COURSE DESCRIPTION CARD - SYLLABUS

Course name
Organization of Production Preparation

Course

Field of study
Safety Engineering
Area of study (specialization)

Level of study
First-cycle studies
Form of study
part-time

Year/Semester
3/5
Profile of study
general academic
Course offered in
Polish
Requirements
elective

Number of hours

Lecture
10
Laboratory classes

Other (e.g. online)

Tutorials
14
Projects/seminars
8

Number of credit points

5

Lecturers

Responsible for the course/lecturer:
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Wydział Inżynierii Zarządzania PP

ul. Rychlewskiego 2, Poznań

Responsible for the course/lecturer:

Prerequisites

Student has knowledge of business processes, design, organization and implementation of the

production processes, as well as in the area of design, evaluation, verification and implementation of production. Student is responsible and can interact with others and work in a team. Student understands the need for lifelong learning and acting in accordance with the rules.

Course objective

Presenting knowledge of theoretical and practical problems connected with organization of production preparation and selected methods applied in this scope.

Course-related learning outcomes

Knowledge

1. Knows the basic concepts of technical safety, safety systems, Occupational Health and Safety and problems of hazards and their consequences [P6S_WG_02].

2. Knows the basic concepts of the life cycle of industrial products and life cycle of socio-technical systems [P6S_WG_06].

3. Knows the basic concepts of engineering management in the field of product and process [P6S_WG_07].

4. Knows the current trends and best practices in safety engineering [P6S_WK_03].

Skills

1. Potrafi właściwie dobierać źródła oraz informacje 1. Is able to collect on the basis of the literature of the subject and other sources information on the problem, make critical analysis, assessment and synthesis [P6S_UW_01].

2. Is able to communicate using appropriately selected resources in a professional environment and in other environments [P6S_UW_02].

3. Is able to make a critical analysis of technical solutions in the field of security engineering [P6S_UW_06].

4. Can design the process that meets the requirements of safety engineering using appropriate methods and techniques [P6S_UW_07].

5. Is able to present the problem using appropriately selected resources within the framework of safety engineering [P6S_UK_01].

6. Is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and on their basis determine the need to supplement own and other knowledge [P6S_UU_01].

Social competences

1. Is aware of the importance of knowledge in solving cognitive and practical problems in the scope of safety engineering and continuous improvement of the knowledge [P6S_KK_02].

2. Is aware of responsibility for own work and readiness to comply with the rules of working in a team and taking responsibility for the tasks carried out jointly [P6S_KR_02].

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Rating forming:

a) projects: on the basis of an assessment of the current progress of tasks,

b) tutorials: on the basis of an assessment of the current progress of tasks,

c) lecture: in the range of lectures based on oral answers to questions about the material covered in the current and previous lectures.

Rating summary:

a) projects: grade point average,

b) tutorials: grade point average,

c) lecture: test, open and closed questions.

Programme content

Production process components, range of tasks. Production process management, technical humanization and economical aspects. Product traits, quality and reliability. Objectives, tasks and functions of product production preparation in industrial company. Constructive, technological and organizational preparation of the production - planning and designing, far-reaching and current activity. Notion and significance of technology of products construction. Curve of product life cycle. Costs of the production preparation. Documentation of production preparation and flow. Organization structure of product preparation units. Innovative processes in activity of industrial company.

Teaching methods

Lecture - multimedia lecture, case study analysis.

Projects - multimedia lecture, work in teams, problem-solving tasks set by the teacher, presentation of solutions and forum discussion group.

Tutorials - multimedia lecture, work in teams, problem-solving tasks set by the teacher, presentation of solutions and forum discussion group.

Bibliography

Basic

1. Kawecka-Endler A., Organizacja technicznego przygotowania produkcji - prac rozwojowych, Wyd. Politechniki Poznańskiej, Poznań 2004.

2. Szatkowski K., Przygotowanie produkcji, PWN Warszawa 2013.

3. Lewandowski J., Skołud B., Plinta D., Organizacja systemów produkcyjnych. Polskie Wydawnictwo Ekonomiczne, Warszawa 2014.

4. Pająk E., Klimkiewicz M., Kosieradzka A., Zarządzanie produkcją i usługami, Polskie Wydawnictwo Ekonomiczne, Warszawa 2014.

Additional

1. Lange R., Ładna A., Konopczyński D., Kowalczyk M., Sztuczna Inteligencja w społeczeństwie i gospodarce, NASK Państwowy Instytut Badawczy, Warszawa 2019.

2. Wójcik J., Wybrane problemy w przygotowaniu produkcji nowego wyrobu w małych i średnich przedsiebiorstwach, Zeszyty Naukowe Politechniki Ślaskiej "Organizacji i Zarządzania", z. 83, Nr. kol. 1941, 2015.

3. Golińska P., Fertsch M., Organizacja produkcji i logistyki w przemyśle samochodowym, Wydawnictwo Politechniki Poznańskiej, Poznań 2012

4. Marczewska-Kuźma R., Kawecka-Endler A., Analiza zmian zachodzących w relacji klient - przedsiębiorstwo, Przegląd Organizacji 12/2015.

5. PN-EN ISO 9001:2015 Systemy zarządzania jakością wymagania.

6. PN-ISO 45001:2018 Systemy zarządzania bezpieczeństwem i higieną pracy. Wymagania i wytyczne stosowania.

Breakdown of average student's workload

	Hours	ECTS
Total workload	125	5,0
Classes requiring direct contact with the teacher	63	3,0
Student's own work (literature studies, preparation for tutorials and projects, preparation for tests, project and tutorials preparation, preparation for presentation of solutions - project and tutorials) [1]	62	2,0

[1] delete or add other activities as appropriate