

STUDY MODULE DESCRIPTION FORM		
Name of the module/subject Diagnosing the Manner of Work		Code 1011102231011126465
Field of study Safety Engineering - Full-time studies - Second-	Profile of study (general academic, practical) (brak)	Year /Semester 2 / 3
Elective path/specialty Ergonomics and Work Safety	Subject offered in: Polish	Course (compulsory, elective) elective
Cycle of study: Second-cycle studies	Form of study (full-time, part-time) full-time	
No. of hours Lecture: 15 Classes: - Laboratory: 30 Project/seminars: 15		No. of credits 4
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 inż. Małgorzata Wejman email: malgorzata.wejman@put.poznan.pl tel. +48 61 665 3406 Faculty of Engineering Management ul. Strzelecka 11 60-965 Poznań		Responsible for subject / lecturer: - dr Joanna Sadłowska-Wrzesińska email: - joanna.sadlowska-wrzesinska@put.poznan.pl tel. - 616653364 - Faculty of Engineering Management - ul. Strzelecka 11 60-965 Poznań
Prerequisites in terms of knowledge, skills and social competencies:		
1	Knowledge	The student has knowledge of ergonomics in technology, ecology, basics of diagnosing and ergonomic design as well as occupational.
2	Skills	The students can interpret relationships occurring in the system of human-technical object, organize work that causes minimal workload ensures security.
3	Social competencies	The student is aware of the social role of a technical college graduate, and of predispositions to apply occupational safety principles.
Assumptions and objectives of the course: -Presenting the students a detailed knowledge of the theoretical and practical problems as well as methods of ergonomic diagnosis occupational safety of a man. The use of diagnosis results in design. The knowledge and skills should allow the student to apply ergonomic diagnoses and occupational safety, in terms of adapting work to the capabilities of the human body, and suggesting the proposals for corrective action.		
Study outcomes and reference to the educational results for a field of study		
Knowledge:		
1. Has extensive knowledge of recognizing the association of a certain problem to a given discipline. - [[K2A_W01]] 2. Knows an in-depth characterization of dependencies within a given discipline. - [[K2A_W02]] 3. Knows the definition of the subject and scope of the discipline. - [[K2A_W04]] 4. Knows the relationships between a given discipline and other disciplines. - [[K2A_W06]] 5. Has a basic knowledge of the objects and organizational and socio-technical systems lifecycle. - [[K2A_W16]] 6. Knows the basic dependencies that exist when solving simple engineering problems in the field of safety engineering. - [[K2A_W19]]		
Skills:		

<p>1. Can acquire, integrate, interpret data from literature, database or other properly matched sources, both in English or other foreign language accepted as an international language of communication within Safety Engineering, as well as to draw conclusions, formulate and justify opinions. - [[K2A_U1]]</p> <p>2. Can apply various techniques in order to communicate in occupational environment and other environments. - [[K2A_U2]]</p> <p>3. Has self-study ability and comprehends it - [[K2A_U5]]</p> <p>4. Student can apply information-communicative techniques to deal with tasks that are typical of engineering activity. - [[K2A_U7]]</p> <p>5. Is able to plan and carry out experiments, including measurements and computer simulations to interpret the results and draw conclusions. - [[K2A_U8]]</p> <p>6. Can, while formulating and solving engineering tasks, discern their systemic and non-technical aspects and also socio-technical, organizational and economic approach. - [[K2A_U10]]</p>
<p>Social competencies:</p> <p>1. Understands the need and knows means how to self-study (first, second and third cycle studies, postgraduate studies, qualification courses)- improving professional, personal and social competence; can argue the need to learn for the whole life. - [[K2A_K1]]</p> <p>2. Student is fully aware of the responsibility that he has taken for his own work and expresses readiness to comply with the rules of team work as well as responsibility for mutually realized and completed tasks. - [[K2A_K3]]</p> <p>3. Can determine some causal relationships in the process of targets implementation and rank pertinence of alternative or competitive tasks. - [[K2A_K4]]</p>

Assessment methods of study outcomes		
<ul style="list-style-type: none"> - Checking the knowledge before the laboratory exercises. - Preparation of reports on activities. - Final test. 		
Course description		
<ul style="list-style-type: none"> -Living and working environment of a man. Technology as a source of occupational environmental risks to human. -The man- technology-environment system as an object of a diagnosis. -Diagnosing loads in the work environment. -Computer-aided diagnosis process of an occupational environment. 		
Basic bibliography:		
<ol style="list-style-type: none"> 1. Wejman M., Diagnostowanie środowiska pracy. Ćwiczenia laboratoryjne, Wyd. Politechniki Poznańskiej, Poznań 2012 2. Horst W.M., Diagnostowanie sposobu wykonywania pracy. Zagrożenia ergonomiczne, Wyd. Politechniki Poznańskiej 2012 		
Additional bibliography:		
<ol style="list-style-type: none"> 1. Normy, standardy i akty prawne wskazane na zajęciach. 2. Horst W.M., Wprowadzenie do diagnostowania sposobu wykonywania pracy. Wybrane zagadnienia fizjologii, biomechaniki i antropometrii, Wyd. Politechniki Poznańskiej 2012 3. Lewicki L., Sadłowska-Wrzesińska J., Istotne aspekty BHP, Wydawnictwo WSL, Poznań 2015. 		
Result of average student's workload		
Activity	Time (working hours)	
1. Participation in laboratory classes	30	
2. Preparation for classes	15	
3. Preparation of reports	15	
4. Preparation for the final assignment	35	
Student's workload		
Source of workload	hours	ECTS
Total workload	95	4
Contact hours	60	2
Practical activities	45	2