



## Subject card

Subject name and code	Safety regulations and ergonomics, PG_00055735						
Field of study	Mechanical and Medical Engineering						
Date of commencement of studies	October 2022		Academic year of realisation of subject		2022/2023		
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] he/she is aware of importance of professional dealing and to fulfill ethics obligations, he/she understands other (non-technical) 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 of ergonomics. It describes its goals and area of application. It is defined by the human - machine - environment system. Designs the human work environment taking into account the design principles. He uses various human models.He presents the safety and reliability of the human - machine - environment system. He presents the information ability of machines.	[SK2] Assessment of progress of work
	[K6_W11] he/she is aware of social and juridical rules and general rules of creation and developing of individual entrepreneurship, business and quality management	The student explains the concepts of ergonomics. It describes its goals and area of application. It is defined by the human - machine - environment system. Designs the human work environment taking into account the design principles. He uses various human models. He presents the safety and reliability of the human - machine - environment system. He presents the information ability of machines.	[SW2] Assessment of knowledge contained in presentation
	[K6_U06] he/she 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 of ergonomics. It describes its goals and area of application. It is defined by the human - machine - environment system. Designs the human work environment taking into account the design principles. He uses various human models. He presents the safety and reliability of the human - machine - environment system. He presents the information ability of machines.	[SU1] Assessment of task fulfilment
	[K6_U12] he/she applies basic life-saving activities in the scope of lavage service	The student explains the concepts of ergonomics. It describes its goals and area of application. It is defined by the human - machine - environment system. Designs the human work environment taking into account the design principles. He uses various human models. He presents the safety and reliability of the human - machine - environment system. He presents the information ability of machines.	[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:	
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		