



## COURSE DESCRIPTION CARD - SYLLABUS

Course name

Engineering Graphics

### Course

Field of study

Chemical Technology

Area of study (specialization)

Level of study

First-cycle studies

Form of study

full-time

Year/Semester

I/2

Profile of study

general academic

Course offered in

English

Requirements

elective

### Number of hours

Lecture

0

Laboratory classes

0

Other (e.g. online)

0

Tutorials

0

Projects/seminars

15

### Number of credit points

2

### Lecturers

Responsible for the course/lecturer:

Ph.D. Eng. Piotr T. Mitkowski

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tel. +48 61 665 3334

Responsible for the course/lecturer:

### Prerequisites

Student possess basic computer skills and completed the basic course on technical drawing or engineering graphics.

### Course objective

Student is going to gain the practical knowledge of computer aided design and preparation of 2 drawing documentation. In addition, the graduate acquires the skills to create assembly drawings of machine parts and executive drawings.

### Course-related learning outcomes

Knowledge

1. Student knows the principles of technical drawing and computer aided 2D design [K\_W15]

2. Student has a knowledge necessary to create assembly drawings and executive drawings [K\_W15]



### Skills

1. Student can acquire information from literature, databases and other sources, including electronics ones [K\_U01]
2. Student uses the principles of technical drawing and computer programs to support the tasks typical for engineering drawing documentation. [K\_U07]

### Social competences

1. Student understands the need to develop and improve his/her professional and personal competencies [K\_K01]

### Methods for verifying learning outcomes and assessment criteria

Learning outcomes presented above are verified as follows:

The acquired knowledge during the project is verified continuously by delivering the specific drawings and final test drawing.

### Programme content

During the course the following issues are discussed:

1. Introduction to CAD (computer aided-design) software, with focus on software supporting the 2D drawing and 3D object design,
2. Work with layers,
3. Dimensioning,
4. Creation assembly drawings of a machine parts,
5. Preparation of executive drawings.

### Teaching methods

Multimedia presentation and pdf materials available through e-Learning system. During classes the AutoCad is used. For student possessing e-mail address in student.put.poznan.pl domain are eligible to download and use for educational purposes selected software from Autodesk (more information go to [www.autodesk.pl](http://www.autodesk.pl)).

### Bibliography

#### Basic

1. Kłosowski P., Ćwiczenia w kreśleniu rysunków w systemie AutoCAD 2010 PL, 2011 PL, Wydawnictwo Politechniki Gdańskiej, Gdańsk 2010.
2. Pikoń A., AutoCAD 2020 PL : pierwsze kroki, Helion, Gliwice 2020.
3. [www.autodesk.pl](http://www.autodesk.pl)



Additional

1. Agaciński P., Grafika Inżynierska, Wydawnictwo Politechniki Poznańskiej, 2014.
2. Dobrzański T., Rysunek techniczny maszynowy, WNT Warszawa 2019.
3. Babiuch M., AutoCAD 2012 i 2012 PL : superprojekt od ręki? z autoCAD-em 2012!, Helion, Gliwice, 2016.

**Breakdown of average student's workload**

	Hours	ECTS
Total workload	50	2,0
Classes requiring direct contact with the teacher	25	1,0
Student's own work (preparation for classes, preparation for tests) <sup>1</sup>	25	1,0

<sup>1</sup> delete or add other activities as appropriate