## **Green Technologies in Chemical Engineering**

Course	1 <sup>st</sup> semester						2 <sup>nd</sup> semester						3 <sup>rd</sup> semester					
	Hours			ECTC		E/7	Hours			E	ECTS	E/7		Но	urs		ECTS	F/7
	W	С	Р	L	EC15	E/Z W	W	С	Р	L	ECIS	E/Z	W	С	Р	L	EC15	E/Z
Applied Transport Phenomena	30			15	3													
Process Dynamics & Control	20			10	2													
Applied Fluid Mechanics	20			10	2													
Kinetics, Catalysis & Reactor Design	30		45		5													
Gas and Liquid Purification Processes	30			15	3													
Equipment for Heat & Mass Transfer	30				2													
Energy Conversion & Storage	20				2													
Sustainable Process Design	20		15		3													
Electrochemistry for Renewable Energy	20			15	3													
Bioreactor design and modelling	20		15		3													
Bioconversion of Raw Materials	30				2													
Process Optimization							30		15		3							
Process Modelling and Simulation							30		45		5							
"HES" topic							30		15		3							
"HES" topic							30				2							
Fundamentals of Process Intensification							30		30		4							
Process Economy							30		30		5							
Advanced Waste Management							20		10		2							
Engineering Methods in Physiology							20				2							
Chemical Engineering and Advanced Materials							20			10	2							
Multiscale Modelling							20		10		2							
Thesis workshop																90	8	Ζ
Diploma seminar														30			2	Ζ
Master thesis																180	20	Ζ
ECTS per semester	30						30						30					
ECTS total		90																
Hours per semester	410						425						300					
Hours total	1135																	
ECTS for electives										90								
ECTS for HES										5								