GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	TECHNICAL ERGONOMICS, PG_00061409		
Field of study	Engineering Management		
Date of commencement of studies	October 2024	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	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 -> Wydziały Politechniki Gdańskiej		
Name and surname of lecturer (lecturers)	Subject supervisor	prof. dr hab. inż. Marcin Sikorski	
	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	7.0	69.0	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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