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Social competencies:	5. Is able to competently ac specialization, based on the	lvise in the selection of equipment	for a given application in the ind /ipment group [K1A_U25]	ustry covered by chosen		
	Social competencies):				

1. Understands the need and knows the possibilities of lifelong learning. - [K1A_K01]

2. Is aware of and understands the importance and impact of non-technical aspects of mechanical engineering activities and its impact on the environment and responsibility for own decisions. - [K1A_K02]

3. Is aware of and understands the importance and impact of non-technical aspects of mechanical engineering activities and its impact on the environment and responsibility for own decisions. - [K1A_K03]

Assessment methods of study outcomes				
Lecture: course credits obtained on the basis of evaluation of tasks carried out in groups				
Course description				
? Basic concepts: origin of ergonomy as a scientific discipline, legal prote environment; corrective and creative ergonomy of adjustment of the work environ	em of man ? work ?			
? Methodology of ergonomic evaluation of technical projects; somatic and receptor relationships and hazards in the anthropotechnical system;				
Physiology of physical effort in ergonomy; anthropometric and biomechanical investigations of man and their computer modelling;				
? Work environment and hazards in machine construction (including: lighting, noise and microclimate); basics of designing of work-stands, e.g. computer stations;				
? Requirements and criteria of ergonomy and labour safety; possibilities of ergonomic computer systems; reproduction of man?s collision; reaching out with limbs and limb ranges in an anthropotechnical system on the basis of selected examples in machine construction;				
? Ergonomic form shaping of technical objects (principles of designing tools, processing stations, furniture etc.);				
? Detailed principles of product ergonomic designing in machine construction.				
Basic bibliography:				
1. Górska E.: Ergonomia, Wyd. Politechniki Warszawskiej, W-wa 2002				
2. Ergonomia produktu. Ergonomiczne zasady projektowania produktów przemysłowych, praca zbiorowa pod redakcją J. Jabłońskiego, Wydawnictwo Politechniki Poznańskiej, Poznań 2006				
3. Pacholski, L.: Ergonomia, Wydawnictwo Politechniki Poznańskiej, Poznań 1986				
4. Tytyk E.: Projektowanie ergonomiczne, Wydawnictwo Naukowe PWN, Warszawa-Poznań 2001				
Additional bibliography:				
1. Słowikowski J.: Metodologiczne problemy projektowania ergonomicznego w budowie maszyn, Wydawnictwo Centralny Instytut Ochrony Pracy, Warszawa 2000				
2. Hempel L.: Człowiek i maszyna model techniczny współdziałania, WKŁ, Warszawa 1984				
Result of average student's workload				
Activity	Time (working hours)			
1	25			
Student's workload				
Source of workload	hours	ECTS		
Total workload	25	1		
Contact hours	17	0		
Practical activities	0	0		