GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00066713		
Field of study	Transport		
Date of commencement of studies	October 2024	Academic year of realisation of subject	2024/2025
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	e-learning
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	2.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Engineering Structures -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Wojciech Migda	
	Teachers	dr inż. Wojciech Migda dr inż. Patryk Deniziak	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	0.0	0.0	30.0	0.0	0.0	30

E-learning hours included: 30.0

Additional information:

Students carry out classes and get acquainted with the contents based on an online course, getting the skills to be implemented in the subsequent semesters. The instructors check the prepared tests and homeworks

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	30	0.0	0.0	30

Subject objectives

Making the students familiar with the AutoCAD software.

Learning the students to make technical drawings and documentation.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_W03] has knowledge of informatics, electronics, telecommunications, automation and control, information technologies, computer graphics, geodesy and satellite navigation which is useful for understanding how it can be applied in transport	The student knows the principles of using CAD software.	[SW3] Assessment of knowledge contained in written work and projects
[K6_U05] able to use IT graphic techniques suitable for tasks typical of designing, construction, operation, and diagnosing means and transportation systems.	The student is able to read and create technical drawings using computer software.	[SU3] Assessment of ability to use knowledge gained from the subject

<table>
<tr><td>Subject contents</td><td>Laboratory

Laboratory for self-study based on the recorded course and the topics of the daily content.
AutoCAD interface. Rules for drawing in the AutoCAD system. Coordinate systems. Navigating the workspace.
Layers. Types of lines and line styles. Features of drawings: simple drawing, precise drawing using permanent and temporary location points. Hatching. Drawing object properties: definition and modification, agreement in properties of the objects, physical properties of the objects (length, area, moments of inertia, etc.). Editing: editing tools, advanced editing of the objects. Blocks: creation and modification of blocks, block libraries, blocks with attributes. Text: definition and modification, text styles. Dimensioning: definition and modification, dimensioning styles, types of dimensions. Printing: plotter configuration, plot scale and paper size, printing from a model and from a paper layout.

Skill check
Performance of tasks - quizzes
Preparation of homeworks (2 or 3 per semester)</td></tr>
<tr><td>Prerequisites and co-requisites</td><td>Acquaintance in geometry and the principles of making technical drawings.

Acquaintance in the basics of CAD operating systems.</td></tr>
<tr><td>Assessment methods and criteria</td><td><table><tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr><tr><td>CAD Homework , quizzes</td><td>100.0%</td><td>100.0%</td></tr></table></td></tr>
<tr><td>Recommended reading</td><td><table><tr><td>Basic literature</td><td>1. KŁOSOWSKI P.: Ćwiczenia w kreśleniu rysunków w systemie AutoCAD 2010PL, AutoCAD 2011PL, Wydawnictwo Politechniki Gdańskiej, Gdańsk 2011.
2. Jaskulski A.: AutoCAD 2014/LT2014/360(WS+), Kurs projektowania parametrycznego i nieparametrycznego 2D i 3D. PWN, 2014
3. Pikoń A.: AutoCAD 2022PL. Pierwsze kroki. Helion, 2021.
4. Pikoń A.: AutoCAD 2023PL. Helion, 2022.
5. Kacprzyk Z., Pawłowska B.: Komputerowe wspomaganie projektowania. Oficyna Wydawnicza Politechniki Warszawskiej, Warszawa 2012.
6. Kasznia D., Magiera J., Wierzowiecki P.: BIM w praktyce. PWN, Warszawa, 2018. 7. Tomana A.: BIM Innowacyjna technologia w budownictwie. Podstawy. Standardy. Narzędzia. Kraków 2016.</td></tr><tr><td>Supplementary literature</td><td>• PN-EN ISO 13567-1:2002 Dokumentacja techniczna wyrobu. Organizacja i nadawanie nazw warstwom w systemie CAD. Część 1: Zasady ogólne.
• PN-EN ISO 128-21: Rysunek techniczny. Zasady ogólne przedstawiania. Część 21: Linie w systemie CAD.</td></tr><tr><td>eResources addresses</td><td>Adresy na platformie eNauczanie:
Kurs podstawowy CAD - Moodle ID: 44791
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=44791</td></tr></table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>Creating a technical drawing.</td></tr>
<tr><td>Work placement</td><td>Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.