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STUDY MODULE DESCRIPTION FORM					
Name of the module/subject Organization of Production Preparation		Code 1011101251011100185			
Field of study Engineering Management - Full-time studies -	Profile of study (general academic, practical) (brak)	Year /Semester 3 / 5			
Elective path/specialty	Subject offered in: Polish	Course (compulsory, elective) elective			
Cycle of study:	Form of study (full-time,part-time)				
First-cycle studies	full-time				
No. of hours		No. of credits			
Lecture: 15 Classes: 15 Laboratory: -	Project/seminars:	- 3			
Status of the course in the study program (Basic, major, other) (university-wide, from another field)					
(brak)	(brak)				
Education areas and fields of science and art		ECTS distribution (number and %)			
Responsible for subject / lecturer:	Responsible for subject	ct / lecturer:			
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Prerequisites in terms of knowledge, skills and social competencies:

1	Knowledge	Student has knowledge of business processes, design, organization and implementation of the production processes, as well as in the area of design, evaluation, verification and implementation of production	
2	Skills	Student is able to use knowledge acquired during courses of other subjects	
3	Social competencies	Student is responsible and can interact with others and work in a team Student understands the need for lifelong learning and acting in accordance with the rules	

Assumptions and objectives of the course:

Presenting knowledge of theoretical and practical problems connected with organization of production preparation and selected methods applied in this scope.

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

Knowledge:

- 1. has basic knowledge of organizational and social behavior in the production preparation process [K1A_W08]
- 2. knows the general principles of creating and developing forms of individual entrepreneurship, using knowledge in the field of technology, economics and management [K1A_W20]
- 3. has basic knowledge about the life cycle of industrial products [K1A_W22]
- 4. knows the basic methods, techniques, tools and materials used to solve simple engineering tasks in the field of machine construction and operation [K1A_W24]
- 5. has basic knowledge necessary to understand non-technical conditions of engineering activity; knows the basic principles of health and safety at work in the process of production preparation [K1A_W25]
- 6. has basic knowledge of management, including quality management, and organization of business [K1A_W26]
- 7. knows typical industrial technologies and in a deepened way knows the technologies of construction and operation of machines [K1A_W27]

Skills:

Faculty of Engineering Management

- 1. is able to correctly interpret social phenomena (cultural, political, legal, economic) in the field of organization of preparation of praoductions [K1A_U01]
- 2. can while preparing production, notice their systemic, socio-technical, organizational and economic and non-technical aspects [K1A_U14]
- 3. is able to make a critical analysis of technological processes of machine production and organization of production systems [K1A_U16]
- 4. can identify project tasks and solve simple design tasks in the field of production preparation [K1A_U17]
- 5. can apply typical methods of solving simple problems in the field of construction and operation of machines [K1A_U18]
- 6. can design the construction and technology of simple parts and subassemblies of machines and design the organization of production units of the first degree of complexity [K1A_U19]

Social competencies:

- 1. is able to provide substantive input in the preparation of production taking into account legal, economic and organizational aspects [K1A_K05]
- 2. can search and select educational and training centers to supplement and improve knowledge and skills [K1A_K06]
- 3. is aware that creating products that meet the needs of users requires a systemic approach with regard to technical, economic, marketing, legal, organizational and financial issues [K1A_K09]

Assessment methods of study outcomes

Forming assessment:

- a) Classes: Current assessment of activity during classes
- b) Lecture: basing on questions asked during the lecture, which refer to previous lectures on the subject

Final assessment:
a) Classes: colloquium
b) Lectures: final test

Course description

Production process components, range of tasks. Production process management, technical humanization and economical aspects. Product traits, quality and reliability. Objectives, tasks and functions of product production preparation in industrial company. Constructive, technological and organizational preparation of the production? planning and designing, far-reaching and current activity. Notion and significance of technology of products construction. Technological processes of assembly. Computer aid CAD and CAD/RAM. Curve of product life cycle. Costs of the production preparation. Documentation of production preparation and flow. Organization structure of product preparation units. Designing unit, serial and mass production; group technology, Flexible Manufacturing System. Starting new production. Innovative processes in activity of industrial company.

Learning methods:

information lecture, problem lecture;

methods of independent learning: classical problem method (problem formulation, verification, student work assessment), case study method;

discussion methods: seminar, student lecture, brainstorming, metaplan (conclusions from discussions in teams presented on the forum in the form of a poster, multimedia presentation);

practical and practical methods: listening exercises, solving cognitive tasks.

Basic bibliography:

- 1. Organizacja technicznego przygotowania produkcji prac rozwojowych, Kawecka-Endler A., Politechniki Poznańskiej, Poznań, 2004
- 2. Inżynieria produkcji, Karpiński T., WNT, Warszawa, 2007
- 3. Przygotowanie produkcji, Szatkowski K., PWN, Warszawa, 2013
- 4. Organizacja technicznego przygotowania produkcji prac rozwojowych, Kawecka-Endler A., Politechniki Poznańskiej, Poznań, 2004
- 5. Inżynieria produkcji, Karpiński T., WNT, Warszawa, 2007
- 6. Przygotowanie produkcji, Szatkowski K., PWN, Warszawa, 2013

Additional bibliography:

- 1. Inżynieria zarządzania. Strategia i projektowanie systemów produkcyjnych cz.2, Durlik I., Agencja Wydawnicza Placet, Warszawa. 2005
- 2. Inżynieria zarządzania. Strategia i projektowanie systemów produkcyjnych cz.2, Durlik I., Agencja Wydawnicza Placet, Warszawa, 2005

Result of average student's workload

Poznan University of Technology Faculty of Engineering Management

Activity	Time (working hours)				
1. Lecture		15			
2. Classes	15				
3. Preparation for classes	15				
4. Consultations	15				
5. Preparation for final test	10				
6. Final test	5				
Student's workload					
Source of workload	hours	ECTS			
Total workload	75	3			
Contact hours	50	2			
Practical activities	15	1			