



## 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 electronic 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	