



Subject card

Subject name and code	ADVANCED CAD SYSTEMS, PG_00041295						
Field of study	Civil Engineering						
Date of commencement of studies	February 2024	Academic year of realisation of subject			2024/2025		
Education level	second-cycle studies	Subject group			Optional subject group		
Mode of study	Full-time studies	Mode of delivery			at the university		
Year of study	1	Language of instruction			Polish		
Semester of study	2	ECTS credits			3.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Metal Structures -> Faculty of Civil and Environmental Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		mgr inż. Paweł Pieczka				
	Teachers		mgr inż. Paweł Pieczka				
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: 0.0						
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		5.0		40.0	75
Subject objectives	<p>Student knows the possibilities offered by the software dedicated to 3D-modelling, detailing and dimensioning of the steel structures.</p> <p>Student learns how to use basic tools and functions of the selected software dedicated to 3D-modelling, detailing and dimensioning of the steel structures.</p> <p>Student learns the principles of the preparation of the steel structures workshop documentation.</p>						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	[K7_U02] can design and dimension complex steel, concrete (including reinforced), wood and masonry constructions and its details		Student is able to design and dimension selected connections of the steel structures.		[SU1] Assessment of task fulfilment		
	[K7_W02] knows principles of analysis, design and dimensioning of complex constructions and its elements		Student knows the principles of the use of the software dedicated to 3D-modelling, detailing and dimensioning of the steel structures.		[SW1] Assessment of factual knowledge		
	[K7_U15] has advanced skills in civil engineering within offered specialization/profile		Student is able to use software dedicated to 3D-modelling, detailing and dimensioning of the steel structures.		[SU1] Assessment of task fulfilment		
Subject contents	Demonstration of the selected software dedicated to 3D-modelling, detailing and dimensioning of the steel structures. Modelling of the beam and plate elements. Modelling of the 2D and 3D structures. Modelling of the connections: bolts and welds. Collision checks. Generating workshop drawings and deliverables.						
Prerequisites and co-requisites							
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Project		60.0%		50.0%		
	Test		60.0%		50.0%		

Recommended reading	Basic literature	Autodesk Advance Steel - User's Guide.
	Supplementary literature	-
	eResources addresses	Adresy na platformie eNauczenie: ZAAWANSOWANE SYSTEMY CAD - Moodle ID: 41553 https://enauczenie.pg.edu.pl/moodle/course/view.php?id=41553
Example issues/ example questions/ tasks being completed	Creating 3-D model of the steel structures. Generating workshop drawings and deliverables.	
Work placement	Not applicable	

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