WTiICh

Faculty of Chemical Technology and Engineering
Major **Chemical Engineering**
Fields of science **engineering and technology**
Disciplines of science **chemical engineering (100%)**
Educational profile **general academic**
Mode of study **stationary**
Level of studies **second cycle**
Specialisation **Modern and Green Chemical Engineering**
Symbol **ChEn_2A_S_2022_2023_ZL**

Zachodniopomorski Uniwersytet Technologiczny w Szczecinie

Academic year 2022/2023
Valid from 2022-10-01
Anex 1 to the Senate Resolution No 92 of April 25, 2022

Curriculum	Selectability blocks	number of elective elements	Selectability groups	Module / Subject code	Modules / subject symbol	No. of exam	No. of credited courses	Total Number of hours	Number of hours of lectures	Number of hours of lecturing courses	Number of hours of laboratory courses	Number of hours of foreign language courses	Number of hours of degree dissertation	Number of hours of seminars	Number of hours of practical laboratory courses	Number of hours of internships	ECTS total	Practical workload ECTS	Contact Hour ECTS
Modules/Subjects of general education				A01	Foreign Language	0	1	30	0	0	0	30	0	0	0	0	3,0	0,0	1,2
Modules/Subjects of general education	1	1			Electives 1	0	1	45	45	0	0	0	0	0	0	0	3,0	0,0	1,8
Modules/Subjects of general education				A04	Basics of Scientific Information	0	1	2	2	0	0	0	0	0	0	0	0,0	0,0	0,0
Modules/Subjects of general education				A05	OHS Training	0	1	12	12	0	0	0	0	0	0	0	0,0	0,0	0,0
Modules/Subjects of general education				A06	Quality Management in Chemical Industry	0	2	30	15	15	0	0	0	0	0	0	2,0	0,0	1,2
Modules/Subjects of general education				A07	Modern Strategies in Environmental Protection	0	2	45	30	15	0	0	0	0	0	0	2,0	0,0	1,8
Modules/Subjects of general education				A08	Intellectual Property Protection	0	1	15	15	0	0	0	0	0	0	0	1,0	0,0	0,6
Modules/Subjects of general education					Total	0	9	179	119	30	0	30	0	0	0	0	11,0	0,0	6,6
Modules/Subjects of major education				B01	Advanced Technologies in Environmental Protection	0	2	75	30	0	0	0	0	0	45	0	4,0	2,0	3,0
Modules/Subjects of major education				B02	Renewable Energy	1	0	30	30	0	0	0	0	0	0	0	2,0	0,0	1,3
Modules/Subjects of major education				B03	Process Analysis and Design	1	2	60	15	30	0	0	0	0	15	0	4,0	1,0	2,5
Modules/Subjects of major education				B04	Instrumental Analysis in Organic Chemical Engineering	0	2	75	30	0	45	0	0	0	0	0	4,0	0,0	3,0
Modules/Subjects of major education				B05	Instrumental Analysis in Inorganic Chemical Engineering	0	2	75	30	0	45	0	0	0	0	0	4,0	0,0	3,0
Modules/Subjects of major education				B06	Artificial intelligence in scientific research	0	1	45	0	0	0	0	0	0	0	45	3,0	3,0	1,8
Modules/Subjects of major education					Total	2	9	360	135	30	90	0	0	0	60	45	21,0	6,0	14,6
Speciality modules/subjects				C01	Industrial Electrochemistry	0	1	15	15	0	0	0	0	0	0	0	1,0	0,0	0,6
Speciality modules/subjects	2	1			Electives 2	0	1	15	15	0	0	0	0	0	0	0	1,0	0,0	0,6
Speciality modules/subjects				C03	Bioprocess Engineering	1	2	90	30	0	0	0	0	0	30	30	6,0	4,0	3,7
Speciality modules/subjects				C04	Biobased and Biodegradable Polymers	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
Speciality modules/subjects				C05	Sustainable Engineering in Monomers and Polymers	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
Speciality modules/subjects				C06	Modern Organic Synthesis	1	1	45	15	0	30	0	0	0	0	0	3,0	0,0	1,9
Speciality modules/subjects				C07	Advanced Topics in Sustainable Catalysis	0	2	30	15	0	15	0	0	0	0	0	2,0	0,0	1,2
Speciality modules/subjects				C08	Modern Heterogeneous Catalysis	0	2	30	15	0	15	0	0	0	0	0	2,0	0,0	1,2
Speciality modules/subjects				C09	Applied Photochemistry	0	2	30	15	0	0	0	0	0	15	0	2,0	1,0	1,2
Speciality modules/subjects	3	1			Electives 3	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
Speciality modules/subjects	4	1			Electives 4	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
Speciality modules/subjects	5	1			Electives 5	0	2	45	15	0	30	0	0	0	0	0	3,0	0,0	1,8
Speciality modules/subjects				C13	Corrosive Processes	0	1	15	15	0	0	0	0	0	0	0	1,0	0,0	0,6
Speciality modules/subjects				C14	Diploma Laboratory	0	1	60	0	0	0	0	0	0	60	0	3,0	3,0	2,4
Speciality modules/subjects				C15	Diploma Seminar	0	1	45	0	0	0	0	0	45	0	0	2,0	0,0	1,8
Speciality modules/subjects				C16	M.Sc. Thesis	0	1	0	0	0	0	0	0	0	0	0	20,0	0,0	0,0
Speciality modules/subjects					Total	2	25	600	210	0	90	0	0	45	225	30	58,0	16,0	24,2
Elective modules/subjects	1	1		A02a	Ethics	0	1	45	45	0	0	0	0	0	0	0	3,0	0,0	1,8
				A02b	Social Psychology	0	1	45	45	0	0	0	0	0	0	0	3,0	0,0	1,8
Elective modules/subjects	2	1		C02a	Hydrogen Technologies	0	1	15	15	0	0	0	0	0	0	0	1,0	0,0	0,6
				C02b	Carbon Capture, Storage and Utilisation	0	1	15	15	0	0	0	0	0	0	0	1,0	0,0	0,6
Elective modules/subjects	3	1		C10a	Technology of Constructive Polymeric Materials	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
				C10b	Functional Adhesives Materials in Industry	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
Elective modules/subjects	4	1		C11a	Multifunctional Materials in Environmental Applications	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
				C11b	Nanomaterials For Chemical Engineering	0	2	45	15	0	0	0	0	0	30	0	3,0	2,0	1,8
Elective modules/subjects	5	1		C12a	Natural Biologically Active Compounds for Industrial Applications	0	2	45	15	0	30	0	0	0	0	0	3,0	0,0	1,8
				C12b	Drugs Technology and Pharmaceutical Process Development	0	2	45	15	0	30	0	0	0	0	0	3,0	0,0	1,8
					Total	4	43	1139	464	60	180	30	0	45	285	75	90,0	22,0	45,4

First year 1st semester

Curriculum	Lecturing classes: lecture	form of crediting a course	Lecturing classes: lecturing course	form of crediting a course	Lecturing classes: laboratory courses	form of crediting a course	Lecturing classes: foreign language courses	form of crediting a course	Lecturing classes: degree dissertation	form of crediting a course	Lecturing classes: seminars	form of crediting a course	ECTS	Practical classes: laboratory courses	form of crediting a course	Practical classes: internship	form of crediting a course	ECTS	ECTS in the semester
Modules/Subjects of general education							30	z					3,0						3,0
Modules/Subjects of general education	45	z											3,0						3,0
Modules/Subjects of general education	2	z											0,0						0,0
Modules/Subjects of general education	12	z											0,0						0,0
Modules/Subjects of general education	15	z	15	z									2,0						2,0
Modules/Subjects of general education	30	z	15	z									2,0						2,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education	104	0	30	0	0	0	30	0	0	0	0	0	10,0	0	0	0	0	0,0	10,0
Modules/Subjects of major education	30	z											2,0	45	z			2,0	4,0
Modules/Subjects of major education	30	e											2,0						2,0
Modules/Subjects of major education	15	e	30	z									3,0	15	z			1,0	4,0
Modules/Subjects of major education	30	z			45	z							4,0						4,0
Modules/Subjects of major education	30	z			45	z							4,0						4,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education	135	0	30	0	90	0	0	0	0	0	0	0	15,0	60	0	0	0	3,0	18,0
Speciality modules/subjects	15	z											1,0						1,0
Speciality modules/subjects	15	z											1,0						1,0
Speciality modules/subjects																			0,0
Speciality modules/subjects																			0,0
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Speciality modules/subjects																			0,0
Speciality modules/subjects	30	0	0	0	0	0	0	0	0	0	0	0	2,0	0	0	0	0	0,0	2,0
Elective modules/subjects	45	z											3,0						3,0
	45	z											3,0						3,0
Elective modules/subjects	15	z											1,0						1,0
	15	z											1,0						1,0
Elective modules/subjects																			0,0
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Elective modules/subjects																			0,0
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Elective modules/subjects																			0,0
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Elective modules/subjects																			0,0
																			0,0
	269	0	60	0	90	0	30	0	0	0	0	0	27,0	60	0	0	0	3,0	30,0

First year 2nd semester

Curriculum	Lecturing classes: lecture	form of crediting a course	Lecturing classes: lecturing course	form of crediting a course	Lecturing classes: laboratory courses	form of crediting a course	Lecturing classes: foreign language course	form of crediting a course	Lecturing classes: degree dissertation	form of crediting a course	Lecturing classes: seminars	form of crediting a course	ECTS	Practical classes: laboratory courses	form of crediting a course	Practical classes: internship	form of crediting a course	ECTS	ECTS in the semester
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
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Modules/Subjects of general education																			0,0
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Modules/Subjects of general education																			0,0
Modules/Subjects of general education	0	0	0	0	0	0	0	0	0	0	0	0	0,0	0	0	0	0	0,0	0,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education																			0,0
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Modules/Subjects of major education	0	0	0	0	0	0	0	0	0	0	0	0	0,0	0	0	0	0	0,0	0,0
Speciality modules/subjects																			0,0
Speciality modules/subjects																			0,0
Speciality modules/subjects	30	e											2,0	30	z		30	z	4,0
Speciality modules/subjects	15	z											1,0	30	z				2,0
Speciality modules/subjects	15	z											1,0	30	z				2,0
Speciality modules/subjects	15	e					30	z					3,0						3,0
Speciality modules/subjects	15	z					15	z					2,0						2,0
Speciality modules/subjects	15	z					15	z					2,0						2,0
Speciality modules/subjects	15	z											1,0	15	z			1,0	2,0
Speciality modules/subjects	15	z											1,0	30	z			2,0	3,0
Speciality modules/subjects	15	z											1,0	30	z			2,0	3,0
Speciality modules/subjects	15	z					30	z					3,0						3,0
Speciality modules/subjects																			0,0
Speciality modules/subjects																			0,0
Speciality modules/subjects																			0,0
Speciality modules/subjects	165	0	0	0	90	0	0	0	0	0	0	0	17,0	165	0	30	0	13,0	30,0
Elective modules/subjects																			0,0
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Elective modules/subjects																			0,0
																			0,0
	165	0	0	0	90	0	0	0	0	0	0	0	17,0	165	0	30	0	13,0	30,0

Second year 3rd semester

Curriculum	Lecturing classes: lecture	form of crediting a course	Lecturing classes: lecturing course	form of crediting a course	Lecturing classes: laboratory courses	form of crediting a course	Lecturing classes: foreign language course	form of crediting a course	Lecturing classes: degree dissertation	form of crediting a course	Lecturing classes: seminars	form of crediting a course	ECTS	Practical classes: laboratory courses	form of crediting a course	Practical classes: internship	form of crediting a course	ECTS	ECTS in the semester
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education																			0,0
Modules/Subjects of general education	15	z											1,0						1,0
Modules/Subjects of general education	15	0	0	0	0	0	0	0	0	0	0	0	1,0	0	0	0	0	0,0	1,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education																			0,0
Modules/Subjects of major education																45	z	3,0	3,0
Modules/Subjects of major education	0	0	0	0	0	0	0	0	0	0	0	0	0,0	0	0	45	0	3,0	3,0
Speciality modules/subjects																			0,0
Speciality modules/subjects																			0,0
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Speciality modules/subjects																			0,0
Speciality modules/subjects	15	0	0	0	0	0	0	0	0	0	0	0	0,0	0	0	0	0	0,0	0,0
Elective modules/subjects																			0,0
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Elective modules/subjects																			0,0
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	15	0	0	0	0	0	0	0	0	0	0	0	24,0	60	0	45	0	6,0	30,0