



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Production planning and scheduling [S1ZiIP2>PiHP]

Course

Field of study

Management and Production Engineering

Year/Semester

3/6

Area of study (specialization)

–

Profile of study

general academic

Level of study

first-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

Number of hours

Lecture

0

Laboratory classes

15

Other

0

Tutorials

15

Projects/seminars

0

Number of credit points

2,00

Coordinators

Lecturers

Prerequisites

A student should have knowledge of the operation of a production enterprise, including the basic tasks of functional units in the enterprise. It should also be able to identify the processes at enterprises and assess their impact on the company's operations.

Course objective

The aim of the course is to acquaint students with the methods of production planning and scheduling, as well as the possibilities of computer aided production planning.

Course-related learning outcomes

Knowledge:

A student knows the basic concepts in production planning and scheduling.

A student is able to indicate the role of production planning in the organization of the enterprise.

A student knows the levels and stages of production planning.

A student has knowledge of the methods of production planning and scheduling.

Skills:

A student is able to perform the process of production planning.

A student using appropriate methods and tools able to develop a production schedule.

A student is able to lead a discussion on production planning.
A student is aware of the importance of production planning in the organization of a production company.

Social competences:

A student is able to assess the feasibility of the plan and production schedule.
A student is creative in the selection of methods and the preparation of production schedules.

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Knowledge and skills acquired during the exercises will be verified on the basis of a final colloquium during the last classes in the semester. The colloquium consists of 2-3 calculation tasks, scored differently. Pass threshold: 50%.

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.

Skills acquired during the project classes will be verified by reporting on the project developed by students (in groups) and discussions with the instructor.

Programme content

Basic concepts and methods of production planning.
Production scheduling methods.

Course topics

Tutorials:

Characteristics of the production strategy. Basic concepts in production planning. The role and place of production planning in the organization of the enterprise. Levels, stages and methods of production planning. Production scheduling methods.

Project:

Characteristics of the technological process and production strategy. Balancing the production capacity. Material requirements planning. Inventories of raw materials, finished products, work in progress. Operational scheduling.

Teaching methods

Tutorials: multimedia presentation illustrated with examples given on the board, solving problems, practical exercises, discussion, workshops, case studies.

Project: multimedia presentation, solving practical problems, searching for sources, teamwork, discussion, simulation

Bibliography

Basic:

Pająk E.: Zarządzanie produkcją. Produkt, technologia, organizacja. PWN Warszawa 2006

Waters D., Zarządzanie operacyjne, PWN Warszawa 2012

Brzeziński M., Organizacja i sterowanie, Wyd. Placet 2002

Additional:

Kulińska E., Busławski A., Zarządzanie procesem produkcji, Wyd. Delfin 2019

Liddell M., Niebieska książeczka o harmonogramowaniu, DSR.S.A 2020

Stadtler H., Kilger Ch., editors, Supply Chain Management and Advanced Planning, Springer Berlin 2008

Durlik I.: Inżynieria zarządzania, AW Placet Warszawa 1997

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