



COURSE DESCRIPTION CARD - SYLLABUS

Course name

Engineering graphics (CAD)

Course

Field of study

Logistics

Area of study (specialization)

Level of study

First-cycle studies

Form of study

part-time

Year/Semester

1/2

Profile of study

general academic

Course offered in

Polish

Requirements

compulsory

Number of hours

Lecture

Laboratory classes

Other (e.g. online)

12

Tutorials

Projects/seminars

Number of credit points

1

Lecturers

Responsible for the course/lecturer:

Ph.D., D.Sc., Eng., Józef Gruszka, University Professor

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Faculty of Engineering Management

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Responsible for the course/lecturer:

Ph.D., Eng., Kamil Wróbel

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Prerequisites

The student should have knowledge of the basics of geometry and technical drawing (sem1) and the use of computer programs.

Course objective

Providing students with knowledge of creating and reading technical drawings using a CAD program.

Course-related learning outcomes

Knowledge

Knows the basic issues of construction, technology and techniques related to logistics [P6S_WG_01]



Skills

Is able to assess and perform a critical analysis in economic terms of a selected problem, which falls within the framework of logistics and its specific issues, and supply chain management [P6S_UW_06]

Is able to identify changes in requirements, standards, regulations, technical progress and the reality of the labor market, and based on them determine the need to supplement knowledge [P6S_UU_01]

Social competences

Is aware of initiating activities related to the formulation and transmission of information and cooperation in society in the field of logistics [P6S_KO_02]

Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

Acquired knowledge is verified in the form of admission cards. Entrance tickets last 5 minutes and consist of 3-4 test questions scored in the same way. Passing threshold: 66% of points. Skills acquired as part of the laboratory are verified on the basis of the student's work. The final grade of the subject is the arithmetic average of partial grades for all classes in accordance with the conditions of passing the subject.

Programme content

1. Creating a frame block and A4 drawing table with text and text attributes.
2. Creating a dynamic block on the example of a door leaf projection.
3. Creating assembly drawings in two-dimensional space - inserting elements and modifying the drawing.
4. dimensioning and description (reference lines) of assembly drawings in two-dimensional space.
5. Page and print settings - work in the area of the print layout.
6. Creating assembly drawings in three-dimensional space - the basics of creating solids and drawing modifications.

Teaching methods

1. Problem lecture; explanations and explanations.
2. Demonstration method; show.
3. Laboratory method; design method.

Bibliography

Basic

Józef Gruszka, Kamil Wróbel, Adam Radecki (2021), Zarządzanie doborem narzędzi inżynierskiej grafiki



komputerowej w projektowaniu ergonomicznym, Monografia (w opracowaniu), Wydawnictwo Politechniki Poznańskiej.

Piotr Agaciński (2014), Grafika inżynierska, Politechnika Poznańska. Wydawnictwo Politechniki Poznańskiej, Poznań 2014

Tadeusz Dobrzański (2019), Rysunek techniczny maszynowy, Wydawnictwo Naukowe PWN.

Andrzej Pikoń (2019), AutoCAD 2020 PL : pierwsze kroki, Helion.

Andrzej Jaskulski (2020), AutoCAD 2021PL/EN/LT+ : metodyka efektywnego projektowania parametrycznego i nieparametrycznego 2D i 3D, Helion.

Additional

Fabian Stasiak (2017), AutoCAD® LT 2018 w projektowaniu mechaniki; ExpertBooks.

Kossakowski, Paweł (2017), Modelowanie żelbetowych elementów konstrukcyjnych w programie Autodesk Autocad Structural Detailing 2015, Wydawnictwo Politechniki Świętokrzyskiej.

www.youtube.pl

Breakdown of average student's workload

	Hours	ECTS
Total workload	25	1,0
Classes requiring direct contact with the teacher	12	0,5
Student's own work (literature studies, preparation for laboratory classes/tutorials, preparation for tests, project preparation) ¹	13	0,5

¹ delete or add other activities as appropriate