



COURSE DESCRIPTION CARD - SYLLABUS

Course name

System safety and protection of intellectual properties [S1AiR2>BSiOWI]

Course

Field of study

Automatic Control and Robotics

Year/Semester

1/1

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

Number of hours

Lecture

10

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

Number of credit points

1,00

Coordinators

Lecturers

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Prerequisites

Student can define and describe Basic concepts and rules In the field of work organization and functioning and organizing of the safety system element. Student can plan and evaluate functioning of the safety system. Student can also interpret the result s of observations. Student is aware of the importance of providing safety. Student is aware of the need of establishing security systems of the companies.

Course objective

To familiarize students with rules, ordinances and regulations about health and safety at work. To acquaint students with the Basic issues of the methodology of human-oriented design as an operator and as an employee of machine service and other technical devices. Students will be familiarized with major legal regulations from the area of the copyright of the industrial property law and with procedures concerning inventions.

Course-related learning outcomes

Knowledge:

1. The graduate has the basic knowledge necessary to understand the non-technical determinants of engineering activities and of the automation and robotics process in industry and the household; the

graduate is familiar with the basic principles of work safety and health applicable in industry. The graduate knows and understands the basic economic, legal and other conditions of different types of activities related to the given qualification [K1_W24].

2. Student knows and understand typical engeneering technologies In terms of studying degree course, and is up to date about actual development trends [K1_W21].

3. The graduate knows and understands basic concepts and principles in the field of intellectual property protection and copyright [K1_W26].

Skills:

1. A student is able to obtain information from literature, databases and other sources [K1_U1].

2. Is able to see non-technical, including environmental, economic and legal aspects of automation and robotics system design. Can take part in a debate - present, assess and discuss various opinions and positions [K1_U16].

3. The graduate is able to apply the principles of health and safety at work. Can plan and organize work, both individually and as part of a team, in accordance with the principles of health and safety at work [K1_U19, K1_U31].

Social competences:

1. The graduate is ready to critically evaluate his or her knowledge. The graduate understands the need for and knows the possibilities of continuous learning - improving professional, personal and social competences, the graduate is able to inspire and organize the learning process of others [K1_K1].

2. Understand the effects of non-technical aspects and engineering activities including its impact on the environment and the associated responsibility for decisions [K1_K2]

3. Is aware of responsibility for one's own work and is ready to obey the principles of teamwork and take responsibility for jointly performed tasks [K1_K3].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Forming rating: Grade based on participation in solving problem tasks and active participation in classes

Summary rating: written test

Programme content

The basics of a system approach to safety: Safety and safety management, safety culture as the context of the safety system. The basics of system design theory. Safety models of systems. Hazards in the work and learning environment. The mechanisms of damage caused by technical objects. Estimating the chances of occurrence probabilities. Social and economical aspects of providing technical safety. The main principles of saving people who are electrocuted.

The idea of copyright. Basic legal regulation of the copyright. The notion of industrial property and forms of its legal protection. The plagiarism and the piracy - legal effects. The patent law, protection law and registration law. Types of creative works and forms of their protection: invention, utility model, industrial design, trademark, geographical indications, topography of integrated circuits, streamlining conclusion. Proceedings in the patent office the Republic of Poland. European patent.

Course topics

none

Teaching methods

Lecture with multimedia presentation.

Bibliography

Basic:

1. Projektowanie ergonomiczne; Edwin Tytyk, Wyd. Naukowe PWN, Warszawa-Poznań, 2001.

2. Poradnik BHP. Tom I: Praktyka, prawo, narzędzia, Kołodziejczyk E. (red.), Wyd. Forum, sp. z o.o. , Warszawa, 2005

3. Barta J., Markiewicz R., Prawo autorskie i prawa pokrewne. Wyd. Zakamycze, 2004

4. Szewc A., Jyż G., Prawo własności przemysłowej. Wyd. C.H. Beck, Warszawa, 2004

Additional:

1. Makroergonomia; Leszek Pacholski, Aleksandra Jasiak, Wyd. Politechniki Poznańskiej, Poznań, 2011.
2. Podstawy ergonomii i fizjologii pracy; Jerzy Olszewski, Wyd. Akademii Ekonomicznej, Poznań, 1997.
3. Niezawodność człowieka w interakcji z procesem przemysłowym; Małgorzata Sławińska, Wyd. Politechniki Poznańskiej, Poznań, 2012

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,00
Classes requiring direct contact with the teacher	10	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	15	0,50