

## SYLLABUS

**Name:**

**Name in Polish:** Planowanie i sterowanie produkcją

**Name in English:** Planning and production control

### Information on course:

<b>Course offered by department:</b>	Faculty of Organisation and Management
<b>Course for department:</b>	Silesian University of Technology
<b>Study level and form:</b>	Bachelor's degree, Full-time
<b>Term:</b>	winter semester 2023/2024
<b>Coordinator of course edition:</b>	Grzegorz Strozik PhD, professor of SUT

### Default type of course examination report:

PASS (ZAL)

### Language:

English

### Course homepage:

<https://platforma.polsl.pl/roz/>

### ECTS

2

### Short description:

In the subject of Production planning and control students obtain knowledge on general concept and detailed content about all aspects of production planning, i.e. factors affecting production planning and management, forecasting methods, as well as production control methods, which contains workload planning, setting start and end dates for products and operations, assigning operations to positions, monitoring work progress, checking the use of employees' and machines' working time and taking corrective actions.

### Description:

Scope of Production planning and control (PPC) subject:

- Planning in a manufacturing enterprise
- Production flow planning methods
- Control of production flow
- Criteria of planning: time, rank, production level
- Hierarchical system of production planning (strategic, tactical, operational plans)
- Operational production management
- Modern and classic approach to PPC
- Stages, procedures, elements of PPC
- Requirements for an effective PPC
- Factors affecting PPC
- Forecasting for Inventory and Production Control
- Demand forecasting
- Types of forecasting (active & passive)

Exercises:

- Inventory EOQ & POQ Planning methods
- Forecasting methods for time-series analysis

### Bibliography:

1. Chapman Stephen N. The Fundamentals of Production Planning and Control. Pearson Prentice Hall, 2006.
2. de Sousa T.B., Camparotti C.E.S., Guerrini F.M., da Silva A.L. An Overview of the Advanced Planning and Scheduling Systems. Independent Journal of Management & Production. vol. 5, no. 4, 2014.
3. Kumar Anil S., Suresh N. Production and Operations Management. New Age International Publishers, 2008.
4. Sharma A., Kumar N. Production Planning and Control. International Journal of Innovative Research in Technology, vol. 1, no. 7, 2014.
5. Sushil Gupta, Starr Martin. Production Operations Management Systems. CRC Press Taylor & Francis Group, 2014.

### Learning outcomes:

K1P\_W12 – The student knows and understands the principles and methods of designing and optimizing production systems and processes, production planning and control, and the basics of flexible manufacturing systems

K1P\_U07 – The student is able to design – in accordance with the given specification – and create a simple technical system and implement a technological process, using appropriately selected methods, techniques, tools and materials

K1P\_U09 – The student is able to analyse the life cycle of an object and use tools supporting the operational processes of machines and devices in the enterprise

K1P\_K03 – The student is ready to fulfil social obligations, co-organize activities for the social environment and initiate activities for the public interest

**Assessment methods and assessment criteria:**

Form and criteria of passing:

- developing tasks and obtaining positive grades for all tasks,
- the grade for the exercises is the average of the grades for all tasks,
- obtaining at least 50% of points in the written test,
- rules of resit examination - obtaining at least 50% of points in the written resit examination.
- the final grade is the sum of 50% of the grade for passing the lecture and 50% of the grade for passing the exercises,
- student's presence at classes is obligatory,
- the student is not obliged to participate in lectures.

**Practical placement:**

None