GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00060099
Field of study	Civil Engineering

Date of commencement of studies	October 2023	Academic year of realisation of subject	2023/2024
Education level	first-cycle studies	Subject group	
Mode of study	Part-time studies	Mode of delivery	at the university
Year of study	1	Language of instruction	Polish
Semester of study	2	ECTS credits	1.0
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. Arkadiusz Sitarski
	Teachers	dr inż. Arkadiusz Sitarski
		dr inż. Przemysław Kalitowski
		mgr inż. Mikołaj Binczyk
		dr inż. Marek Szafrański

Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	5.0	0.0	0.0	5
	E-learning hours included: 0.0						
	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 Hybrid mode classes - five hours in a laboratory room, the rest of the schedule conducted independently. https://enauczanie.pg.edu.pl/moodle/course/view.php?id=30001						

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	5	0.0	0.0	5

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_W04] Knows the rules of descriptive geometry and technical drawing for preparing and reading architectural, construction and geodetic drawings; also with the use of CAD	The ability to read and perform basic drawings in the CAD environment	[SW1] Assessment of factual knowledge
	[K6_U04] Reads and prepares construction documentation (including drawings, graphic documentation in the CAD environment), efficiently uses maps as well as architectural, construction and geodetic drawings.	The ability to read and perform basic drawings in the CAD environment	[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools

Subject contents	**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
Prerequisites and co-requisites	Acquaintance in geometry and the principles of making technical drawings. Acquaintance in the basics of CAD operating systems.

Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	CAD Homework , quizzes	100.0%	100.0%

Recommended reading	Basic literature	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.
	Supplementary literature	• 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.
	eResources addresses	Adresy na platformie eNauczanie: AutoCAD I - semestr II 2023/2024 - Moodle ID: 37666 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=37666

Example issues/ example questions/ tasks being completed	
Work placement	Not applicable