COURSE DESCRIPTION CARD - SYLLABUS

Course name
Production management [S2TOZ1>ZP]

Course

Field of study
Circular System Technologies

Year/Semester
1/1

Area of study (specialization)
Material recycling and chemical recovery

Profile of study
general academic

Level of study
second-cycle

Course offered in
Polish

Form of study
full-time

Requirements
compulsory

Number of hours

Lecture
30

Laboratory classes
0

Other
0

Tutorials
15

Projects/seminars
0

Number of credit points

3,00

Coordinators

dr inż. Agnieszka Grzelczak
agnieszka.grzelczak@put.poznan.pl

Lecturers

Prerequisites

A student starting this subject should have basic knowledge of technology and production processes and the basics of management and logistics. They should also have the ability to understand technological (production) processes, as well as understand and be prepared to design the organization of production, and in terms of social competences, they should have the ability to work in a group.

Course objective

To familiarize students with the basics of production management.

Course-related learning outcomes

Knowledge:
The student has advanced, detailed knowledge covering issues related to sustainable production, principles of conduct and development trends in the circular economy [P7S_WG_03]
The student has in-depth knowledge that allows designing technological processes based on the principles of the circular economy [P7S_WG_07]

Skills:

The student is able to cooperate with other people and take a leading role in a team in order to solve engineering problems related to methods and devices used in production management, including those related to the circular economy [P7S_UO_09]

Social competences:
The student critically evaluates his/her knowledge, understands the need for further education and improvement of his/her professional, personal and social competences [P7S_KK_03]
The student is able to think and act in an entrepreneurial manner, while being aware of his/her social role and public interest [P7S_KK_04]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Knowledge acquired during lectures is verified by a colloquium during the last class and/or by tests (quizzes) during individual classes. Passing threshold: 50% of points.
Exercises: Skills acquired during exercises are verified by activities during classes (implementation of problem-solving tasks). Passing threshold: 50% of points.

Programme content

The essence of production management. Production system. Production process and its parameters. Production planning and control. Production management parameters and standards. Modern production management concepts. Sustainable production.

Course topics

Lecture: The essence of production management. Parameters and standards of production management. Product (product and service). Basics of technical preparation of production. Production assortment. Production stocks and their functions. Production capacity management. Scheduling. Analysis of production flow. Logistic processes. Basics of production planning and control. Production control standards. Methods and levels of production control. Production structure. Classification of processes in the enterprise. Production process and production system. Classical and modern production systems. Sustainable production, recycling, circular economy.
Exercises: Designing a production system and production process in a production unit. Parameters and standards of production management.

Teaching methods

Lecture: informative lecture (conventional) supported by multimedia presentation, illustrated with examples and tasks and case study method - analysis of specific cases of illustrative (demonstrative) or problem-related nature (problem recognition).
Exercises: exercise method, project method.

Bibliography

Basic:
1. Pająk E., Klimkiewicz M., Kosieradzka A., Zarządzanie produkcją i usługami, PWE, Warszawa 2014.
2. Brzeziński M. (red.), Organizacja i sterowanie produkcją, AW Placet, Warszawa, 2002.
3. Mazurczak J., Projektowanie struktur systemów produkcyjnych, WPP, Poznań, 2001.
4. Anuszewska I., Podlejska K., Jackiewicz A., Filipek M., Zrównoważona produkcja w działalności przedsiębiorstw, PARP, Warszawa, 2011.

Additional:
1. Muhlemann A., Oakland J., Lockyer K., Zarządzanie. Produkcja i usługi, PWN , Warszawa, 2001.
2. Pająk E., Zarządzania produkcją, Wydawnictwo Naukowe PWN, Warszawa 2017.
3. Senger Z., Sterowanie przepływem produkcji, WPP, Poznań, 1998.
4. Wróblewski K., Podstawy sterowania przepływem produkcji, WNT, Warszawa 1993.

Breakdown of average student's workload

	Hours	ECTS
Total workload	75	3,00
Classes requiring direct contact with the teacher	45	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	30	1,00