STUDIA II LEVEL, MAGISTERSKIE (3 sem)

DIRECTION: CHEMICAL TECHNOLOGY

Specialty: **Technology of fine chemicals** (Prof. K. A. Wilk)

Sem.	I	II	III
Godz.	24h / 30 ECTS / 3E	25h / 30 ECTS / 3E	23h / 30 ECTS / 1E
26			
25		Principles of business	
24	Philosophy of science and technology 1w (2ECTS)	2w (3 ECTS)	
23	Mathematical methods in design and analysis of experiment 1w (1 ECTS)	Polymer additives E 2w (2 ECTS)	Green chemistry 2w (2 ECTS)
22	Environmental protection in chemical		
21 20	technology $1w + 2l (2 + 2)ECTS$	Data mining in chemical technology 21 (3 ECTS)	Production control and quality management E 1w + 1p (2 + 1) ECTS
19 18 17	Process modeling in chemical technology 1w + 2l (1 + 2)ECTS	Pharmaceuticals and biopharmaceuticals E 2w + 2l (3 +2) ECTS	Process project 1w (1 ECTS) Design and feasibility study of technological process 2p (3 ECTS)
16 15	Chemical reaction engineering 1w + 1p (2 + 2)ECTS	Agrochemicals and plant health products	Sustainable development 1w (1 ECTS) Graduate laboratory II
14	Fundamentals of biotechnology E 2w (2 ECTS)		141 (10 ECTS)
12 11 10	Disperse systems – physicochemistry and technology E 2w + 21 (3 +3) ECTS	Analytical methods in fine chemicals 2w + 2l (2 + 2)ECTS	
9			
8 7	Surface phenomena and applied catalysis E 2w + 2l (3 +2) ECTS	Specialty polymers – physicochemistry and technology E 2w + 21 (3 + 3) ECTS	
5			
4	Foreign language II	Graduate laboratory I	
2	3c (2 ECTS)	41 (4 ECTS)	
1	Foreign language I 1c (1 ECTS)		Graduate seminar- and thesis preparation 1s (10 ECTS)
Sem.	I	II	III

Allowable deficit of ECTS credits after each semester 15 credits