STUDY MODULE DESCRIPTION FORM

Name of the module/subject		Code
Safety measures and protection		**1011101271011123016**

Field of study	Profile of study (general academic, practical)	Year /Semester
Safety Engineering - Full-time studies - First-	**(brak)**	**4 / 7**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
-	**Polish**	**obligatory**

Cycle of study:	Form of study (full-time,part-time)
First-cycle studies	**full-time**

No. of hours				No. of credits
Lecture: **15**	Classes: **15**	Laboratory: **-**	Project/seminars: **-**	**3**

Status of the course in the study program (Basic, major, other)	(university-wide, from another field)
(brak)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**100 3%**
Technical sciences	**100 3%**

Responsible for subject / lecturer:

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Prerequisites in terms of knowledge, skills and social competencies:

1	**Knowledge**	The student has a basic knowledge of ergonomics and safety.
2	**Skills**	Student is able to identify the hazards in the work environment.
3	**Social competencies**	The student is able to associate the socio-economic phenomena to working conditions.

Assumptions and objectives of the course:

To familiarize students with the classification, purpose, requirements and possibilities of the use of means of protection against hazardous and noxious factors in the work environment and human life.

Study outcomes and reference to the educational results for a field of study

Knowledge:

1. The student is ordered, that is made up theoretically general knowledge of safety. - [K1A_W08]
2. The student has a basic knowledge of the life cycle of machines and equipment. - [K1A_W19]
3. The student knows the basic issues of reliability and operational safety of technical equipment, facilities, and technical systems. - [K1A_W20]
4. The student knows the basic methods, techniques, tools and materials used in solving simple engineering tasks in the field of safety engineering. - [K1A_W23]

Skills:

1. Student is able to acquire, integrate, interpret information in the field of international communication in safety engineering; and to draw conclusions, formulate and justify opinions. - [K1A_U1]
2. The student can use different techniques to communicate in the workplace and in other environments. - [K1A_U2]
3. The student is able to create in Polish and English, well-documented problems of development of Safety Engineering. - [K1A_U3]
4. The student is able to prepare and present an oral presentation, on specific issues in the field of safety engineering in Polish and foreign language. - [K1A_U4]
5. The student has the ability to self-learning and understands its need. - [K1A_U5]
6. The student has the necessary preparation to work in an industrial environment, and knows the rules of safety associated with this work and is able to enforce their application in practice. - [K1A_U11]

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Social competencies:
1. The student understands and knows the need for continuous training opportunities and enhance professional competence and personal; can argue the need for learning throughout life. - [K1A_K01]
2. The student is able to see the cause and effect in achieving its goals and rangować importance of alternative or competing tasks. - [K1A_K04]

Assessment methods of study outcomes
Rating: a) in respect of exercises: on the basis of written or oral response from the current news from the lecture, b) in respect of the lecture: on the basis of written or oral questions about the material discussed in the current and previous lectures. Evaluation: a) in respect of exercises: the average score of the current response, b) in respect of the lecture: on the basis of testu.Student able to see the cause and effect in achieving its goals and rangować importance of alternative or competing tasks.

Course description
Requirements for safeguards and protection of individual and collective. Conditions for admission to trade on the European market. Division and classification of safety and security measures as a function of factors, risks and the protection of particular parts of the body. Characteristics of security measures to protect against heat flux, flame, chemicals (in liquid and gas), aerosols, stroke, electromagnetic radiation, mechanical factors, static electricity, falls from heights, weather conditions, biological factors - requirements, quality assessment methods, base construction . Protection against mechanical hazards, electrical, and chemical use on equipment and structures.

Basic bibliography:

1. DOBÓR ŚRODKÓW OCHRONY INDYWIDUALNEJ , red. A. Pościk , CIOP, Warszawa, 2000
2. DOBÓR FILTRUJĄCEGO SPRZĘTU OCHRONY UKŁADU ODDECHOWEGO, K. Makowski, K. Majchrzycka , CIOP, Warszawa, 2000
3. ZASADY DOBORU I UŻYTKOWANIA SPRZĘTU OCHRONY UKŁADU ODDECHOWEGO, K. Bociek, K. Makowski , CIOP, Warszawa, 2001
4. EFEKTYWNA OCHRONA UKŁADU ODDECHOWEGO PRZED ZAGROŻENIAMI PYŁOWYMI, L. Gradoń, K. Majchrzycka , CIOP, Warszawa, 2001
5. ZASADY DOBORU ORAZ STOSOWANIA POCHŁANIACZY I FILTROPOCHŁANIACZY, P. Pietrowski , CIOP, Warszawa, 2001

Additional bibliography:

Result of average student's workload

Activity	Time (working hours)
1. Participation in lectures	15
2. Participation in the exercises	15
3. Prepare for Training	12
4. Preparing to pass exercises	10
5. Preparing to pass lectures	15
6. Consultation	10

Student's workload

Source of workload	hours	ECTS
Total workload	82	3
Contact hours	40	1
Practical activities	25	1

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