# POZNAN UNIVERSITY OF TECHNOLOGY



#### EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)

## **COURSE DESCRIPTION CARD - SYLLABUS**

Course name

Production engineering in practice [N2ZiIP2>IPP]

Course				
Field of study Management and Production Engineering		Year/Semester 1/1		
Area of study (specialization)	5	Profile of study general academic	c	
Level of study second-cycle		Course offered in Polish	1	
Form of study part-time		Requirements compulsory		
Number of hours				
Lecture 6	Laboratory classe	es	Other 0	
Tutorials 0	Projects/seminar 10	S		
Number of credit points 2,00				
Coordinators		Lecturers		
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#### **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: Presentation made by students

## Programme content

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

## **Course topics**

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Lecture:

- 1. Scope of functioning of production engineering
- 2. The impact of forms of production organization on the functioning of the enterprise
- 3. Measures of effectiveness and efficiency of production processes
- 4. IT systems in a production company
- 5. Characteristics and application of manufacturing techniques

Project:

1. Getting to know the practical aspect of production engineering

## **Teaching methods**

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

Project: 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., Jardzioch 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	16	0,50
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	34	1,50