

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Ergonomics of automated systems		Code 1011105311011120242
Field of study Engineering Management - Part-time studies -	Profile of study (general academic, practical) (brak)	Year /Semester 1 / 1
Elective path/specialty Quality Systems and Ergonomics	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) part-time	
No. of hours Lecture: 12 Classes: - Laboratory: - Project/seminars: -		No. of credits 2
Status of the course in the study program (Basic, major, other) (brak)		(university-wide, from another field) (brak)
Education areas and fields of science and art		ECTS distribution (number and %)
Responsible for subject / lecturer:		
dr hab. inż. Małgorzata Sławińska email: malgorzata.slawinska@put.poznan.pl tel. 61 665 34 38 Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań		
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	Knows chosen description of methods and tools, including data acquisition techniques and modeling social structures and processes occurring in them
2	Skills	Has the ability to suggest own solutions of for determined problems and Carry out procedures to implement these solutions,
3	Social competencies	Is able to complete his knowledge and skills independently, knows how to enhance own knowledge with interdisciplinary aspect
Assumptions and objectives of the course:		
Transfer of knowledge of the essence of the theoretical and practical aspects of diagnosis and design of ergonomic factors in technical objects.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has an extended knowledge about the human role in shaping the organizational culture and ethics in management - [K2A_W05] 2. Deeply knows the modeling method for organizational structures with use of the function tree - [K2A_W06] 3. Deeply knows the modeling methods and instruments for modeling information processes - [K2A_W01]		
Skills:		
1. Can use the theoretical knowledge to describe and analyze the causes and course of social phenomena and processes - [K2A_U02] 2. Has the ability to use the acquired knowledge in various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitability of the applied knowledge - [K2A_U07] 3. Has the skill to understand and analyze social phenomena, his ability is widened with the skill of deep theoretical assessment of observed phenomena in chosen areas, and with use of suitable scientific method - [K2A_U09]		
Social competencies:		
1. Is aware of the importance of professional behavior and of compliance with the rules of professional ethics and respect for the diversity of ideas and cultures - [K2A_K04] 2. Is aware of the reasonability for own work and willingness to comply with the principles of team work and responsibility for cooperative tasks - [K2A_K03] 3. Can contribute in the preparation of the social projects with consideration of the legal aspects, economic and organizational - [K2A_K06]		

Assessment methods of study outcomes		
Forming assessment: a) classes: on the basis of assessments of the current progress of the implementation of the tasks evaluated by written work-colloquia b) lectures: on the basis of the answers to questions concerning the material from previous lectures, Final assessment: a) classes: on the basis of the results of the average partial evaluations of the forming assessment b) lectures: exam In form of a test. Student can write the exam after obtaining a positive grade at the end of classes.		
Course description		
Ergonomic and its essence. Basis for ergonomic design. Ergonomics in industrial processes diagnosing. Man to computer interaction. Optimization for steering system in the dialogue between man and technical object. Ergonomic aspect of the occupational risk assessment and reliability evaluation.		
Basic bibliography:		
1. Modelowanie systemów (Systems modelling), Tarnowski W, Wydawnictwo Uczelniane Politechniki Koszalińskiej, Koszalin 2004 2. Projektowanie ergonomiczne (Ergonomic design), Tytyk E, PWN, Warszawa 2001 3. Ergonomia systemów zautomatyzowanych (Ergonomics of automated systems), Sławińska M., Wyd. Politechniki Poznańskiej, Poznań 2008		
Additional bibliography:		
1. Interakcja człowiek- computer (Man-computer interaction), Sikorski M., Wyd. Polsko-Japońskiej Wyższej Szkoły Technik Komputerowych, Warszawa 2010 2. Psychologia poznania (The psychology of cognition), Maruszewski T., Gdańskie Wydawnictwo psychologiczne, Gdańsk, 2001 3. . Niezawodność człowieka w interakcji z procesem przemysłowym (Human reliability in interaction with the industrial process), Sławińska M., WPP, Poznań 2012		
Result of average student's workload		
Activity	Time (working hours)	
1. Lectures	15	
2. Classes	15	
3. Consultations	6	
4. Final test ? written form	3	
5. Preparation for classes	8	
6. Preparation for the final test	8	
Student's workload		
Source of workload	hours	ECTS
Total workload	56	2
Contact hours	39	1
Practical activities	15	1