



Subject card

Subject name and code	TECHNICAL ERGONOMICS, PG_00061343						
Field of study	Engineering Management						
Date of commencement of studies	October 2023		Academic year of realisation of subject		2025/2026		
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	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		exam		
Conducting unit	Department of Informatics in Management -> Faculty of Management and Economics						
Name and surname of lecturer (lecturers)	Subject supervisor		prof. dr hab. inż. Marcin Sikorski				
	Teachers		prof. dr hab. inż. Marcin Sikorski				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	30.0	0.0	0.0	15.0	0.0	45
	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	45		7.0		48.0	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_K02] makes competent and ethical decisions to create and maintain economic, social and environmental values		modifies the working environment by proposing recommendations to minimize the diagnosed ergonomic irregularities		[SK5] Assessment of ability to solve problems that arise in practice		
	[K6_W07] analyzes in an advanced way management processes in the technical, legal, economic, financial and social context		analyzes work processes focusing on the ergonomic context in all its aspects		[SW1] Assessment of factual knowledge		
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	Górska E. (2007): Ergonomia - projektowanie, diagnoza, eksperymenty. Wyd. Politechnika Warszawska, Warszawa Olszewski J.(1993): Podstawy ergonomii i fizjologii pracy. Akademia Ekonomiczna, Poznań Lewandowski J.(1995): Ergonomia. MARCUS, Łódź
	Supplementary literature	Wykowska M. (2010). Ergonomia. Wyd. AGH, Kraków Kamieńska-Żyła M.(1996): Ergonomia stanowiska komputerowego. Wyd. AGH Kraków
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Methods of assessing physical load at workstations 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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