



## 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	Zakład Maszyn Przepływowych -> Institute of Energy -> Faculty of Mechanical Engineering and Ship Technology						
Name and surname of lecturer (lecturers)	Subject supervisor		dr inż. Marzena Banaszek				
	Teachers		dr inż. Marzena Banaszek				
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	Diploma internships give the opportunity to expand the acquired knowledge with practical skills to apply it in industrial conditions. They allow you to learn the rules of operation of various enterprises, the requirements of future employers and adapt your knowledge and skills to the technical problems of a given enterprise. Internships develop skills necessary in future professional work, e.g. analytical, organizational and teamwork skills. Internships are to help in the selection of further individual interests.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_K01		The student is able to see and justify the need to use the methods and tools of continuous improvement.		[SK5] Assessment of ability to solve problems that arise in practice		
	K6_K02		The student knows the principles of building an effective team, the phases of the team life cycle and the roles that team members can take during the team life cycle. He can use this knowledge to select means of work and incentives. He can apply these measures to obtain the desired efficiency of the team's work.		[SK1] Assessment of group work skills [SK4] Assessment of communication skills, including language correctness [SK5] Assessment of ability to solve problems that arise in practice		

Subject contents	<p>Diploma internships must include design, workshop and operational work in the field of energy.</p> <p>I. General technical issues</p> <ol style="list-style-type: none"> <li>1. Getting acquainted with the structure of the company, organization of work and its profile of activity (scope of production and/or services) and (possibly) the law regulating its functioning.</li> <li>2. Getting to know the technical processes implemented in the company, including: getting to know the issues of automation, process control with the use of modern computer technologies important in the process of supporting production processes, as well as the analysis of measurement results.</li> <li>3. Getting to know the technological installations in the company, including the problems of control, reliability, diagnostics and environmental protection.</li> </ol> <p>II. Maintenance and workshop works (only under the supervision of authorized persons)</p> <ol style="list-style-type: none"> <li>1. Auxiliary work in the operation, inspection, repair, installation and start-up of power equipment.</li> <li>2. Auxiliary works during periodic inspections and operational measurements of selected installations.</li> <li>3. Auxiliary works in the maintenance, repair or replacement of power equipment in the following installations: electronic, heating, pneumatic, hydraulic, etc.</li> </ol> <p>III. Design and construction works</p> <ol style="list-style-type: none"> <li>1. Reading and understanding the available technical documentation and manuals for subassemblies and devices and/or energy systems.</li> <li>2. Getting acquainted with the computer systems used in the company, the hardware and software used and their functions.</li> <li>3. Participation in the design of energy equipment and/or systems, such as: turbines (thermal, hydro and wind), power plants (conventional and unconventional), heat exchangers, boilers, diagnostic systems, control and automation systems.</li> </ol>		
Prerequisites and co-requisites	<ol style="list-style-type: none"> <li>1. Preliminary Activities - present company, the objectives and program practices, training, occupational safety and protection of personal collection.</li> <li>2. Work in the chosen company department.</li> <li>3. Completion of the practice - the implementation of the report from the practice, the execution of formalities related to the completion and validation practice.</li> </ol>		
Assessment methods and criteria	Subject passing criteria	Passing threshold	Percentage of the final grade
	Internship report	100.0%	100.0%
Recommended reading	Basic literature		<a href="https://wimio.pg.edu.pl/studenci/praktyki-i-staze">https://wimio.pg.edu.pl/studenci/praktyki-i-staze</a>  <a href="https://wimio.pg.edu.pl/studenci/praktyki-i-staze/energetyka">https://wimio.pg.edu.pl/studenci/praktyki-i-staze/energetyka</a>
	Supplementary literature		<a href="https://pg.edu.pl/biuro-karier">https://pg.edu.pl/biuro-karier</a>
	eResources addresses		Adresy na platformie eNauczanie: Praktyka dyplomowa, E, sem.6, letni 22/23 (PG_00042116) - Moodle ID: 30168 <a href="https://enauczenie.pg.edu.pl/moodle/course/view.php?id=30168">https://enauczenie.pg.edu.pl/moodle/course/view.php?id=30168</a>
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> <li>1. Describe the basic structures and organization of work in a company.</li> <li>2. Discuss exemplary work on the operation, control, repair, installation and start-up of power equipment.</li> <li>3. Discuss the principles of safe work in the company.</li> <li>4. Describe the procedures for performing work on the repair and commissioning of power equipment.</li> <li>5. Explain the principles of making technical documentation and instructions for power equipment.</li> </ol>		
Work placement	Not applicable		