



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Production management [S1ETI2>ZProd]

### Course

Field of study

Education in Technology and Informatics

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

elective

### Number of hours

Lecture

15

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

15

### Number of credit points

2,00

### Coordinators

dr inż. Justyna Trojanowska

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### Lecturers

### Prerequisites

The student knows the basics of entrepreneurship and is able to associate facts, think logically, and use e-resources.

### Course objective

The course aims to familiarize students with basic and auxiliary processes and the organization of material and information flow in a manufacturing enterprise.

### Course-related learning outcomes

Knowledge:

Knows the functioning of production systems.

Knows modern production management methods.

Knows the principles of organizing the flow of materials and information in production processes.

Skills:

Can discuss the effectiveness of the organization of production systems.

Can define the elements of a production system.

Social competences:

Is aware of the diversity of production systems.

Is aware of the responsibility for decisions made and their impact on the functioning of the production system.

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Knowledge acquired during the lecture will be verified based on a final test during the last class of the semester. Knowledge and skills acquired during the project classes will be verified based on a report presented in the form of a multimedia presentation during the last class of the semester.

### Programme content

Economic system. Manufacturing enterprise, organizational structure. Management and management functions. Types and forms of production organization. Organization of production processes. Modern methods of production management.

### Course topics

Lecture

Economic system - elements and dependencies. Definition and functions of management. Organizational structure in a manufacturing enterprise on selected examples. Processes in a manufacturing enterprise. Types and forms of production organization. Flow of information and materials in the production system. Managing a production team, methods of motivating employees. Lean Manufacturing and the Theory of Constraints.

Project

Creativity in solving engineering problems. Organization of the workstation. PUSH and PULL organization of materials and information flow. Selected tools of the Lean Manufacturing concept: work standardization, 5S, SMED, TPM. Identification of bottlenecks in the production process.

### Teaching methods

Lecture: multimedia presentation enriched with video, case study, crossword.

Project: puzzle, multimedia presentation, simulation of the production process (workshops using blocks).

### Bibliography

Basic:

1. Organizacja i sterowanie, Marek Brzeziński, AW Placet, Warszawa, 2002
2. Zarządzanie produkcją. Produkt, technologia, organizacja, Edward Pająk, PWN, Warszawa, 2006

Additional:

1. Inżynieria zarządzania, Ireneusz Durlik, AW Placet, Warszawa, 1993
2. Cel I: Doskonałość w produkcji, Eliyahu M. Goldratt, MINT Books, Warszawa 2017

### Breakdown of average student's workload

	Hours	ECTS
Total workload	55	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)	25	1,00