

Plan of II level studies CHEMICAL AND PROCESS ENGINEERING

new programs of 2016/2017

II LEVEL STUDY, MASTER PROGRAMME

FIELD OF STUDY: CHEMICAL AND PROCESS ENGINEERING

Applied Chemical Engineering

Elective courses :

Statistical thermodynamics in molecular modeling -

2w (2 ECTS)

Materials used in chemical unit operation

2w (2 ECTS)

Microwaves and other advanced thermal technologies in
chemical engineering - 2w (2 ECTS)

New concepts and solutions in chemical engineering
2w (2 ECTS)

Hours	24 h / 30 ECTS / 3E	24 h / 30 ECTS / 1E	24 h / 30 ECTS / 1E
26			
25			
24	Chemical nanoengineering E	Principles of business 2w (3 ECTS)	Electives
23	2w + 1s (3 + 1) ECTS		2w (2 ECTS)
22		Biotechnology process engineering	Management of quality in chemical enterprise
21	Modern methods of liquid separation	1w + 2l (2 + 2) ECTS	2w (3 ECTS) E
20	1w + 2l (2 + 2) ECTS		Philosophy of science and technology
19		Multiphase systems in chemical processes	1w (2 ECTS)
18	Software for simulation and design of chemical	2w (3 ECTS)	Economics of production processes
17	systems 2l (2 ECTS)	Process modeling in chemical engineering	1w + 2l (1 + 2) ECTS
16	Advanced engineering graphics	1w + 2l (1 + 2) ECTS	Sports 1c (1 ECTS)
15	2l (3 ECTS)		Graduate laboratory II
14	Process equipment E	CFD - computer modeling of processes	14l (9 ECTS)
13	2w + 2l (3 + 2) ECTS	1w + 3l (2 + 3) ECTS	
12			
11			
10	Transport phenomena in chemical processes E	Computer simulations in designing materials	
9	2w (3 ECTS)	for chemical processes	
8	Renewable energy sources	1w + 2l (2 + 2) ECTS	
7	1w + 1s (2 + 1) ECTS	Industrial waste management E	
6	Mathematical and statistical methods in chemical	2w (3 ECTS)	
5	engineering	Foreign language I 1c (1 ECTS)	
4	1w + 2l (2 + 2) ECTS	Graduate laboratory I	
3	Foreign language II	4l (4 ECTS)	
2	3c (2 ECTS)		
1			Graduate seminar - and thesis preparation
			1s (10 ECTS)
Sem.	I	II	III

Allowable deficit of ECTS credits after each semester **15** credits