POZNAN UNIVERSITY OF TECHNOLOGY

EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS)
pl. M. Skłodowskiej-Curie 5, 60-965 Poznań

COURSE DESCRIPTION CARD - SYLLABUS

Course name
Engineering graphics

Course

Field of study	Year/Semester
Environmental Protection Technologies	I/1
Area of study (specialization)	Profile of study
-	general academic
Level of study	Course offered in
First-cycle studies	Polish
Form of study	Requirements
full-time	compulsory

Number of hours

Lecture	Laboratory classes	Other (e.g. online)
0	0	0
Tutorials	Projects/seminars	
0	30	

Number of credit points

3

Lecturers

Responsible for the course/lecturer:	Responsible for the course/lecturer:
Dr Eng. Justyna Szadzińska	

Prerequisites

The student starting this subject should have a basic knowledge of mathematics, geometry and calligraphy. He should also be able to use tools for technical drawing.

Course objective

The aim of the course is to provide students with basic knowledge of engineering graphics necessary for the correct design, creation and reading of technical drawings. Developing skills in using tools for drawing, planning and presenting structural and technological elements of machine parts and entire products.

Course-related learning outcomes

Knowledge

1. A student demonstrates a basic knowledge of technical drawing in the scope of principles and methods of presenting technical drawing.
K_W10

2. A student can demonstrate knowledge of planning and designing technical drawings.
K_W03

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Skills

1. A student has a good ability to use tools for drawing, sketching, constructing, designing and reading technical drawings.
KU_03, KU_19

2. A student is able to work individually and in a team to create technical documentation of the project.
K_U02

Social competences

1. A student understands that knowledge and skills in the field of technical drawing as an engineering subject are one of the basics of the engineer's competence.
K_K06

2. A student demonstrates the need for continuous training and raising their professional and personal qualifications.
K_K01

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Knowledge and skills acquired during the projects are checked regularly based on grades from technical drawings carried out within engineering graphics issues. In addition, knowledge of the principles and structure of technical drawings is verified on the basis of a final test, carried out at the end of the projects. Passing threshold: 50% of points.

Programme content

Within the course students learn the basics of technical drawing, which include: standardized elements of technical drawing (including technical writing), geometric constructions, rectangular projection by various methods, axonometric projection, views, cross-sections and their types as well as dimensions, principles and methods of dimensioning, as well as various types of structural element connections. Projects of engineering graphics are carried out in pencil.

Teaching methods

1. A multimedia presentation illustrated with examples given on the blackboard by the teacher. Performing tasks ordered during projects and presenting an example solution on the blackboard.

2. Drawing and designing exercises shaping the skills in creating technical drawings in pencil.

Bibliography

Basic
1. Technical machine drawing, Dobrzański, T., PWN: Warsaw, 2020.

Additional
1. Technical drawing for mechanics, Handbook, Lewandowski, T., WSiP: Warsaw, 2018.

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Breakdown of average student's workload

	Hours	ECTS
Total workload	60	3,0
Classes requiring direct contact with the teacher	30	1,5
Student's own work (literature studies, preparation for projects, preparation for test, project preparation) [1]	30	1,5

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[1] delete or add other activities as appropriate