



Subject card

Subject name and code	Technical Ergonomics, PG_00068417						
Field of study	Engineering Management						
Date of commencement of studies	October 2025		Academic year of realisation of subject		2026/2027		
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	Part-time studies		Mode of delivery		at the university		
Year of study	2		Language of instruction		Polish		
Semester of study	4		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department Of Informatics In Management -> Faculty Of Management And Economics -> Wydział Politechniki Gdańskiej						
Name and surname of lecturer (lecturers)	Subject supervisor						
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	16.0	0.0	0.0	8.0	0.0	24
	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	24		4.0		72.0	100
Subject objectives	Assesses work processes in the context of meeting ergonomic requirements and proposes recommendations to minimize the perceived irregularities						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K6_U03] collaborates with others in solving interdisciplinary problems.		is able to collaborate in a team with representatives of various fields in designing and implementing ergonomic technical solutions, integrating engineering, organizational, and social knowledge		[SU5] Assessment of ability to present the results of task [SU4] Assessment of ability to use methods and tools		
	[K6_W07] knows and understands advanced methods for analyzing the management process in technical, legal, economic, financial, and social contexts.		has knowledge of methods for evaluating and analyzing ergonomic solutions in work process management, taking into account their technical, economic, and social implications		[SW3] Assessment of knowledge contained in written work and projects		
	[K6_K02] is prepared to make competent and ethical decisions to create and maintain economic, social, and environmental values, demonstrating entrepreneurial actions.		can communicate the importance of ergonomic technical solutions clearly to various stakeholders, considering their impact on efficiency, employee well-being, and corporate social responsibility		[SK4] Assessment of communication skills, including language correctness [SK3] Assessment of ability to organize work		

Subject contents	Ergonomics - introduction. Ergonomic system: man - technology environment Analysis of physical load at workstations Reduction of physical loads at workstations Workspace design Spatial requirements for typical workplaces Ergonomics and organization of computer-aided work Mental strain at workstations - shaping the content of work Methods of assessing the mental burden at workstations Analysis of the factors of the material working environment (1). Analysis of lighting conditions and electromagnetic field at workstations Analysis of the factors of the material working environment (2). Analysis of acoustic conditions, vibrations, microclimate and air pollution at workplaces Methods of occupational risk assessment at workstations Systemic management of occupational safety in the enterprise Employer's obligations to ensure safe working conditions Economic aspects of security management in an enterprise Macroergonomics - shaping work organization and employer-employee relations		
Prerequisites and co-requisites			
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Exam	60.0%	50.0%
	Project	60.0%	50.0%
Recommended reading	Basic literature	<ul style="list-style-type: none">Górska E. (2007). Ergonomia - projektowanie, diagnoza, eksperymenty. Wyd. Politechnika Warszawska, Warszawa.Wojcisz M. (2018). Ergonomia - ocena stanowisk pracy. Wydawnictwo: Politechnika Poznańska, 2018	
	Supplementary literature	Wykowska M. (2010). Ergonomia. Wyd. AGH, Kraków	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	Methods of assessing physical load at workplaces Principles of shaping software ergonomics during an IT project Principles of proper organization of work with screen monitors		
Work placement	Not applicable		

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