



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

The organization of the work of people with disabilities

### Course

Field of study

Safety Engineering

Area of study (specialization)

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

II/3

Profile of study

general academic

Course offered in

polish

Requirements

elective

### Number of hours

Lecture

10

Laboratory classes

12

Other (e.g. online)

Tutorials

10

Projects/seminars

### Number of credit points

6

### Lecturers

Responsible for the course/lecturer:

dr hab. Eng. Marcin Butlewski

Responsible for the course/lecturer:

dr inż. Jarosław Gabryelski

Department of Ergonomics Applications

Phone: 605 883 000

Room: 361, Jacka Rychlewskiego 2, Poznań

marcin.butlewski@put.poznan.pl

### Prerequisites

The student has basic knowledge in the field of ergonomics and work organisation

### Course objective

The aim of the course is to learn the principles of organization of people with disabilities

### Course-related learning outcomes

Knowledge

knows the issues of the life cycle of products, devices, facilities, systems and technical systems dedicated to special user populations such as people with disabilities

knows development trends and best practices in security engineering in the field of universal design



is able to correctly select the sources and information derived from them, assessing, critically analyzing and synthesizing this information regarding disability

can see in engineering tasks system and non-technical aspects as well as socio-technical, organizational and economic aspects regarding the employability of people with different levels of fitness

is able to prepare the necessary resources to work in an industrial environment and knows the safety rules associated with this work and is able to force their application in practice

#### Skills

can present, using properly selected means, a problem that falls within the framework of security engineering

is able to identify changes in requirements, standards, regulations and technical progress and the reality of the labor market, and based on them determine the need to supplement knowledge

#### Social competences

is able to see the cause-and-effect relationships in achieving the set goals and rank the importance of alternative or competitive tasks related to spending funds to improve jobs

is aware of the recognition of the importance of knowledge in solving problems in the field of security engineering and continuous improvement in the field of knowledge about job creation

is aware of the responsibility for own work and readiness to comply with the principles of teamwork and taking responsibility for jointly implemented tasks in the field of work organization

#### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment of individual exercises and subsequent stages of projects presented to the teacher

Summative assessment - lecture test and project defense

#### Programme content

Disability in considering various sciences

The problem of efficiency and models for assessing functionality and efficiency

Classifications of disabilities and their use in practice

Design-oriented design approaches for people with disabilities - Universal Design, Immersive Design - inclusive,

Methods of counteracting disability problems at workplaces

The cohort approach and its practical use

Programs promoting the employment of persons with disabilities in Poland



Programs promoting the employment of people with disabilities in the world

Computer disability simulation models

During the exercises, practical examples of specific issues will be discussed

In the project, students will write the company's policy regarding the employment of people with disabilities and create tools that allow the company to solve problems in adjusting positions and structure. Projects take place based on the real problems of companies in the open and protected labor market as well as entities employing people with disabilities, such as foundations or WTZ - occupational therapy workshops.

### Teaching methods

Lecture, discussion. Classical problem method, Case method, Discussions

### Bibliography

Basic

Butlewski M., Projektowanie ergonomiczne wobec dynamiki deficytu zasobów ludzkich / Marcin Butlewski (WIZ) / red. Krystyna Bubacz - Poznań, Polska : Wydawnictwo Politechniki Poznańskiej, 2018 - 255 s.

Garbat, M. (2012). Zatrudnianie i rehabilitacja zawodowa osób z nie-pełnosprawnością w Europie. Oficyna Wydawnicza Uniwersytetu Zielonogórskiego.

Górska, E. (2002). Projektowanie stanowisk pracy dla osób niepełno-sprawnych. Warszawa: Oficyna Wydawnicza Politechniki Warszawskiej.

Jasiak, A., & Swereda, D. (2009). Ergonomia osób niepełnosprawnych. Wydawnictwo Politechniki Poznańskiej

Grabarek, I., & Choromański, W. (2014). Wybrane zagadnienia projektowania innowacyjnych środków transportu dostosowanych do osób o ograniczonej sprawności ruchowej. Zeszyty Naukowe. Transport/Politechnika Śląska.

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Additional

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Mikołajewska, E., & Mikołajewski, D. (2013). Możliwości automatyzacji i robotyzacji otoczenia osoby niepełnosprawnej. Niepełnosprawność-zagadnienia, problemy, rozwiązania, 2, 107-126.

Sydor, M., Zabłocki, M., Butlewski, M. (2017). Ergonomiczne wymagania stawiane pojazdom samochodowym dla osób z niepełnosprawnościami. Bezpieczeństwo Pracy – Nauka i Praktyka, 553(10), 10–14.

Wilmowska-Pietruszyńska, A., & Bilski, D. (2013). Międzynarodowa Klasyfikacja Funkcjonowania, Niepełnosprawności i Zdrowia. Niepełnosprawność-zagadnienia, problemy, rozwiązania, 2, 5-20

Zabłocki, M., Butlewski, M., Sydor, M. (2017). Ergonomiczne rozwiązania techniczne dla osób z niepełnosprawnościami stosowane w transporcie zbiorowym. Bezpieczeństwo Pracy – Nauka i Praktyka, 553(10), 15–19.

### Breakdown of average student's workload

	Hours	ECTS
Total workload	150	6,0
Classes requiring direct contact with the teacher	42	3,0
Student's own work (literature studies, preparation for classes/tutorials, preparation for tests/exam, project preparation) <sup>1</sup>	108	3

<sup>1</sup> delete or add other activities as appropriate