

Specialisation: GREEN TECHNOLOGIES IN CHEMICAL ENGINEERING

USOS Code	Course Title	Semester I					Semester II					Semester III			
		Hours			ECTS	E/Z	Hours			ECTS	E/Z	Hours		ECTS	E/Z
		Lecture	Project	Lab			Lecture	Project	Lab			Tutorials	Lab		
1070-ICGTE-MSA-101	Applied fluid mechanics	20		10	2	Z									
1070-ICGTE-MSA-102	Applied transport phenomena	30		15	3	Z									
1070-ICGTE-MSA-103	Equipment for heat and mass transfer	30			2	Z									
1070-ICGTE-MSA-104	Gas and liquid purification processes	30		15	3	Z									
1070-ICGTE-MSA-105	Kinetic, catalysis and reactor design	30	45		5	E									
1070-ICGTE-MSA-106	Process dynamics and control	20		10	2	E									
1070-ICGTE-MSA-107	Bioconversion of waste raw materials	30			2	Z									
1070-ICGTE-MSA-108	Bioreactor design and modelling	20	15		3	Z									
1070-ICGTE-MSA-109	Energy conversion and storage	20			2	Z									
1070-ICGTE-MSA-110	Electrochemistry for renewable energy	20		15	3	Z									
1070-ICGTE-MSA-111	Sustainable development in process engineering	20	15		3	E									
1070-ICGTE-MSA-201	Industrial process modelling and simulation						30	45		5	Z				
1070-ICGTE-MSA-202	Process optimization						30	15		3	E				
1070-ICGTE-MSA-H2xx	HES topic						30	15		3	Z				
1070-ICGTE-MSA-H2xx	HES topic						30			2	Z				
1070-ICGTE-MSA-203	Advanced materials in chemical engineering						20		10	2	Z				
1070-ICGTE-MSA-204	Advanced waste management						20	10		2	Z				
1070-ICGTE-MSA-205	Engineering methods in physiology						20			2	Z				
1070-ICGTE-MSA-206	Fundamentals of process intensification						30	30		4	E				
1070-ICGTE-MSA-207	Multiscale modelling						20	10		2	Z				
1070-ICGTE-MSA-208	Process economy						30	30		5	E				
1070-ICGTE-MSA-301	Diploma Workshop												90	8	Z
1070-ICGTE-MSA-302	Diploma Seminar											30		2	Z
1070-ICGTE-MSA-303	Master of Science Thesis												180	20	Z
from 2023L	Number of ECTS credits in the semester	30					30								
	Total ECTS credits						60								
	Number of hours in the semester	410					425								
	Total hours						835								
	Number of ECTS credits for elective courses						90								
	Number of ECTS credits for socio-economic courses						5								