

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Organization of Production Preparation</b>		Code <b>1011105251011100185</b>
Field of study <b>Engineering Management - Part-time studies -</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>elective</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>14</b> Classes: <b>-</b> Laboratory: <b>-</b> Project/seminars: <b>-</b>		No. of credits <b>3</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		ECTS distribution (number and %)
<b>Responsible for subject / lecturer:</b> prof. dr hab. inż. Aleksandra Kawecka-Endler email: aleksandra.kawecka-endler@put.poznan.pl tel. 61- 6653370 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań		<b>Responsible for subject / lecturer:</b> dr inż. Roma Marczevska-Kuźma email: roma.marczevska-kuzma@put.poznan.pl tel. 61-6653364 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	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	<b>Skills</b>	Student is able to use knowledge acquired during courses of other subjects
3	<b>Social competencies</b>	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
<b>Assumptions and objectives of the course:</b> Presenting knowledge of theoretical and practical problems connected with organization of production preparation and selected methods applied in this scope.		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
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]		
<b>Skills:</b>		

<p>1. is able to correctly interpret social phenomena (cultural, political, legal, economic) in the field of organization of preparation of productions - [K1A_U01]</p> <p>2. can - while preparing production, notice their systemic, socio-technical, organizational and economic and non-technical aspects - [K1A_U14]</p> <p>3. is able to make a critical analysis of technological processes of machine production and organization of production systems - [K1A_U16]</p> <p>4. can identify project tasks and solve simple design tasks in the field of production preparation - [K1A_U17]</p> <p>5. can apply typical methods of solving simple problems in the field of construction and operation of machines - [K1A_U18]</p> <p>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]</p>
<p><b>Social competencies:</b></p> <p>1. is able to provide substantive input in the preparation of production taking into account legal, economic and organizational aspects - [K1A_K05]</p> <p>2. can search and select educational and training centers to supplement and improve knowledge and skills - [K1A_K06]</p> <p>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]</p>

<b>Assessment methods of study outcomes</b>	
<p>Forming assessment:</p> <p>a) Classes: Current assessment of activity during classes</p> <p>b) Lecture: basing on questions asked during the lecture, which refer to previous lectures on the subject</p> <p>Final assessment:</p> <p>a) Classes: colloquium</p> <p>b) Lectures: final test</p>	
<b>Course description</b>	
<p>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.</p> <p>Learning methods:</p> <p>information lecture, problem lecture;</p> <p>methods of independent learning: classical problem method (problem formulation, verification, student work assessment), case study method;</p> <p>discussion methods: seminar, student lecture, brainstorming, metaplan (conclusions from discussions in teams presented on the forum in the form of a poster, multimedia presentation);</p> <p>practical and practical methods: listening exercises, solving cognitive tasks.</p>	
<p><b>Basic bibliography:</b></p> <p>1. Golinska P., Fertsch M. Organizacja produkcji i logistyki w przemyśle samochodowym, wyd. PP, Poznań 2012</p> <p>2. Organizacja technicznego przygotowania produkcji prac rozwojowych, Kawecka-Endler A., Politechniki Poznańskiej, Poznań, 2004</p> <p>3. Inżynieria produkcji, Karpiński T., WNT, Warszawa, 2007</p> <p>4. Przygotowanie produkcji, Szatkowski K., PWN, Warszawa, 2013</p>	
<p><b>Additional bibliography:</b></p> <p>1. Inżynieria zarządzania. Strategia i projektowanie systemów produkcyjnych cz.2, Durlik I., Agencja Wydawnicza Placet, Warszawa, 2005</p>	
<b>Result of average student's workload</b>	
Activity	Time (working hours)

1. Lecture	14	
2. Preparation for lectures	10	
3. Consultations	11	
4. Preparation for final test	8	
5. Final test	2	
<b>Student's workload</b>		
<b>Source of workload</b>	<b>hours</b>	<b>ECTS</b>
Total workload	45	3
Contact hours	25	2
Practical activities	0	1