



## Subject card

Subject name and code	Professional Training, PG_00042116						
Field of study	Power Engineering, Power Engineering, Power Engineering, Power Engineering, Power Engineering						
Date of commencement of studies	October 2020		Academic year of realisation of subject			2022/2023	
Education level	first-cycle studies		Subject group			Optional subject group Subject group related to scientific research in the field of study	
Mode of study	Full-time studies		Mode of delivery			at the university	
Year of study	3		Language of instruction			Polish	
Semester of study	6		ECTS credits			6.0	
Learning profile	general academic profile		Assessment form			assessment	
Conducting unit	Department of Mechatronics and High Voltage Engineering -> Faculty of Electrical and Control Engineering						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Daniel Kowalak				
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	0.0	0.0	0.0	0
	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	0		10.0		150.0	160
Subject objectives	The professional practices make possible extension captured knowledge about practical skills used in industrial conditions. The practices permit students to check captured theoretical knowledge in practical situations. The practices make possible to get to know the future employers of requirement and to adapt the competence and knowledge of student to technical problems of institution. The practices help in choice of further individual interests and the future directions of deepening of theoretical knowledge.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_K02		The student is able to effectively solve engineering problems on the basis of provided design requirements according to the applicable legal regulations.				
	K6_K01		The student is able to organize the training materials necessary to solve the engineering problems. He is aware of legal responsibility in case of using illegal sources.				

Subject contents	<p>The practical training must include design, workshop and operational work in the field of electrical engineering and power industry.</p> <p>I. General technical issues</p> <ol style="list-style-type: none"><li>1. Familiarizing oneself with the structure of the company and organization of work in the company.</li><li>2. Getting to know the technical processes carried out in the plant, their final products.</li><li>3. Getting to know the technological installations in the plant including the problems of power supply, control, reliability, diagnostics and environmental protection.</li></ol> <p>II. Maintenance and workshop works (only under the supervision of authorized people)</p> <ol style="list-style-type: none"><li>1. Auxiliary works in the operation, control, repair, installation and start-up of electrical or electric power devices.</li><li>2. Auxiliary work on periodic inspections and operational measurements of electrical and power installations.</li><li>3. Auxiliary work on the maintenance, repair or replacement of electrical apparatus and devices in the following installations: electronic, heating, pneumatic, hydraulic, etc.</li></ol> <p>III. Work project - design</p> <ol style="list-style-type: none"><li>1. Familiarise oneself with and understand the available technical documentation and operating manuals of subassemblies and devices of technological installations: electrical, power, electronic, etc.</li><li>2. Familiarise oneself with the computer systems, equipment and software used in the plant and their functions.</li><li>3. Participate in designing industrial electrical installations as well as in selecting electrical equipment in other installations.</li></ol>		
Prerequisites and co-requisites	Basic knowledge of electrical engineering and electronics and mechanics.		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	The signed report	60.0%	100.0%
Recommended reading	Basic literature	Katalog branżowy miesięcznika Napędy i Sterowanie; <a href="http://www.nis.com.pl">www.nis.com.pl</a> Wiatr J.; Orzechowski M.: Poradnik projektanta elektryka. Medium.	
	Supplementary literature	None	
	eResources addresses	Adresy na platformie eNauczanie:	
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"><li>1. Describe the basic structure and organization of work at the factory.</li><li>2. Explain the structure of electrical power and control systems in a production plant.</li><li>3. Rules for safe performance of work in the plant under the supervision of authorized persons.</li><li>4. Describe the procedures for performing work on the repair and commissioning of power industry devices.</li><li>5. Explain the principles of carrying out technical documentation and instructions for power industry devices.</li></ol>		
Work placement	Not applicable		