



Subject card

Subject name and code	Essentials of Computer Science, PG_00044386						
Field of study	Civil Engineering						
Date of commencement of studies	October 2021		Academic year of realisation of subject		2021/2022		
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:						
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_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.		[SW1] Assessment of factual knowledge [SW2] Assessment of knowledge contained in presentation		
	[K6_U02] is able to define basic calculation models used in computer calculations		Student knows how to solve simple engineering problems using MATLAB software.		[SU1] Assessment of task fulfilment [SU4] Assessment of ability to use methods and tools		
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		<ol style="list-style-type: none">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	<ol style="list-style-type: none"> 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	
Example issues/ example questions/ tasks being completed		
Work placement	Not applicable	