



Subject card

Subject name and code	Computer-Aided Design in Electrical Engineering, PG_00038418						
Field of study	Electrical Engineering						
Date of commencement of studies	October 2021		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	3		Language of instruction		Polish		
Semester of study	5		ECTS credits		4.0		
Learning profile	general academic profile		Assessment form		assessment		
Conducting unit	Department of Electrical Engineering of Transport -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr hab. inż. Andrzej Wilk				
	Teachers		dr hab. inż. Andrzej Wilk dr inż. Wojciech Rosiński				
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	20.0	0.0	10.0	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		65.0	100
Subject objectives	The main objective of the course is learning of basic and advanced computer aided design techniques using selected commercial CAD/CAE software.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_U11		The student is able to use typical measuring equipment		[SU4] Assessment of ability to use methods and tools		
	K6_U09		Is able to select electrical equipment		[SU4] Assessment of ability to use methods and tools		
	K6_U05		Student is adapted to work in an industrial environment		[SU4] Assessment of ability to use methods and tools		
	K6_W11		The student knows the principles of creating technical drawings		[SW3] Assessment of knowledge contained in written work and projects		
	K6_W10		The student knows the basics of energy conversion and consumption		[SW3] Assessment of knowledge contained in written work and projects		
	K6_W09		Student knows the basics of electricity generation and distribution		[SW3] Assessment of knowledge contained in written work and projects		
	K6_K05		Student is able to react in emergency situations		[SK3] Assessment of ability to organize work		
	K6_K01		Student is aware to continuous learning		[SK5] Assessment of ability to solve problems that arise in practice		
Subject contents	2D and 3D computer modeling on sketches. Transformation tools for drawing object on sketches. 3D computer modeling of solid objects. Constraints types for parts connection. Assmely kinematics. Creating of elctronic technical dokumentation. Basics of assembly and disassembly animation.						
Prerequisites and co-requisites	No requirements						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	Computer project		100.0%		50.0%		
	Test		60.0%		50.0%		
Recommended reading	Basic literature		Tremblay T.: Autodesk Inventor 2014. Oficjalny podręcznik. Wydawnictwo Helion. 2015				

	Supplementary literature	K. Kapias: Inventor. Praktyczne rozwiązania. Wydawnictwo Helion
	eResources addresses	Adresy na platformie eNauczanie:
Example issues/ example questions/ tasks being completed	Advanced 3D computer methods	
Work placement	Not applicable	