy na platformie eNauczanie: Bezpieczeństwo pracy i ergonomia - W-15/Ć-0/L-0/P-0, WIMiO, IMM, I st., sem. 01, stacjonarne, (PG_00064112), semestr zimowy 2024/2025 - Moodle ID: 39002 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=39002	
Example issues/ example questions/ tasks being completed	Biomechanical analysis of the process and the workplace. The physical capacity of the human body. System Diagram man - technical object.		
Work placement	Not applicable		

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