



Subject card

Subject name and code	Occupational Health and Safety Ergonomics, PG_00041987						
Field of study	Power 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			English		
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. Ryszard Woźniak				
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	3.0		7.0		25
Subject objectives	Gaining basic knowledge of ergonomics and occupational health and safety.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_K02] is able to work in a group taking different roles in it, can think and act in an entrepreneurial way, is aware of responsibility for their own work and responsibility for teamwork		The student presents the safety and reliability of the man-machine environment system.		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_K03] is able to react in emergency situations, threats to health and life when using energy devices, is aware of the impact of engineering activities on the environment		The student designs the human work environment taking into account the principles of design.		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_U03] has the preparation necessary to work in an industrial environment, applies the principles of occupational health and safety, can perform diagnostics of the regulation system of a simple energy facility		The student uses different human models.		[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		
	End test		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: Occupational Health and Safety Ergonomics - L-15/C-0/L-0/P-0, ENERGY TECHNOLOGIES, se 01, (PG_00041987), winter semester, 2024/2025 - Moodle ID: 38997 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=38997
Example issues/ example questions/ tasks being completed	1) definitins of ergonomics 2) human models	
Work placement	Not applicable	