POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Industrial project [S1IBiJ1>PP]

Course

Field of study
Safety and Quality Engineering

Year/Semester
4/7

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
0

Laboratory classes
0

Other
0

Tutorials
0

Projects/seminars
60

Number of credit points

4,00

Coordinators

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Lecturers

Prerequisites

A student starting this subject should have the knowledge, skills and competences acquired in the previous years of study in the field of Safety Engineering that can be used in conducting research in enterprises and looking for solutions to the identified problem. Student should also be able to obtain information from the indicated sources and be willing to cooperate within a team.

Course objective

Preparation of input materials for the research part of the diploma thesis by the student.

Course-related learning outcomes

Knowledge:
1. The student has advanced knowledge about life cycle of products, devices, objects, systems and technical systems, as well as quality engineering in relation to products and processes sufficiently to take up solution to the problem of safety in business practice. [K1_W06]
2. The student knows at an advanced level methods, techniques, tools and materials used in preparation for conducting scientific research and undertaking research topic in the diploma thesis using information technology, information protection and computer aided. [K1_W11]

3. The student knows at an advanced level concepts and principles of copyright protection, information safety and intellectual property protection in a market economy that relate to the thesis. [K1_W12]

Skills:
1. The student is able to properly select sources and information derived from them for purpose of their evaluation, critical analysis and synthesis for purposes of the thesis. [K1_U01]
2. The student is able to use various techniques to communicate in vocational and other environments in order to obtain the data necessary to solve the problem. [K1_U02]
3. The student is able to use analytical, simulation and experimental methods for solving the diploma problem, also using information and communication methods and tools. [K1_U04]
4. The student is able to make a critical analysis of the way it functions and assess - in conjunction with Safety Engineering - existing technical solutions, in particular machines, devices, objects, systems, processes and services. [K1_U06]
5. The student can design an object, system or process that meets the requirements of safety engineering using appropriate methods and techniques and make a preliminary economic assessment. [K1_U07]
6. The student is able to plan, organize and implement individual and team work and carry out experiments, including computer measurements and simulations, interpret obtained results and draw conclusions. [K1_U11]
7. The student is able to identify changes in requirements, standards, regulations and technical progress and the reality of the labour market and, on the basis of these changes, to determine the needs for completing knowledge. [K1_U12]

Social competences:
1. The student is aware of the importance of knowledge for obtaining the ability to effectively solve problems in the field of Safety Engineering and to obtain opportunities for continuous improvement. [K1_K02]
2. The student is aware of the understanding of non-technical aspects and effects of engineering activities, including its impact on the environment and the associated responsibility for the decisions. [K1_K03]
3. The student is aware of behavior in a professional manner, compliance with the principles of professional ethics and respect for the diversity of views and cultures. [K1_K06]
4. The student 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 work. [K1_K07]

Methods for verifying learning outcomes and assessment criteria
Learning outcomes presented above are verified as follows:

Rating forming: on the basis of an assessment of the current progress of tasks.
Rating summary: grade point average.
passing threshold: 60% of the points.

Programme content

Presentation and analysis the results of research conducted in the enterprise and identification of areas for improvement and proposed improvement tasks.

Course topics

Presentation of the results of research conducted in the enterprise and the documentation obtained during the research.
Analysis of the research results with the use of various methods, techniques and tools presented in the program of studies at the 1st degree and evaluation of the usefulness of these instruments.
Identification of areas requiring improving actions.
Preparation of draft directions for the improvement of the analyzed aspects of the company's functioning.

Teaching methods

Talk, explanation, work with a book and magazine, work with bibliographic databases, problem method, workshop method, presentation.

Bibliography

Basic:
1. Regulamin realizacji prac dyplomowych oraz przebiegu egzaminu dyplomowego (materiały wewnętrzne Wydziału inżynierii Zarządzania opublikowane na stronie internetowej).
2. Czakon W. (red.), Podstawy metodologii badań w naukach i zarządzaniu, Oficyna a Wolters Kluwer business, Warszawa 2015.
3. Majchrzak J., Mendel T., Metodyka pisania prac magisterskich i dyplomowych: poradnik pisania prac promocyjnych oraz innych opracowań naukowych wraz z przygotowaniem ich do obrony lub publikacji, Wydawnictwo Uniwersytetu Ekonomicznego, Poznań 2009.

Additional:
1. According to the scope of the research.

Breakdown of average student's workload

	Hours	ECTS
Total workload	100	4,00
Classes requiring direct contact with the teacher	60	2,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	40	1,50