

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Tool management</b>		Code <b>1011104371011115718</b>
Field of study <b>Logistics - Part-time studies - First-cycle</b>	Profile of study (general academic, practical) <b>general academic</b>	Year /Semester <b>4 / 7</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>12</b>		No. of credits <b>3</b>
Status of the course in the study program (Basic, major, other) <b>other</b>		(university-wide, from another field) <b>university-wide</b>
Education areas and fields of science and art <b>technical sciences</b> <b>Technical sciences</b>		ECTS distribution (number and %) <b>3 100%</b> <b>3 100%</b>
<b>Responsible for subject / lecturer:</b>  dr hab. Inż. Marek Fertsch, prof.nadzw email: marek.fertsch@put.poznan.pl tel. 616659476 Wydział Inżynierii Zarządzania ul. Strzelecka 11, 60-965 Poznań		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	Students knows basic terms within the logistics area
2	<b>Skills</b>	Student has capability of noticing, associating, interpreting phenomenas within logistics area
3	<b>Social competencies</b>	Student is aware of influence of of logistics on competitive edge of companies
<b>Assumptions and objectives of the course:</b> Providing students with knowledge, skills and social competences connected with tools management in machining industry		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. has a basic knowledge on: engineering graphics, construction, technology and exploitation pf materials (T1A_W02) - [K1A_W05]		
2. has a basic knowledge on: mechanics and machines construction and durability of materials - [K1A_W07]		
3. can explain basic concepts for logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_W15]		
4. is able to recognize the basic phenomena characteristic for logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_W16]		
5. can explain in detail the specific concepts for logistics and its specific issues and supply chain management - [K1A_W17]		
6. can define basic interdependencies in logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_W18]		
7. can identify contemporary trends in logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_W19]		
8. can characterize best practices in logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_W20]		
9. knows basic methods, techniques, tools and materials applied when solving simple engineering tasks connected with designing systems and logistics processes - [K1A_W23]		
<b>Skills:</b>		

<p>1. can independently develop the for the problem within the field of studies - [K1A_U05]</p> <p>2. can formulate project task using analytical methods, simulation or experiments falling within the field of studies and solve the task in the field of logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_U09]</p> <p>3. can make a critical analysis of the problem within the logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_U13]</p> <p>4. can design using appropriate methods and techniques a building, system or process that meets the requirements within the framework of logistics and its specific issues (inventory management, logistics, distribution, logistics, manufacturing and sourcing, logistics operation, ecologistics) and supply chain management - [K1A_U16]</p>
<p><b>Social competencies:</b></p> <p>1. The student is willing to cooperate and work in a project group - [K1A_K03]</p> <p>2. The student is aware of the responsibility for their own work and willingness to comply with the principles of teamwork and accountability in the project group - [K1A_K04]</p> <p>3. The student is aware of the potential conflict between the procurement and production departments - [K1A_K05]</p>

<b>Assessment methods of study outcomes</b>		
<p>Forming Rating:</p> <p>a) In terms of the project: on the basis of progress in the implementation phases of the project, and knowledge of the issues necessary for its implementation b) for laboratory: on the basis of discussions on the knowledge of the issues necessary for the proper performance of the laboratory exercises c) in terms of the lecture: on the basis of responses to questions about issues discussed in the previous lectures</p> <p>Summary Rating:</p> <p>a) In terms of the project: on the basis of (1) the quality of the merits of the project (2) The presentation of the project b) In terms of laboratories: based on reports prepared. c) in respect of the lecture: on the basis of test - written work on the issues discussed in the lecture. The student is allowed to take an take the exam after the assessments of the project and the laboratory. The exam is passed, after giving the correct answer to most of the substantive issues discussed</p>		
<b>Course description</b>		
<p>Lectures: Planning tool wear: statistical methods, the method of statistical factors, analytical method. Tool Management Organization. Production program tooling. Tooling equipment. Tooling staff. The organization of production tools. Actions of production tools providers. The single and multibrand systems. Services of tools suppliers. Stocks of tools.</p> <p>Exercises: Planning tool wear: statistical methods, the method of statistical factors, analytical method. Tool Management Organization. Production program tooling. Tooling equipment. Tooling staff. The organization of production tools. Actions of production tools providers. The single and multibrand systems. Services of tools suppliers. Stocks of tools.</p>		
<b>Basic bibliography:</b>		
<p>1. Liwowski B., Kozłowski R., Podstawowe zagadnienia zarządzania produkcją, Oficyna Wolters Kluwer business, Kraków 2007</p> <p>2. Banaszak Z., Kłosa S., Mleczko J., Zintegrowane systemy zarządzania ,Polskie Wydawnictwo Ekonomiczne, Warszawa 2011</p>		
<b>Additional bibliography:</b>		
<b>Result of average student's workload</b>		
Activity	Time (working hours)	
1. lectures	14	
2. project	12	
3. consultation	15	
4. student?s individual work	30	
<b>Student's workload</b>		
Source of workload	hours	ECTS
Total workload	71	3
Contact hours	41	2
Practical activities	12	1