



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Production Planning and Control [S2Log2-SPL>PiSP]

### Course

Field of study

Logistics

Year/Semester

1/2

Area of study (specialization)

Production-logistics Systems

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

elective

### Number of hours

Lecture

30

Laboratory classes

0

Other

0

Tutorials

0

Projects/seminars

30

### Number of credit points

4,00

### Coordinators

dr hab. inż. Łukasz Hadaś prof. PP  
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### Lecturers

### Prerequisites

The student knows the basic concepts of production management. The student has the ability to perceive, associate and interpret phenomena occurring in the sphere of management. The student is responsible, is able to interact and actively work in a team.

### Course objective

The aim of the course is to familiarize students with the basic issues of production planning and control, presentation of the production planning and control system.

### Course-related learning outcomes

Knowledge:

1. Student knows the typical structure of production planning at the level of finished products and components [P7S\_WG\_01]
2. The student knows the concepts of the Main Production Schedule (GHP), the principles of its creation and role in the production planning system [P7S\_WG\_02]
5. The student knows the basic principles and methods of controlling the flow of material streams [P7S\_WK\_01]

#### Skills:

1. The student has the ability to present information on a specific problem in the area of production planning and control [P7S\_UW\_01]
2. Student is able to design a production planning system for given organizational conditions [P7S\_UW\_05]
3. Student is able to design the index analysis process for assessing the proposed production planning system [P7S\_UK\_01]

#### Social competences:

1. The student is aware of the responsibility for their own work and readiness to comply with the rules of teamwork and taking responsibility in the project group [P7S\_KR\_01]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Lecture: Formative assessment: based on answers to questions about issues discussed in previous lectures or partial test. Summative assessment: based on an exam - a written essay on the issues discussed in the lecture or test. The lecture is passed after giving substantively correct answers to most of the issues raised, passing the threshold of 50% of the points.

Project: Formative assessment: based on the progress of the project stages and knowledge of the issues necessary for its implementation. Summative assessment: based on the substantive quality of the completed project and defense of the completed project.

### Programme content

The program includes: production planning in a manufacturing company (Assortment and quantity plan, Master Production Schedule) and the essence of production control and control methods.

### Course topics

Lecture: Discussion of a typical planning structure in a production company. Production planning decisions at level; strategic, tactical and operational. Production planning decisions at the level of finished products, components and operations. Creation and types of the Main Production Schedule (GHP). Assortment and quantity plan. Planning "forward" and "backward". MRP II model. The essence of production control and control principles.

Project: Design of the production planning system for specific production and organizational conditions, including planning at the level of finished products, components and index analysis of the production process.

### Teaching methods

Lecture: information lecture, problem lecture.

Project: project method.

### Bibliography

#### Basic:

1. Hadaś Ł., Fertsch M., Cyplik P., Planowanie i sterowanie produkcją, Wydawnictwo Politechniki Poznańskiej, Poznań, 2012.
2. Fertsch M., Podstawy zarządzania przepływem materiałów w przykładach, Biblioteka logistyka, Wydawnictwo ILiM, Poznań, 2003.
3. Brzeziński M., Organizacja i sterowanie produkcją. Projektowanie systemów produkcyjnych i procesów sterowania produkcją, Agencja Wydawnicza Placet, Warszawa, 2002.

#### Additional:

1. Liker J. K., Droga Toyoty. 14 zasad zarządzania wiodącej firmy produkcyjnej świata, MT Biznes, Warszawa, 2005.
2. Senger Z., Sterowanie przepływem produkcji, Wydawnictwo Politechniki Poznańskiej, Poznań, 1998.
3. Goldratt E., Cox J., Cel. Doskonałość w produkcji, WERBEL, Warszawa, 2000.

### Breakdown of average student's workload

|                                                                                                                                            | Hours | ECTS |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------|------|
| Total workload                                                                                                                             | 100   | 4,00 |
| Classes requiring direct contact with the teacher                                                                                          | 60    | 2,50 |
| Student's own work (literature studies, preparation for laboratory classes/<br>tutorials, preparation for tests/exam, project preparation) | 40    | 1,50 |