

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Production and Operations Management		Code 1011101351011115676
Field of study Logistics - Full-time studies - First-cycle studies	Profile of study (general academic, practical) general academic	Year /Semester 3 / 5
Elective path/specialty -	Subject offered in: Polish	Course (compulsory, elective) obligatory
Cycle of study: First-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 30 Classes: 30 Laboratory: 15 Project/seminars: -		No. of credits 5
Status of the course in the study program (Basic, major, other) other		(university-wide, from another field) university-wide
Education areas and fields of science and art technical sciences Technical sciences		ECTS distribution (number and %) 5 100% 5 100%
Responsible for subject / lecturer: dr inż. Agnieszka Grzelczak email: agnieszka.grzelczak@put.poznan.pl tel. 61 665 33 69 Faculty of Engineering Management ul. Strzelecka 11, 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Student has a fundamental knowledge in the field of process engineering, production and logistics organization.
2	Skills	Student understands and is able to apply the parameters of manufacturing process and systems for designing of production structures.
3	Social competencies	Student understands and is prepared to manage production and services especially in the scope of designing of production systems? structures.
Assumptions and objectives of the course: Students become familiar with methodology and technique applied for designing of production systems? structures and other management aspects.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. He has a basic knowledge of computer science (information technology), economics and transportation, production management and services, production systems design (industrial design) - [K1A_W09]		
2. He is able to explain the relationship between: IT (information technology), economics and organization of transport, production management and services, production systems design (industrial design) and logistics, supply chain management - [K1A_W10]		
3. Student knows methods and tools for developing manufacturing structures - [K1A_W33]		
Skills:		
1. He can independently develop a set, housed in the subject being studied issue - [T1A_U05]		
2. He can be formulated using analytical methods, simulation or experimental located within the subject being studied design task and solve the task in the field of logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics service,) and supply chain management - [K1A_U09]		
3. He is able to select appropriate tools and methods to solve the problem of falling within the logistics and supply chain management as well as how to use them effectively - [T1A_U15]		
Social competencies:		

1. He is aware of the need for lifelong learning; inspire and organize the learning process of others in the coming within studied concerning issues - [K1A_K01]
2. He is willing to cooperate and work in teams to resolve contained within the subject being studied problems - [K1A_K03]
3. He is able to see the cause-and-effect relationships in the implementation of the set objectives and importance rangować tasks - [K1A_K04]
4. He is able to plan and manage in an entrepreneurial manner - [K1A_K06]

Assessment methods of study outcomes

Formative assessment:

in laboratory: on the basis of assessing the current progress of the tasks

in lectures: on the basis of answers to questions about the material discussed in the previous lectures

Summary summary:

in laboratory: presentation of works

in lectures: colloquium

Course description

Enterprises as manufacturing system. Production structure, fundamentals of its model ling. Plant specialization. Similarity and stabilization of production. Types and forms of production organization. Criteria of system optimization. Algorithm for design and reconstruction of manufacturing structures. Technical development of production units with usage of software support. Design of production units layout and surface arrangement. New trends in the field of service and operations management.

DIDACTIC METHODS:

Lecture: information lecture

Exercise: case study, method of exercise

Laboratory: laboratory method

Basic bibliography:

1. Pająk E., Klimkiewicz M., Kosieradzka A., Zarządzanie produkcją i usługami, PWE, Warszawa 2014.
2. Brzeziński M. (red.), Organizacja i sterowanie produkcją, AW Placet, Warszawa, 2002.
3. Mazurczak J., Projektowanie struktur systemów produkcyjnych, WPP, Poznań, 2001.
4. Boszko J., Struktura organizacyjna przedsiębiorstwa i drogi jej optymalizacji, WNT, Warszawa 1973.
5. Ragin-Skorecka K., Grzelczak A., Motała D., Podstawy zarządzania nie tylko dla logistyków, Wydawnictwo WSB, Poznań 2017.

Additional bibliography:

1. Muhlemann A., Oakland J., Lockyer K., Zarządzanie. Produkcja i usługi, PWN , Warszawa, 2001.
2. Pająk E., Zarządzania produkcją, Wydawnictwo Naukowe PWN, Warszawa 2017.
3. Senger Z., Sterowanie przepływem produkcji, WPP, Poznań, 1998.
4. Wróblewski K., Podstawy sterowania przepływem produkcji, WNT, Warszawa 1993.
5. Durlik I., Inżynieria zarządzania, AMP WN, Katowice, 1993.

Result of average student's workload

Activity	Time (working hours)
1. Participation in lectures	30
2. Participation in laboratories and projects	45
3. Literature studiem	30
4. Elaboration of project	15
5. Preparation for exam	5

Student's workload		
Source of workload	hours	ECTS
Total workload	125	5
Contact hours	75	3
Practical activities	45	2