STUDY MODULE DESCRIPTION FORM

Name of the module/subject	Code
Ergonomics of automated systems	**1011102311011120242**

Field of study	Profile of study (general academic, practical)	Year /Semester
Engineering Management - Full-time studies -	**(brak)**	**1 / 1**
Elective path/specialty	Subject offered in:	Course (compulsory, elective)
Quality Systems and Ergonomics	**Polish**	**elective**

Cycle of study:	Form of study (full-time,part-time)
Second-cycle studies	**full-time**

No. of hours	No. of credits
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)	**(brak)**

Education areas and fields of science and art	ECTS distribution (number and %)
technical sciences	**2 100%**

Responsible for subject / lecturer:

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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 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 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, 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 workload

Source of workload	hours	ECTS
Total workload	56	2
Contact hours	39	1
Practical activities	15	1