# COURSE DESCRIPTION CARD - SYLLABUS

Course name
Standardization in work safety and ergonomics

**Course**

Field of study
Safety Engineering
Year/Semester
3/5
Area of study (specialization)
Profile of study
general academic
Level of study
First-cycle studies
Course offered in
Polish
Form of study
part-time
Requirements
elective

**Number of hours**

Lecture
10
Laboratory classes
Other (e.g. online)
Tutorials
10
Projects/seminars

**Number of credit points**
3

**Lecturers**

Responsible for the course/lecturer:
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Responsible for the course/lecturer:
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**Prerequisites**

The student knows the essence and importance of information provided in technical documents. The student is aware of the role and importance of technical documents in shaping the conditions of work.

## Course objective

Understanding the possibilities and ways of implementing normative requirements. Gaining the ability to identify and apply standards to determine technical requirements and identify the records and requirements specified in the standards.

## Course-related learning outcomes

Knowledge

- knows issues in the field of technical safety, safety systems, health and safety at work, as well as the

identification of hazards and the determination of their effects, resulting from the provisions of technical standards and standardization guides [P6S_WG_02],

- knows improvement trends and best practices in the field of safety engineering [P6S_WK_03],

- knows the basic concepts and requirements in the field of copyright protection, information security and intellectual property protection applicable in a market economy [P6S_WK_05].

Skills

- is able to properly select the sources and scope of information derived from them and carry out critical analysis and synthesis of the information obtained [P6S_UW_01],

- can see system and non-technical aspects in implemented engineering tasks, including socio-technical, organizational and economic aspects [P6S_UW_03],

- is able to make a critical analysis and assess the functioning of existing technical solutions, in particular machines, devices, facilities, systems, processes and services, paying attention to the applicable standardization documents [P6S_UW_06],

- can present, using properly selected tools a problem that falls within the framework of safety engineering [P6S_UK_01],

- is able to identify changes in requirements, standards, regulations and norms aimed at adapting them to technical progress and the reality of the labor market and, on their basis, indicate the need to supplement knowledge and skills [P6S_UU_01].

Social competences

- is aware of the importance of knowledge to ensure the effectiveness of solving problems in the field of safety engineering and ensure the possibility of continuous improvement [P6S_KK_02].

## Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Formative assessment:

- in the scope of tutorials: on the basis of reports on independently performed tasks,
- in the scope of lectures: on the basis of partial tests covering the discussed issues.

Summative rating:

- in the scope of tutorials: average grade of partial grades for submitted reports and colloquium to check knowledge,
- in the scope of lecture classes: partial evaluation and credit in the form of a test in which at least one answer is correct or written answers to open questions; a positive pass the student receives after obtaining at least 51% of points possible to obtain.

## Programme content

Lecture: Normalization, terms, definitions. National and international standardization. National and international standardization units. Standardization documents. Technical standards in the field of

occupational safety and ergonomics. Accreditation, authorization and notification. Harmonization of standards. Presumption of conformity with the standard. Possibilities of applying standards.

Classes: practical implementation of the issues presented during the lecture.

## Teaching methods

Lecture classes are conducted in the form of an informational lecture supported by a multimedia presentation.

Tutorials are conducted using the case method, based on solving practical examples (tasks). During the exercises, a round table discussion takes place. Preparation for tutorials requires student's independent work, including work with a book.

## Bibliography

Basic

1. Górny A., Normalizacja w ergonomii. Charakterystyka wymagań normatywnych, Zeszyty Naukowe Politechniki Poznańskie, Seria: Organizacja i Zarządzanie, 2014, nr 63, ss. 51-66.
2. Schweitzer T. (red.), Normalizacja, Wydawnictwo PKN, Warszawa, 2013
3. Tomaszewski Z., Bezpieczeństwo wyrobów oraz ich zgodność ze standardami Unii Europejskiej, Wydawnictwo Politechniki Poznańskiej, Poznań, 2002.
4. Tomaszewski Z., Wprowadzenie do techniki, Wydawnictwo Politechniki Poznańskiej, Poznań, 2002.
5. Matysek A., Normalizacja europejska w zakresie informatologii, Wydawnictwo Uniwersytetu Śląskiego, Katowice, 2014.

Additional

1. Journal "Bezpieczeństwo Pracy".
2. Journal"Normalizacja".
3. Web page: https://www.pkn.pl

## Breakdown of average student's workload

| | Hours | ECTS |
|---|---|---|
| Total workload | 75 | 3,0 |
| Classes requiring direct contact with the teacher | 25 | 1,0 |
| Student's own work (literature studies, preparation for exercises and credits, preparation of reports on independent work, preparation for tests)[1] | 50 | 2,0 |

[1] delete or add other activities as appropriate