



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Production and personnel management [S2IMat1>ZPiP]

Course

Field of study

Materials Engineering

Year/Semester

1/1

Area of study (specialization)

–

Profile of study

general academic

Level of study

second-cycle

Course offered in

Polish

Form of study

full-time

Requirements

compulsory

Number of hours

Lecture

15

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

0

Number of credit points

2,00

Coordinators

dr hab. inż. Edward Pająk
edward.pajak@put.poznan.pl

Lecturers

Prerequisites

General knowledge in the field of engineering and technical sciences and social sciences, mainly the disciplines of management and quality sciences.

Course objective

The aim of the course is to indicate the relationship between the technologies used in the area of specific engineering activities and the management of these technologies.

Course-related learning outcomes

Basic knowledge of production management. He knows the place of the company and its role in the national and global economy. He understands the role of the production system as the basis of each enterprise and the processes carried out in this system. He understands the importance of production preparation. He has knowledge of modern methods of production management, especially the concept of Lean Manufacturing - economical manufacturing. K2_W13

Student can define the basic and auxiliary processes implemented in a specific production system and characterize these processes. He can carry out activities related to the preparation of production, including technical (construction and technological) and organizational preparation, including activities related to the

organization of workstations and the operation of staff. K2_U14

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Oral test - analysis and solution in groups of a simple study.

Programme content

1. Basic information (world economy, national economy, enterprise, production system, processes of production systems). Resources of the production system with particular emphasis on human resources.
2. Development of production systems - technical and social conditions. Industry 4.0.
3. Preparation of construction, technological and organizational production.
4. Production control: suction flow (kanban cards), pressing flow - development of schedules
5. The concept of lean manufacturing (Lean Manufacturing) - the essence of the concept, its application and the tools used (TPM, JiT, SMED).
6. Methodology for developing a VSM value stream map (current state) and a proposal to improve the value stream map.
7. Pass

Course topics

none

Teaching methods

Lecture: multimedia presentation,

Bibliography

1. Pająk E.: Zarządzanie produkcją. Produkt, technologia, organizacja. PWN Warszawa 2021 r.
2. Praca zbiorowa - red. K.Szatkowski: Nowoczesne zarządzanie produkcją. Ujęcie procesowe. PWN Warszawa 2014 r.
3. Pająk E.: Zasady i metody oszczędnego wytwarzania. WYd. PWSZ Konin 2013 r

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	2,00
Classes requiring direct contact with the teacher	15	2,00
Student's own work (literature studies, preparation for laboratory classes/ tutorials, preparation for tests/exam, project preparation)	10	0,00