

## **Faculty of Chemical Technology and Engineering**

Field of s	tudy									
Mode of s	study	Chem	ical Engineering	9						
	study	statio	nary	Level	first cy	cle	WITHCh			
Graduate's qualification		inżyni	inżynier W I 1					IICI	1	
Area(s) o	of study	nauki	techniczne						-	
Education	nal profile	gener	al academic						<u>-</u>	ı
Module										
Course ui	nit	Rese	arch Project in	Chemical Tec	hnology					
Code		ChEn	1A_S_D02b							
Field of s	pecialisation								-1	
Administ	ering faculty		ute of Inorganic onmental Engine	Chemical Techn eering	ology and				-	
ECTS		15,0		ECTS (forms) 15,0						
Form of course credit		credit	:S	Language english		1				
Electives	;	12		Elective group						
Form of i	instruction	Code	Semester	Hours		ECTS	Weight		Credit	t
		PD	7	0		15,0	1,00		credit	 S
Leading t	teacher	Grzec	hulska-Damszel	l Joanna (Joanna	.Grzechuls	ka@zut.edu.	pl)			
Other tea				,			• •			
Prerequis										
W-1	Basis of chemical	technolo	ogy							
W-2		nnology - processes of chemical synthesis industry								
W-3	Industrial technology laboratory									
Module/c	course unit objecti	ves								
C-1	Acquire the basic		conduction and co	ntrol of the proce		: -   -   -   -   -   -   -   -   -   -	ic chamical t			
C-1			conduction and co	introl of the proce	sses in the r	ieid of inorgan	ic chemical c	ecnnolog	у,	
		d environ	ment engineering	)	sses in the f	leid of inorgan	iic chemical t	ecnnolog	у,	
C-2 C-3	Acquire the skills	d environ in data c	nment engineering ollection and inter	)						and
C-2	Acquire the skills Acquire the skills	d environ in data c in the pr	nment engineering ollection and inter eparation of degre	pretation ee's thesis basing						and
C-2 C-3 C-4	Acquire the skills Acquire the skills worked out	d environ in data c in the pro	nment engineering ollection and inter eparation of degre tation of degree's	propertation ee's thesis basing thesis				results ob		
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ChEn_1A_D02b_W02 Has knowledge in general chemistry, inorganic chemistry, organic chemistry, physical chemistry, analytical chemistry, reactros structure, catalytical processes, environmental protection and applies it to control processes in the field of inorganic chemical technology and environment engineering, product characterization, kinetic and thermodynamic description, work out and interpretation of results	ChEn_1A_W07 ChEn_1A_W08	P6S_WG_TA11		C-1 C-2 C-3	T-PD-1	T-PD-3	M-1 M-2	S-1 S-2 S-3
ChEn_1A_D02b_W07 Has knowledge in mathematics, physics, chemistry and electotechnics and can use it to quality and quantity description of unit operations and processes within the field of inorganic chemical technology and environmental engineering, can solve the basic technological problems	ChEn_1A_W07 ChEn_1A_W08	P6S_WG_TA11		C-1 C-2 C-3 C-4	T-PD-1	T-PD-3	M-1 M-2	S-1 S-2
Skills								
ChEn_1A_D02b_U01 Basing on subject literature research and results of conducted studies is able to prepare documentation dealing with problems of inorganic chemical technology, biotechnology and environment engineering in English while cooperation with other specialists	ChEn_1A_U01 ChEn_1A_U02 ChEn_1A_U03 ChEn_1A_U04 ChEn_1A_U05 ChEn_1A_U06 ChEn_1A_U07 ChEn_1A_U14 ChEn_1A_U17	P6S_UK P6S_UU P6S_UW_TA11 P6S_UW_TA13 P6S_UW_TA14	P6S_UW_IA13 P6S_UW_IA14	C-3 C-4	T-PD-2 T-PD-3	T-PD-4	M-1 M-2	S-1 S-2 S-3
ChEn_1A_D02b_U02 Is able to designe and build test station, use analytical methods to control unit operation and processes, work out and interpretate the obtained results, can use statisticall methods to plan experiments	ChEn_1A_U01 ChEn_1A_U02 ChEn_1A_U03 ChEn_1A_U04 ChEn_1A_U05 ChEn_1A_U06 ChEn_1A_U07 ChEn_1A_U14 ChEn_1A_U17	P6S_UK P6S_UU P6S_UW_TA11 P6S_UW_TA13 P6S_UW_TA14	P6S_UW_IA13 P6S_UW_IA14	C-1 C-2 C-3 C-4	T-PD-3	T-PD-4	M-1 M-2	S-1 S-2 S-3
Other social / personal competences								
ChEn_1A_D02b_K01 Understands the effect of reliable realization of self work tasks on the final results of group work, can determine order of actions importance, is able to share knowlege and discuss	ChEn_1A_K01 ChEn_1A_K03 ChEn_1A_K04 ChEn_1A_K05 ChEn_1A_K06 ChEn_1A_K07	P6S_KK P6S_KO P6S_KR		C-1 C-2 C-3 C-4		T-PD-3 T-PD-4	M-1 M-2	S-1 S-2

Required reading

1. Literature dealing with subject of research - papers, monographs, books, patents