



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Production engineering in practice [S2ZiIP2>IPP]

Course

Field of study

Management and Production Engineering

Year/Semester

1/1

Area of study (specialization)

–

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

12

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

18

Number of credit points

2,00

Coordinators

dr inż. Paulina Rewers

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Lecturers

Prerequisites

The student has knowledge of: basics of management, production management and organization, production techniques, quality management.

Course objective

To familiarize the student with the practical aspects of production engineering in small, medium and large enterprises.

Course-related learning outcomes

Knowledge:

Has practical knowledge of the organization and control of production processes

Has practical knowledge of manufacturing technologies

Has practical knowledge of the use of IT systems in the management of production processes

Skills:

Is able to select a manufacturing technique for the production of specific products

Is able to select the form of production organization to the nature of the production process

Is able to develop forecasts regarding the effectiveness and efficiency of production processes

Social competences:

Notes the diversity of production techniques and forms of production organization as well as the IT systems supporting them.

Has the knowledge necessary to understand the social, economic, legal and other non-technical conditions of engineering activities

Is aware of the shortcomings of his knowledge and the need to cooperate with experienced employees and experts

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: final colloquium in the form of open and closed questions. Assessment in written or oral form based on scored questions (pass in case of obtaining 51% of points). Assignment of grades to percentage ranges of results: <90–100> very good; <80–90) good plus; <70–80) good; <60–70) satisfactory plus; <50–60) satisfactory; <0–50) unsatisfactory.) carried out at the end of classes.

Project: Report on each study trip (according to the diagram prepared by the teacher).

Programme content

Basics of production engineering, including production techniques and organization of production processes

Course topics

Lectures:

1. Presentation of the production profile, applied manufacturing techniques, forms of organization and production control - lecture by company representatives,
2. Basics of occupational health and safety in the enterprise, scope of laboratory classes
3. Scope of functioning of production engineering
3. The impact of forms of production organization on the functioning of the enterprise
4. Organizational structure of the enterprise
5. Measures of effectiveness and efficiency of production processes
6. IT systems in a production company
7. Characteristics and application of manufacturing techniques

Project:

Study tours in production enterprises with various types of production

Teaching methods

Lecture: multimedia presentation, discussion panel. Lecture conducted remotely using the synchronous access method.

Project: study visit, discussion, team work

Bibliography

Basic:

Hamrol A.: Strategie i praktyki sprawnego działania. Lea, Six Sigma i inne. Wydawnictwo Naukowe PWN, Warszawa 2017

Brzeziński M.: Organizacja produkcji w przedsiębiorstwie, Difin, 2013

Additional:

Kłos S., Jarczoch A., Kalinowski K.: Organizacja i planowanie produkcji, PWE, 2023

Breakdown of average student's workload

	Hours	ECTS
Total workload	50	2,00
Classes requiring direct contact with the teacher	30	1,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	20	1,00