



## Subject card

Subject name and code	Inorganic technology, PG_00035986						
Field of study	Chemical Technology						
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		
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 Process Engineering and Chemical Technology -> Faculty of Chemistry						
Name and surname of lecturer (lecturers)	Subject supervisor						
	Teachers						
Lesson types and methods of instruction	Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
	Number of study hours	0.0	0.0	30.0	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		15.0	50
Subject objectives	Student extends his/her knowledge concerning selected inorganic technologies through experiments in the lab and visiting industrial instalations.						
Learning outcomes	Course outcome		Subject outcome		Method of verification		
	K6_W05						
	K6_U03						
	K6_U11						
	K6_U05						
Subject contents	Production technologies: sulfur acid, phosphoric acid, fertilizers, chlorine (hypochlorite), metal's coatings, water conditioning.						
Prerequisites and co-requisites	Inorganic technology, lecture, the exam passed concerning following technologies: soda ash, sulfur acid, phosphoric acid, nitrogen compound (ammonia, nitric acid, urea, ammonia nitrate), combustion, water conditioning, chlorine production, metallurgy.						
Assessment methods and criteria	Subject passing criteria		Passing threshold		Percentage of the final grade		
	lab reports		0.0%		50.0%		
	written tests		60.0%		50.0%		
Recommended reading	Basic literature		<ol style="list-style-type: none"><li>Schmidt-Szawłowski, K; Szafran, M.; Bobryk, E.; Sentek, J: Technologia Chemiczna. Przemysł Nieorganiczny, PWN, Warszawa, 2013.</li><li>Bretsznajder S., Podstawy ogólne technologii chemicznej, WNT, Warszawa, 1973</li><li>Kępiński J., Technologia chemiczna nieorganiczna, PWN, Warszawa, 1984.</li><li>Bortel E., Koneczny H , Zarys technologii chemicznej, PWN, Warszawa, 1992.</li></ol>				

	Supplementary literature	<ol style="list-style-type: none"> <li>1. Praca zbiorowa, Soda i produkty towarzyszące, WNT, Warszawa, 1978.</li> <li>2. Dylewski R., Gnot W., Gonet M., Elektrochemia przemysłowa, Wydawnictwo Politechniki Śląskiej, Gliwice, 1999.</li> <li>3. Głowiński J. (Red.), Przykłady i zadania do przedmiotu Podstawy Technologii Chemicznej, Wydawnictwo Politechniki Wrocławskiej, Wrocław, 1991.</li> </ol>
	eResources addresses	
Example issues/ example questions/ tasks being completed	<ol style="list-style-type: none"> <li>1. Draw an idea scheme of the production of the NPK fertilizer</li> <li>2. Describe properties of the major catalyst employed for the sulfuric acid production</li> <li>3. Present major chemical and technological challenges concerning the chloride(I) production.</li> </ol>	
Work placement	Not applicable	