<ol> <li>Deeply knows the modeling method for organizational structures with use of the function tree - [K2A_W06]</li> <li>Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W01]</li> <li>Skills:         <ol> <li>Can use the theoretical knowledge to describe and analyze the causes and course of social phenomena and processes - [K2A_U02]</li> <li>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]</li> <li>Has the skill to understand and analyze social phenomena, his ability is widened with the sill of deep theoretical assessment of observed phenomena in chosen areas, and with use of suitable scientific method - [K2A_U09]</li> </ol> </li> <li>Social competencies:         <ol> <li>Is aware of the importance of professional behavior and of compliance with the rules of professional ethics and respect for</li> </ol> </li> </ol>	STUDY MODULE DESCRIPTION FORM					
Field of study       Production and Operations Management       Production and Operations Management       Yaar /Semester         Elective pathipsecialty       Production and Operations Management       Yours (computers), practical)       Yaar /Semester         Cycle of study:       Second-cycle studies       Form of study (full-time, practical)       Yaar /Semester         No. of nouts       Second-cycle studies       Form of study (full-time, practical)       No. of credits         Excture:       15       Classes:       15       Laboratory: -       Project/seminars: -       2         Status of the course in the study program (Base, major, other)       (unversity-wide, from another field)       No. of credits         Education areas and fields of science and ant       ECTS distribution (number and %)       ECTS distribution (number and %)         Responsible for subject / lecturer:       (r hab: in2; Maigorzata Slawińska email: malgorzata.slawinska @put poznan.pl       ECT       ECT         I. Streideska 116:0:985 Poznan       Extended processes occurring in them       ECT       Skills       Has the ability to suggest own solutions of for determined problems and Carry out procedures to implement these solutions,         2       Skills       Is able to complete his knowledge and skills independently, knows how to enhance own knowledge with interdisciplinary aspect         Answirptions and Objectives of the course       Transfer of knowledge ab		•	nated systems			
Engineering Management - Full-time studies - (brak)         (brak)         1 / 1           Elective path/specially         Subject offered in: Subject offered in: Production and Operations Management         Subject offered in: Subject offered in Subject of Greene in Subject offered in Subject of Greene in Subject offered in Subje						
Elective path/specially         Subject offered n: Production and Operations Management         Subject offered n: Polish         Course (compulsory, elective) elective           Cycle of study:         Form of study (full-time,part-time)         No. of credits           Status of the course in the study program (Basic, major, other)         (university-wide, from another field)         No. of credits           Status of the course in the study program (Basic, major, other)         (university-wide, from another field)         No. of credits           Education areas and fields of science and at         Image: Credit and the study program (Basic, major, other)         No. of credits           Education areas and fields of science and at         Image: Credit and the study program (Basic, major, other)         Image: Credit and the study program (Basic, major, other)           Responsible for subject / lecturer:         (brak)         (brak)         ECTS distribution (number and %)           dial. Streteleck at 16:0-965 Poznah         Image: Credit and the study (Basic, major, other)         Image: Credit and the study (Basic, major, other)           1         Knowledge         Knowledge, skills and social competencies:         Image: Credit and problems and Carry out procedures to implement these solutions.           2         Skills         Has the ability to suggest own solutions of for determined problems and Carry out procedures in technical object:           3         Social competencies         Knowledge of	Fngi	neering Manage	ment - Full-time studies -		1/1	
Cycle of study:         Form of study (full-lime.part-time)           Second-cycle studies         Full-time           No. of hours         Lecture:         15         Classes:         15         Laboratory:         -         Project/Seminars:         -         2           Status of the course in the study program (Basic, major, other)         (university-wide, from another field)         (brak)         2           Education areas and fields of science and at         ECTS distribution (number and %)         ECTS distribution (number and %)           Responsible for subject / lecturer:         dr hab. in2. Malgorzata Slawińska         ECTS distribution (number and %)           ul. Strzelecka 116.0-965 Poznan         Litter of the science and modeling social structures and processes occurring in them           1         Knowledge         Knows chosen description of methods and lools, 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 of the courses:           Tansfer of knowledge and the dometers of the courses:         Tansfer of knowledge and the theoretical and practical aspects of diagnosis and design of ergonomic factors in technical objects.				· · ·		
Second-cycle studies         full-time           No. of hours         No. of credits         No. of credits         2           Status of the course in the study program (Basic, major, other)         (university-wide, from another field)         (brak)           Education areas and fields of science and at         (brak)         (brak)         ECTS distribution (number and %)           Education areas and fields of science and at         (brak)         (brak)         ECTS distribution (number and %)           Responsible for subject / lecturer:         dr hab. inz. Majorzata slawinks@ put poznan.pl tet 6: 1665 34.38         Wydzial Inzymieril Zarządzania            U. Strzelecka 11 60-965 Poznan         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 complete his knowledge and skills independently, knows how to enhance own knowledge the easence 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 with interdisciplinary aspect           Assumptions and objectives of the courses:         1. Als an extended knowledge about the human role in shaping the organizational culture and ethics in management - (K2A_W06)           2. Deepty knows the modeling methods and instruments for model l		Production an	d Operations Managemen	t Polish	elective	
No. of hours       No. of aredits         Lecture:       15       Laboratory:       Project/seminars:       No. of aredits         Status of the course in the study program (Basic, major, other)       (university-wide, from another field)       (Urak)         Education areas and fields of science and at       (Urak)       (Urak)       ECTS distribution (number and %)         Responsible for subject / lecturer:       dr hab, in2, Malgorzata Slawińska @put.poznan.pl       (ECTS distribution (number and %)         dr hab, in2, Malgorzata Slawińska @put.poznan.pl       (ECTS distribution (number and %)         tel. 61 665 34 38       Wydział inzynienii Zarządzania       (Urak)         Vydział inzynienii Zarządzania       (Urak)       (Urak)         2       Skills       Has the ability to suggest own solutions of for determined problems and Carry out procedures to implement these solutions,         3       Social structures of the course:       It is able to complete his knowledge and skills independently, knows how to enhance own knowledge with interdisciplinary aspect         Assumptions and objectives of the course:       Talso extures 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 - [KZA_W06]         3. Deeply knows the modeling methods and instruments for model ing information processes - [KZA_W06]	Cycle of	study:		Form of study (full-time,part-time)		
Lecture:       15       Classes:       15       Laboratory:       Project/seminars:       2         Status of the course in the study program (Basic, major, other)       (university-wide, from another field)       (brak)         Education areas and fields of science and an       ECTS distribution (number and %)       ECTS distribution (number and %)         Responsible for subject / lecturer:       or hab. inz. Malgorzata Slawińska       ECTS distribution (number and %)         wydział Inzynierii Zarządzania       u. Strzelecka (Bp Eorand)       ECTS distribution (number and %)         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, nowledge and skills independently, knows how to enhance own knowledge with interdisciplinary aspect         Assumptions and Objectives of the course:       Tanafer of knowledge about the human role in shaping the organizational culture and ethics in management - [K2A_W06]         1. Has an extended knowledge about the human role in shaping the organizational culture and ethics in management - [K2A_W06]         2. Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W06]         3. Deepty knows the modeling methods and instruments for model ling information processes - [K2A_W06]         4. Deas	Second-cycle studies			full-ti	full-time	
Status of the course in the study program (Basic, major, other)       (university-wide, from another field)         Education areas and fields of science and art       (brak)         Education areas and fields of science and art       ECTS distribution (number and %)         Responsible for subject / lecturer:       dr hab. in2. Melgorzata Slawniska@ put poznan.pl tet.81 (65 34 38         Wydzial Inzynierii Zarządzania       ui. Strzelecka 11 60-965 Poznań         U. Strzelecka 11 60-965 Poznań       ui. Strzelecka 11 60-965 Poznań         Prerequisites in terms of knowledge, skills and social competencies:       Knowledge         Knowledge       Knowledge sciela 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, and social competencies:         3       Social competencies       Is able to complete his knowledge and skills independently, knows how to enhance own knowledge of the essence of the theoretical appects 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 externed knowledge about the human role in shaping the organizational culture and ethics in management - [K2A_W06]         2. Deeply knows the modeling methods for organizational structures with use of the function tree - [K2A_W06]         3. Deeply knows the modeling methods for organizational structu	No. of he	ours			No. of credits	
(brak)         (brak)           Education areas and fields of science and art         ECTS distribution (number and %)           Education areas and fields of science and art         ECTS distribution (number and %)           Responsible for subject / lecturer: dr hab. in2. Malgorzata Stawińska email: malgorzata.stawińska@put.poznan.pl tel. 61 665 34 38         Wydziel Inzynieni Zarządzania ul. Strzelecka 11 60-965 Poznań           Prerequisites in terms of knowledge, skills and social competencies:         Knowledge         Knows chosen description of methods and tools, including data acquisition techniques and modeling social structures and processes occuring 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 tourse: 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 (VA_VOS]           1. As an extended knowledge about the human role in shaping the organizational culture and ethics in management - (X2A_VOS]           2. Deeply knows the modeling method for organizational structures with use of the function tree - [K2A_VOS]           3. Deeply knows the modeling method sand instruments for model ling information pro	Lectur	e: <b>15</b> Classes	s: 15 Laboratory: -	Project/seminars:	- 2	
Education areas and fields of science and art         ECTS distribution (number and %)           Responsible for subject / lecturer:         dr hab, int?. Malgorzata ślawińska           dr hab, int?. Malgorzata ślawińska         mait: malgorzata slawińska           mait: malgorzata slawińska         gwutpozrata ślawińska           ul. Strzelecka 11 60-965 Poznań         ul. Strzelecka 11 60-965 Poznań           Prerequisites in terms of knowledge, skills and social competencies:         ul. Strzelecka 11 60-965 Poznań           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 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_W06]           2. Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W06]           3. Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W06]           3. Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W06]           3. Deeply knows the modeling methods and instruments	Status o	-			·	
And %)         Responsible for subject / lecturer:         dr hab. inż. Małgorzata Sławińska emai: małgorzata sławińska@put.poznan.pl tel. 61 665 534 38         Wydział Inżynierii Zarządzania ul. Strzelecka 11 60-965 Poznań         Prerequisites in terms of knowledge, skills and social competencies:         1       Knowledge         2       Skills         3       Social competencies         3       Social competencies         1       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 with instruments for modeling method for organizational structures with use of the function tree - [K2A_W06]         2. Deeply knows the modeling method for organizational structures with use of the function tree - [K2A_W06]         3. Deeply knows the modeling method for organizational structures with use of social phenomena and processes - [K2A_W05]         2. Deeply knows the modeling method sond instruments for model ling information processes - [K2A_W06]         3. Deeply knows the modeling method so and instruments field sond forms, and extend the knowledge with a critical review of the effectivenes and suitability of the applied knowledge in various fields and forms, and extend the knowledge with a critical review of the effectivenes and suitability of the appl	Educatio		• •	(1		
dr hab. inž. Małgorzata Sławińska emai: malgorzata sławinska@put.poznan.pl tel. 61 665 34 38 Wydział Inżynierii Zarądzania ul. Strzelecka 11 60-965 Poznań         Prerequisites in terms of knowledge, skills and social competencies:         1       Knowledge         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         Study outcomes and reference to the educational results for a field of study         Monovledge         Nervey the system of the organizational structures with use of the function tree - [K2A_W06]         Study outcomes and reference to the educational results for a field of study         Monovledge         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 methods and instruments for model ling information processes - [K2A_W06]         Deeply knows the modeling methods and instructures with use of the knowledge with a critical review of the effectiveness and suitability of the applied knowledge in Various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitability of the applied knowledge in various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitabilit	Euucalio					
dr hab. inž. Małgorzata Sławińska emai: malgorzata sławinska@put.poznan.pl tel. 61 665 34 38 Wydział Inżynierii Zarądzania ul. Strzelecka 11 60-965 Poznań         Prerequisites in terms of knowledge, skills and social competencies:         1       Knowledge         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         Study outcomes and reference to the educational results for a field of study         Monovledge         Nervey the system of the organizational structures with use of the function tree - [K2A_W06]         Study outcomes and reference to the educational results for a field of study         Monovledge         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 methods and instruments for model ling information processes - [K2A_W06]         Deeply knows the modeling methods and instructures with use of the knowledge with a critical review of the effectiveness and suitability of the applied knowledge in Various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitability of the applied knowledge in various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitabilit						
dr hab. inž. Małgorzata Sławińska emai: malgorzata sławinska@put.poznan.pl tel. 61 665 34 38 Wydział Inżynierii Zarądzania ul. Strzelecka 11 60-965 Poznań         Prerequisites in terms of knowledge, skills and social competencies:         1       Knowledge         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         Study outcomes and reference to the educational results for a field of study         Monovledge         Nervey the system of the organizational structures with use of the function tree - [K2A_W06]         Study outcomes and reference to the educational results for a field of study         Monovledge         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 methods and instruments for model ling information processes - [K2A_W06]         Deeply knows the modeling methods and instructures with use of the knowledge with a critical review of the effectiveness and suitability of the applied knowledge in Various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitability of the applied knowledge in various fields and forms, and extend the knowledge with a critical review of the effectiveness and suitabilit						
email: malgorzata.slawinska @put.poznan.pl         tel. 61 665 34 38         Wydzial Inzynierii Zarządzania         ul. Strzelecka 11 60-965 Poznań    Prerequisites in terms of knowledge, skills and social competencies:          1       Knowledge         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 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         Moveledge:         1       Law set the theoretical knowledge and analyze the causes and course of social phenomena and processes - [K2A_W06]         Study outcomes and reference to the educational results for a field of study         Moveledge:         1       Law set the theoretical knowledge to describe and analyze the causes and course of social phenomena and processes - [K2A_W06]         Subject knows the modeling methods and instruments for model ling information processes - [K2A_W01]         Study outcomes the acquired knowledge in various fields and forms, and extend the knowledge with a critical review of the fedevieness and suitability of the applied knowledge or [K2A_U02]         2 <td>Resp</td> <td>onsible for subje</td> <th>ect / lecturer:</th> <td></td> <td></td>	Resp	onsible for subje	ect / lecturer:			
tel 1665 34 38         Wydział inżynierii Zarządzania         ul. Strzelecka 11 60-965 Poznań         Prerequisites in terms of Knowledge, skills and social competencies:         1       Knowledge         Nows 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         Insolvedge of the course:       Is able to complete his knowledge and skills independently, knows how to enhance own 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. As an extended knowledge about the human role in shaping the organizational culture and ethics in management - [K2A_W05]         3. 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 model ling 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_U00]         2. Has the ability to use the acquired knowledge in various fields and forms, and extend the knowledge with a crit		-				
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 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 methods and instruments for model ling information processes - [K2A_W06]           3. Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W00]           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 skill to understand and analyze social phenomena, hits ability is widened with the sill of deep theoretical assessme		•	ka@put.poznan.pl			
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 of the essence 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_W06]           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 model ling information processes - [K2A_W06]           3. Las 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, ins ability is widened with the sill of deep theoretical assessment of observed phenomenan in chosen areas, and with use of suitable scientific method - [K2A_U09]	Wyd	lział Inżynierii Zarządz				
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 method for organizational structures with use of social phenomena and processes - [K2A_U02]           1. Can use the theoretical knowledge to describe and analyze the causes and course of social phenomena and processes - [K2A_U02]           2. Has the skill to understand and analyze social phenomena, his ability is widened with the sill 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 rule	ul. S	trzelecka 11 60-965 F	Poznań			
Image         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 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]         Its able to describe and analyze the causes and course of social phenomena and processes - [K2A_W06]           3. Deeply knows the modeling methods and instruments for model ling information processes - [K2A_W06]         Its he ability to use the acquired 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 ability to understand and analyze social phenomena, his ability is widened with the sill 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 id	Prere	quisites in term	s of knowledge, skills and	I social competencies:		
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 model ling 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 sill 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	1	Knowlodgo			acquisition techniques and	
2       Skills       to implement these solutions, and competencies         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         Monwledge:         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 model ling 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 sill 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 respec	I	Knowledge	modeling social structures and pr	ocesses occurring in them		
S       competencies       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 model ling 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 sill 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 responsibility for cooperative tasks - [K2A_K04]         2. Is aware of the reasonability for own work and willingness to comply with the principles of team work and responsib	2	Skills				
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## 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 workcolloquia

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, Tarnowski W, Wydawnictwo Uczelniane Politechniki Koszalińskiej, Koszalin 2004

2. Projektowanie ergonomiczne, Tytyk E, PWN, Warszawa 2001

3. Ergonomia systemów zautomatyzowanych, Sławińska M., Wyd. Politechniki Poznańskiej, Poznań 2008

### Additional bibliography:

1. Interakcja człowiek- komputer, Sikorski M., Wyd. Polsko-Japońskiej Wyższej Szkoły Technik Komputerowych, Warszawa 2010

2. Psychologia poznania, Maruszewski T., Gdańskie Wydawnictwo psychologiczne, Gdańsk, 2001

3. Niezawodność człowieka w interakcji z procesem przemysłowym, 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 wo	orkload	
Source of workload	hours	ECTS
Total workload	56	2
Contact hours	39	1
Practical activities	15	1