



Subject card

Subject name and code	Occupational Safety and Ergonomics, PG_00072236						
Field of study	Mechanical Engineering						
Date of commencement of studies	October 2026		Academic year of realisation of subject		2026/2027		
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		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	Faculty of Mechanical Engineering and Ship Technology -> Faculties of Gdańsk University of Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Sławomir Sommer				
	Teachers		dr inż. Sławomir Sommer				
Lesson types	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		5.0		5.0	25
Subject objectives	Gaining basic knowledge of ergonomics and occupational health and safety.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U04] performs critical analysis and evaluation of technical solutions and compares design solutions taking into account functional, safety, environmental, economic, and legal criteria		The student critically analyses and evaluates technical solutions and compares design solutions, taking into account functional, safety, environmental, economic and legal criteria.		[SU1] Assessment of task fulfilment		
	[K6_W05] knows and understands the technical and non-technical determinants of engineering activities, including organizational, economic, environmental, social and legal aspects, such as management, entrepreneurship, intellectual property protection, occupational safety, and sustainable development		The student knows and understands the technical and non-technical conditions of engineering activities, particularly their organisational, economic, environmental, social and legal aspects, as well as those related to occupational safety and sustainable development.		[SW3] Assessment of knowledge contained in written work and projects [SW2] Assessment of knowledge contained in presentation		
	[K6_K02] understands the non-technical aspects of a mechanical engineer's activity, including its social consequences and environmental impact; is aware of the responsibility associated with decisions made in engineering practice		The student understands the non-technical aspects of mechanical engineering activities, particularly their social consequences and environmental impact, and is aware of the responsibility associated with engineering decisions.		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_W71] has general knowledge in the fields of humanities, social sciences, economics, or law, including their fundamentals and applications		The student has basic knowledge of social, economic and legal sciences and understands how it can be applied in engineering practice.		[SW1] Assessment of factual knowledge		

Subject contents	Course content – lecture 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		
Practical activites within the subject	Not applicable		

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