



## Subject card

Subject name and code	Internship, PG_00045273						
Field of study	Data Engineering						
Date of commencement of studies	October 2022	Academic year of realisation of subject			2025/2026		
Education level	first-cycle studies	Subject group			Obligatory subject group in the field of study 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	4	Language of instruction			Polish		
Semester of study	7	ECTS credits			2.0		
Learning profile	general academic profile	Assessment form			assessment		
Conducting unit	Department of Intelligent Interactive Systems -> Faculty of Electronics, Telecommunications and Informatics						
Name and surname of lecturer (lecturers)	Subject supervisor	dr inż. Mariusz Szwoch					
	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		50.0		50
Subject objectives	<p>The objectives of practice are as follows:</p> <ul style="list-style-type: none"><li>•apply knowledge and skills acquired during previous studies,</li><li>•acquisition of a new knowledge, skills and social competence</li><li>•knowledge of the industrial environment of teamwork and the conditions and rules in force in this environment</li><li>•development of appropriate attitudes to work in a team : taking care of the quality of work , timeliness tasks, correct cooperation with others and cells in the place of practice , developing his own initiative in the work environment , the acquisition of skills work efficiently as a team.</li></ul>						

Learning outcomes	Course outcome	Subject outcome	Method of verification
	[K6_K03] Knows how to cooperate or work in a project team and take managerial or executive functions.	The student is able to work in a company in a project team.	[SK1] Assessment of group work skills
	[K6_K01] is aware of quickly changing trends and the resulting need for further education and self-improvement in the area of the performed profession of an engineer with IT and economic-financial skills.	The student learns about the need for constant replenishment knowledge.	[SK2] Assessment of progress of work
	[K6_U11] is able to use mathematical and IT tools in economics.	The student knows the management methods of hi-tech company.	[SU2] Assessment of ability to analyse information [SU3] Assessment of ability to use knowledge gained from the subject
	[K6_U03] analyses problems and creates appropriate models, data structures and algorithms (including heuristic and numerical ones), assesses their computational complexity, estimates errors of the received solutions	On the basis of his knowledge, the student is able to solve the problems posed to him.	[SU3] Assessment of ability to use knowledge gained from the subject
	[K6_U08] can acquire and apply basic theoretical knowledge of economic sciences to analyse economic processes	The student is able to use his or her knowledge and learn new issues.	[SU2] Assessment of ability to analyse information
Subject contents	<p>The professional internship plan must contain at least three selected tasks from the following technical and engineering skills block:</p> <ol style="list-style-type: none"> <li>1. Installation, configuration and administration of small computer networks, including wireless ones.</li> <li>2. Implementation of information security policy in a company or institution, installation of anti-virus protection, configuration of firewalls.</li> <li>3. Installation, configuration and administration of software, in particular operating systems and application servers.</li> <li>4. Design, implementation and modification of software in various technologies and for various applications.</li> <li>5. Software testing, also using automated testing tools.</li> <li>6. The use of open program components, taking into account the legal relationships between them and the resulting product.</li> <li>7. Database design and implementation as well as performance testing.</li> <li>8. Using advanced methods and technologies for processing, storage, transformation and data analysis (Big Data, Business Intelligence, data warehouses)</li> <li>9. Design and prototyping of advanced user interfaces.</li> <li>10. Using advanced IT tools for processing sound, image and video files.</li> <li>11. Configuration of external computer devices, expansion and modification of its module structure and internal devices.</li> <li>12. Preparation and testing of software for simple microcontrollers and embedded systems.</li> <li>13. Preparation and analysis of technical documentation of IT projects, use of models and management tools for e-business.</li> </ol>		

Prerequisites and co-requisites	<p>Before starting the internship, the student must complete the following formalities within the time limit indicated by the Dean's representative for professional internships:</p> <ol style="list-style-type: none"> <li>1. Report in the manner specified in the current internship regulations about intending to do an internship in the plant of your choice and obtain the consent of the Dean's representative for internships.</li> <li>2. In the cases indicated in the current internship regulations, obtain the consent of the relevant vice-dean and provide it to the dean's attorney for internships.</li> <li>3. In the case of unpaid internships, obtain a signed contract between the workplace and PG WETI and provide data for accident insurance.</li> </ol>								
Assessment methods and criteria	<table border="1"> <thead> <tr> <th data-bbox="459 488 786 517">Subject passing criteria</th> <th data-bbox="802 488 1137 517">Passing threshold</th> <th data-bbox="1153 488 1481 517">Percentage of the final grade</th> </tr> </thead> <tbody> <tr> <td data-bbox="459 521 786 595">Report, positive assessment of the workplace and compliance with procedures</td> <td data-bbox="802 521 1137 595">60.0%</td> <td data-bbox="1153 521 1481 595">100.0%</td> </tr> </tbody> </table>	Subject passing criteria	Passing threshold	Percentage of the final grade	Report, positive assessment of the workplace and compliance with procedures	60.0%	100.0%		
Subject passing criteria	Passing threshold	Percentage of the final grade							
Report, positive assessment of the workplace and compliance with procedures	60.0%	100.0%							
Recommended reading	Basic literature	No recommendations							
	Supplementary literature	No recommendations							
	eResources addresses								
Example issues/ example questions/ tasks being completed									
Work placement	The subject is internship.								