



Subject card

Subject name and code	Professional Practice, PG_00038162						
Field of study	Automation, Robotics and Control Systems						
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			
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	Katedra Elektrotechniki i Inżynierii Wysokich Napięć -> 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		0.0		160.0	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_W07	The student selects the devices, is able to make numerical calculations and carry out measurements on objects.			[SW1] Assessment of factual knowledge		
	[K6_U81] is able to communicate appropriately in foreign language at B2 level of the Common European Framework of Reference for Languages (CEFR) in everyday life, in academic and professional environments	The student is able to find his/her own place of professional practice, arranges the necessary administrative formalities resulting from the study programme regulations, understands the consequences of not applying legal requirements.			[SU4] Assessment of ability to use methods and tools		
K6_U06	The student, alone, but under the supervision of those responsible at the workplace, solves tasks that are an integral part of the practice. He or she is familiar with the applicable legal regulations in the scope of design standards and OHS.			[SU3] Assessment of ability to use knowledge gained from the subject			

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