# **Faculty of Engineering Management**

STUDY MODULE DESCRIPTION FORM					
Name of the module/subject Production Management		Code 1011101251011101178			
Field of study	Profile of study (general academic, practical)	Year /Semester			
Engineering Management - Full-time studies -	(brak)	3/5			
Elective path/specialty	Subject offered in:	Course (compulsory, elective)			
-	Polish	obligatory			
Cycle of study:	Form of study (full-time,part-time)				
First-cycle studies	full-time				
No. of hours		No. of credits			
Lecture: 15 Classes: - Laboratory: 15	Project/seminars:	15 4			
Status of the course in the study program (Basic, major, other)	(university-wide, from another f	ield)			
(brak)	(brak)				
Education areas and fields of science and art		ECTS distribution (number and %)			
Responsible for subject / lecturer:	Responsible for subject	ct / lecturer:			
dr inż. Agnieszka Grzelczak	dr inż. Ireneusz Gania				
email: agnieszka.grzelczak@put.poznan.pl	email: ireneusz.gania@put.poznan.pl				
tel. 61 665 33 69	tel. 616653385				
Faculty of Engineering Management	Faculty of Engineering Management				
ul. Strzelecka 11 60-965 Poznań	ul. Strzelecka 11 60-965 Po	oznań			
Prerequisites in terms of knowledge, skills and	d social competencies:				

1	Knowledge	The student has a basic knowledge of the technology used and the basis for the management and organization of work stations.
2	Skills	The student understands and can apply the parametric description of the process and the design of the production system and the organization of work stations.
3	Social competencies	The student understands and is prepared for production management especially in the design of the organization of production.

# Assumptions and objectives of the course:

To familiarize students with the basics of production management.

# Study outcomes and reference to the educational results for a field of study

## Knowledge:

- 1. know the methods and tools for designing the production structures [K1A\_W09]
- 2. he has knowledge about the views on organizational structures and types of organizational ties and about their historical evolution  $[K1A\_W18]$
- 3. has a basic knowledge of the life cycle of socio-technical systems [K1A\_W23]
- 4. knows the basic methods, techniques, tools and materials used to solve simple engineering tasks in the field of production management [K1A\_W24]
- 5. has the basic knowledge necessary to understand non-technical conditioning of engineering activities; knows the basic principles of occupational safety and health in the construction industry [K1A\_W25]
- $6.\ has\ basic\ knowledge\ of\ management,\ including\ production\ management\ and\ business\ operations\ -\ [K1A\_W26]$

### Skills:

- 1. analyzes proposed solutions to specific management problems and proposes appropriate solutions in this regard [K1A\_U07]
- 2. it can perform critical analysis of technological processes of machine production and organization of production systems [K1A\_U16]
- 3. it can identify project tasks and solve simple project management tasks [K1A\_U17]
- 4. it can apply common methods of solving simple problems in production management [K1A\_U18]
- 5. it can design the organization of production units of the first degree of complexity [K1A\_U19]

# Social competencies:

# **Faculty of Engineering Management**

- 1. he can see causal relationships in the achievement of the goals set and the importance of alternative or competitive tasks [K1A\_K03]
- 2. is aware of the importance and understanding of the non-technical aspects and effects of engineering activities, including its environmental impact and the resulting responsibility for its decisions [K1A\_K08]

## Assessment methods of study outcomes

Formative assessment:

in exercise: on the basis of assessment of current progress of tasks

in project: on the basis of an assessment of 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 exercises: colloquium in project: presentation of works

in lectures: colloquium

#### Course description

The essence of production management. Classification of business processes, the process organized. The parameters and norms of production management, space modeling of the manufacturing process, the control plane. The product (product or service), the basis of technical preparation of production, product range, the program, the pace and rhythm of production. The production cycle of the product performance. Inventories production and their functions. Production capacity, balancing the burden of production capacity. Management of production capacity, scheduling, production flow analysis. Fundamentals of production control.

DIDACTIC METHODS: information lecture, case study, method of exercise and design.

## Basic bibliography:

- 1. Wróblewski K., Podstawy sterowania przepływemm produkcji, WNT, Warszawa 1993.
- 2. Senger Z., Sterowanie przepływem produkcji, WPP, Poznań, 1998.
- 3. Pająk E., Klimkiewicz M., Kosieradzka A., Zarządzanie produkcją i usługami, PWE, Warszawa 2014.
- 4. Brzeziński M. (red.), Organizacja i sterowanie produkcją, AW Placet, Warszawa, 2002.
- 5. Mazurczak J., Projektowanie struktur systemów produkcyjnych, WPP, Poznań, 2001.
- 6. Boszko J., Struktura organizacyjna przedsiębiorstwa i drogi jej optymalizacji, WNT, Warszawa 1973.
- 7. 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.

# Result of average student's workload

Activity	Time (working hours)
1. Participation in lectures	15
2. Participation in laboratory and activities of project	30
3. Consultation	30
4. Independent problem solving	30
5. Preparing to exam	13
6. Exam	2

# Student's workload

Source of workload	hours	ECTS
Total workload	120	4
Contact hours	77	2
Practical activities	30	1