

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Production and Operations Management</b>		Code <b>1011104351011115676</b>
Field of study <b>Logistics - Part-time studies - First-cycle</b>	Profile of study (general academic, practical) <b>(brak)</b>	Year /Semester <b>3 / 5</b>
Elective path/specialty <b>-</b>	Subject offered in: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>
Cycle of study: <b>First-cycle studies</b>	Form of study (full-time,part-time) <b>part-time</b>	
No. of hours Lecture: <b>16</b> Classes: <b>-</b> Laboratory: <b>14</b> Project/seminars: <b>-</b>		No. of credits <b>5</b>
Status of the course in the study program (Basic, major, other) <b>(brak)</b>		(university-wide, from another field) <b>(brak)</b>
Education areas and fields of science and art <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>5 100%</b> <b>5 100%</b>
<b>Responsible for subject / lecturer:</b>  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		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Student has a fundamental knowledge in the field of process engineering, production and logistics organization.
2	<b>Skills</b>	Student understands and is able to apply the parameters of manufacturing process and systems for designing of production structures.
3	<b>Social competencies</b>	Student understands and is prepared to manage production and services especially in the scope of designing of production systems? structures.
<b>Assumptions and objectives of the course:</b> Students become familiar with methodology and technique applied for designing of production systems? structures and other management aspects.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
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]		
<b>Skills:</b>		
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]		
<b>Social competencies:</b>		

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: Based on current performance progress assessment

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: oral exam

### 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

Laboratory: case study, laboratory exercises.

#### Basic bibliography:

1. Brzeziński M. (red.), Organizacja i sterowanie produkcją, AW Placet, Warszawa, 2002.
2. Pająk E., Klimkiewicz M., Kosieradzka A., Zarządzanie produkcją i usługami, PWE, Warszawa 2014.
3. Mazurczak J., Projektowanie struktur systemów produkcyjnych, WPP, Poznań, 2001.
4. Boszko J., Struktura organizacyjna przedsiębiorstwa i drogi jej optymalizacji, WNT, Warszawa 1973.
5. Wróblewski K., Podstawy sterowania przepływem produkcji, WNT, Warszawa 1993.
6. 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. Durlik I., Inżynieria zarządzania, AMP WN, Katowice, 1993.
4. Senger Z., Sterowanie przepływem produkcji, WPP, Poznań, 1998.

### Result of average student's workload

Activity	Time (working hours)	
1. Participation in lectures	16	
2. Participation in laboratories and projects	14	
3. Literature studiem	30	
4. Elaboration of project	15	
5. Preparation for exam	5	
6. Consultation	25	
7. Exam	5	
Student's workload		
Source of workload	hours	ECTS
Total workload	110	5
Contact hours	60	4
Practical activities	14	1