

<b>STUDY MODULE DESCRIPTION FORM</b>		
Name of the module/subject <b>Organization of Supporting Processes</b>		Code <b>1011105251011100205</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>  dr inż. Małgorzata Jasiulewicz-Kaczmarek email: malgorzata.jasiulewicz-kaczmarek@put.poznan.pl tel. 616653364 Inżynierii Zarządzania Poznań, ul. Strzelecka 11		
<b>Prerequisites in terms of knowledge, skills and social competencies:</b>		
1	<b>Knowledge</b>	The student knows and understands the basic concepts and principles of the basics of organization and management of production processes,
2	<b>Skills</b>	The student knows how to apply the basic knowledge of the basics of organization and management
3	<b>Social competencies</b>	The student is aware of the need to shape the products subject to the requirements
<b>Assumptions and objectives of the course:</b> Knowing the theoretical and practical problems associated with the organization and preparation of auxiliary processes in the enterprise. Designing solutions to auxiliary processes and their optimization		
<b>Study outcomes and reference to the educational results for a field of study</b>		
<b>Knowledge:</b>		
1. Has basic knowledge about the organization of auxiliary services in the company. List and characterize the technical, economic and managerial factors influencing organizational solutions in the area of auxiliary processes - [K1A_W08; K1A_W20] 2. It characterizes the place and role of maintenance activities in the lifecycle of a technical facility - [K1A_W22] 3. List and characterize the basic methods, techniques, tools used to solve typical engineering tasks in terms of maintaining the suitability of the company's production infrastructure. ie - [K1A_W24] 4. List the non-technical areas of activities carried out as part of supporting processes, shows the relationship between technical activities and activities in the area of OSH, environment - [K1A_W25; K1A_W27] 5. Lists and characterizes the basic concepts of modern enterprise infrastructure management - [K1A_W26]		
<b>Skills:</b>		
1. Justifies system, socio-technical and organizational aspects in the design of auxiliary processes - [K1A_U14] 2. Carries out critical analysis of auxiliary processes in the context of core processes - [K1A_U16] 3. Identifies organizational problems in the area of support processes and identifies potential causes - [K1A_U17] 4. Applies methods, techniques and organizational tools to solve simple problems in the organization of auxiliary processes - [K1A_U18] 5. Can design the organization of auxiliary units (maintenance, etc.) - [K1A_U19]		
<b>Social competencies:</b>		

1. Be aware of the need for a system approach that includes technical elements when creating products that meet user requirements - [K1A\_K05]  
 2. Understands the need for continuous improvement of auxiliary processes and the consequent need to improve participants in these process - [K1A\_K06; K1A\_K09]

### Assessment methods of study outcomes

Rating forming:

- a) in respect of classes exercises +: on the basis of an assessment of the current progress of tasks and public presentation solutions,  
 b) in the range of lectures based on oral answers to questions about the material covered in the current and previous lectures,

Rating summary:

- a) in respect of classes exercises +: Average for completed exercises  
 b) w zakresie wykładów: pisemne zaliczenie, pytania otwarte.

### Course description

Aspects of organizational and technical maintenance (the concept of operation (place of use in the life cycle of the product, place a technical object in the chain of actions), reliability (reliability features), durability, moral consumption, systems, methods, principles of operation of technical facilities; trends for process improvement Manual (TPM, RCM, etc.); assessment of the overall effectiveness of technical objects (OEE) and maintenance (OCE)

Aspects of organizational and technical management tool (the meaning of tools and aids workshop in the context of the main processes (manufacturing companies and service organizations); shopping, supplies, production support workshop; supervising the suitability of tools and aids workshop (responsibility, authority, documentation))

Internal transport (transport systems, transport, structure, responsibility, competence, documentation, records)

Media (types of technological media, balancing the demand, monitoring and optimization of consumption)

Teaching methods used:

Lecture - multimedia lecture, case study analysis

Classes - work in teams, problem-solving tasks set by the teacher, presentation of solutions and forum discussion group

### Basic bibliography:

1. Loska A., Wybrane aspekty komputerowego wspomagania zarządzania eksploatacją i utrzymaniem ruchu systemów technicznych, Oficyna Wydawnicza Polskiego Towarzystwa Zarządzania Produkcją, 2012
2. Jasiulewicz-Kaczmarek M., Piechowski M., Drożyner P., Zastosowanie narzędzi IT i regałów automatycznych do zarządzania częściami zamiennymi ? studium przypadku, Logistyka 4/2014
3. S. Legutko, (2009), Trendy rozwoju utrzymania ruchu urządzeń i maszyn, Eksploatacja i Niezawodność 2
4. J. Mikołajczyk, (2013), Wykorzystanie analizy FMEA we współczesnej koncepcji utrzymania ruchu ? RCM, Zeszyty Naukowe Politechniki Poznańskiej, seria Organizacja i Zarządzanie nr 61

### Additional bibliography:

1. Służby Utrzymania Ruchu
2. Inżynieria &#38;#38; Utrzymanie Ruchu Zakładów Przemysłowych

### Result of average student's workload

Activity	Time (working hours)
1. Lecture	14
2. consultations	16
3. Preparing to exam	20
4. exam	5

### Student's workload

Source of workload	hours	ECTS
Total workload	55	3
Contact hours	35	2
Practical activities	0	0