



Subject card

Subject name and code	Occupational Health and Safety Ergonomics, PG_00041987						
Field of study	Power Engineering, Power Engineering, Power Engineering, Power Engineering, Power Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject		2020/2021		
Education level	first-cycle studies		Subject group		Obligatory subject group in the field of study Humanistic-social subject group		
Mode of study	Full-time studies		Mode of delivery		e-learning		
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: 15.0						
	Adresy na platformie eNauczanie:						
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_K71] is conscious of the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment		The student explains the concepts of ergonomics. It describes its goals and area of application. Defines the human - machine - environment system. Designs a human work environment taking into account design principles. Applies different human models. Presents the safety and reliability of the human-machine-environment system. Student presents information on machines.		[SK5] Assessment of ability to solve problems that arise in practice [SK2] Assessment of progress of work		
	[K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems in a social environment		The student explains the concepts of ergonomics. It describes its goals and area of application. Defines the human - machine - environment system. Designs a human work environment taking into account design principles. Applies different human models. Presents the safety and reliability of the human-machine-environment system. Student presents information on machines.		[SU4] Assessment of ability to use methods and tools [SU3] Assessment of ability to use knowledge gained from the subject		
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		
Example issues/ example questions/ tasks being completed	1) definitins of ergonomics 2) human models		
Work placement	Not applicable		