GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	Essentials of Computer Science, PG_00044386		
Field of study	Civil Engineering		
Date of commencement of studies	October 2020	Academic year of realisation of subject	2020/2021
Education level	first-cycle studies	Subject group	Obligatory subject group in the field of study
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	4.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Structural Mechanics Department -> Faculty of Civil and Environmental Engineering		
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Krzysztof Żerdzicki	
	Teachers	dr inż. Krzysztof Żerdzicki	

Lesson types and methods of instruction

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	10.0	0.0	0.0	25

E-learning hours included: 0.0

Adresy na platformie eNauczanie:
Podstawy Informatyki - 2021 - Moodle ID: 13544
https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13544

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	25	5.0	70.0	100

Subject objectives

Aim of the subject is to learn the students how to use computer aided engineering softwares on the basis of AutoCAD and MAtlab commercial programs.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_U02] is able to define basic calculation models used in computer calculations	Student knows how to solve simple engineering problems using MAtlab software.	[SU4] Assessment of ability to use methods and tools [SU1] Assessment of task fulfilment
[K6_W11] Knows selected software supporting the calculation and design of construction as well as construction management	Student knows how to use Matlab and AutoCAD softwares for engineering calculation and preparation of technical drawings and projects.	[SW2] Assessment of knowledge contained in presentation [SW1] Assessment of factual knowledge

Subject contents

Basis of programming - Matlab software.

Basis of engineering computer aided design - AutoCAD software.

Engineering software - CAD / CAM/ CAE - examples.

Prerequisites and co-requisites

Assessment methods and criteria

Subject passing criteria	Passing threshold	Percentage of the final grade
Project	60.0%	100.0%

Recommended reading	Basic literature	1. R. Jankowski, I. Lubowiecka, W. Witkowski: „Podstawy Programowania w języku MATLAB". Wyd. PG Gdańsk 2003. 2. A. Pikoń: „AutoCAD 2008 i 2008PL" Helion Warszawa 2008. 3. P. Kłosowski: „Ćwiczenia w kreśleniu rysunków w systemie AutoCAD 2010PL 2011PL". Wyd. PG Gdańsk 2010
	Supplementary literature	1. B. Mrozek, Z. Mrozek: „MATLAB i Simulink. Poradnik użytkownika", Wyd. III, Helion 12/2010. 2. I. Lubowiecka, A. Ambroziak: 'MATLAB i jego środowisko", Wyd. PG Gdańsk 2016.
	eResources addresses	Podstawy Informatyki - 2021 - Moodle ID: 13544 https://enauczanie.pg.edu.pl/moodle/course/view.php?id=13544
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	