



KAPITAŁ LUDZKI
NARODOWA STRATEGIA SPÓJNOŚCI

Projekt współfinansowany przez
Unię Europejską w ramach
Europejskiego Funduszu
Społecznego

UNIA EUROPEJSKA
EUROPEJSKI
FUNDUSZ SPOŁECZNY



Course title		ECTS code	
Technical drawing		13.3.0902	
Name of unit administrating study			
null			
Studies			
faculty	field of study	type	all
Faculty of Chemistry	Chemical Business	form	all
		specialty	all
		specialization	all
Teaching staff			
dr inż. Paweł Mazierski			
Forms of classes, the realization and number of hours		ECTS credits	
Forms of classes		3	
Laboratory classes		classes - 45 h	
The realization of activities		tutorial classes – 5 h	
classroom instruction		student's own work – 25 h	
Number of hours		Total: 75 h - 3 ECTS	
Laboratory classes: 45 hours			
The academic cycle			
2022/2023 summer semester			
Type of course		Language of instruction	
obligatory		polish	
Teaching methods		Form and method of assessment and basic criteria for evaluation or examination requirements	
<ul style="list-style-type: none"> - critical incident (case) analysis - group work - problem solving - project-based method (research, implementation, practical project) 		Final evaluation	
		Graded credit	
		Assessment methods	
		<ul style="list-style-type: none"> - (mid-term / end-term) test - assignment work – project or presentation 	
		The basic criteria for evaluation	
		The basic criteria for evaluation or exam requirements <ul style="list-style-type: none"> • passing three written tests including: (1) axonometric and rectangular projection, (2) cross-sections and dimensioning. (3) dimensional tolerances, fits and construction connections • each negative grade in the test should be corrected by writing a retake 	
Method of verifying required learning outcomes			
The method of verifying the acquisition of knowledge: The student answers the questions of the final test concerning the program content of the course (K_BCh_W03, K_BCh_W04). The method of verifying the acquisition of skills: The student performs a number of tasks provided for in the exercise program. Presents conclusions and discusses possible errors, uses the language of technical drawing during classes and final tests (K_BCh_U01, K_BCh_U02, K_BCh_U08). The method of verifying the acquisition of social competences: During the auditorium classes, the student works independently and in a group, solving the tasks given by the teacher (K_BCh_K02, K_BCh_K03, K_BCh_K04).			
Required courses and introductory requirements			
A. Formal requirements			
Mathematics, physics, chemistry			

<p>B. Prerequisites Basic knowledge of mathematics, physics, chemistry and computer use, the ability to use accessories to perform graphic works</p>	
<p>Aims of education</p> <p>Aims of education</p> <ul style="list-style-type: none"> • acquainting students with all issues mentioned in the program content of the subject • teaching students how to make technical drawings • to develop skills of critical assessment and interpretation of technical drawings and analysis of source texts 	
<p>Course contents</p> <p>Course contents</p> <ul style="list-style-type: none"> - normalized elements of technical drawing - rules of orthographic projections - views and cross sections - dimensioning, - rules of axonometric projections, - technical drawings 	
<p>Bibliography of literature</p> <p>A. Literature required for the final completion of the course (passing the exam):</p> <p>A.1. used during classes</p> <p>A.2. studied independently by the student</p> <p>B. Supplementary literature</p> <p>T. Dobrzański "Machine technical drawing" WNT W-wa, last editions</p>	
<p>The learning outcomes (for the field of study and specialization)</p> <p>K_BCh_W03 describes at an advanced level the techniques of higher mathematics and IT tools necessary to describe and model chemical phenomena and technological processes</p> <p>K_BCh_W04 describes role of experiment and computer simulation in the design process of engineering issues</p> <p>K_BCh_U01 on the basis of the acquired knowledge, identifies, analyses and solves engineering tasks and problems in broadly understood chemistry</p> <p>K_BCh_U02 uses methods, techniques and tools in formulating and solving engineering tasks in the field of chemistry</p> <p>K_BCh_U08 uses the chemical nomenclature and engineering terminology properly</p> <p>K_BCh_K02 works individually demonstrating initiative and independence in actions, and effectively cooperates in a team, performing various roles in it</p> <p>K_BCh_K03 independently sets or implements a set action plan specifying priorities for its implementation</p> <p>K_BCh_K04 demonstrates responsibility for the safety of her/his own and others' work</p>	<p>Knowledge</p> <p>Knowledge</p> <p>Student:</p> <ol style="list-style-type: none"> 1. defines and presents normalized elements of technical drawing 2. describes, illustrates and explains the principles of orthographic projection 3. describes views and cross sections 4. understands the principles of dimensioning 5. knows the principles of axonometric projection 6. can make a technical drawing
	<p>Skills</p> <p>Skills</p> <p>Student:</p> <ol style="list-style-type: none"> 1. uses terminology to present (in written and oral form) the content of the subject 2. uses the basic drawing techniques used in engineering graphics 3. knows the operation of devices based on their technical drawings 4. analyzes technical drawings, draws conclusions about the correctness of their implementation
	<p>Social competence</p> <p>Social competence</p> <p>Student:</p> <ol style="list-style-type: none"> 1. Understands the need for continuous education, 2. is aware of the need for honest and reliable work, 3. appreciates the need to be able to work in a team in accordance with its role in it, 4. is aware of the need for a critical analysis of own work 5. shows cautious criticism in receiving information, especially available in the mass media
<p>Contact</p> <p>pawel.mazierski@ug.edu.pl</p>	