# **Faculty of Engineering Management**

STUDY MODULE DESCRIPTION FORM					
		Code 011101251011101178			
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: <b>Polish</b>	Course (compulsory, elective) <b>obligatory</b>			
Cycle of study:	Form of study (full-time,part-time)				
First-cycle studies full-time		me			
No. of hours		No. of credits			
Lecture: 15 Classes: - Laboratory: 15	Project/seminars: 1:	5 4			
Status of the course in the study program (Basic, major, other)	(university-wide, from another fiel	d)			
(brak)		orak)			
Education areas and fields of science and art		ECTS distribution (number and %)			
technical sciences		4 100%			
Technical sciences		4 100%			
Responsible for subject / lecturer:	Responsible for subject	/ lecturer:			
dr inż. Agnieszka Grzelczak email: agnieszka.grzelczak@put.poznan.pl tel. 61 665 33 69 Faculty of Engineering Management	dr inż. Ireneusz Gania email: ireneusz.gania@put.poznan.pl tel. 616653385 Faculty of Engineering Management				
ul. Strzelecka 11 60-965 Poznań ul. Strzelecka 11 60-965 Poznań					
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]

## **Faculty of Engineering Management**

#### Social competencies:

- 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