

## Study programme: CHEMICAL ENGINEERING

No.	Subject Name	Semester	Lecture	SRW	ECTS
1.	Methodology in Scientific Research	1	6	2	10
2.	Election Subject I*	1	4	2	10
3.	Election Subject II*	1	4	2	10
4.	Election Subject III**	1	4	2	10
5.	Election Subject IV**	2	4	2	10
6.	Study Research Work 1	2	-	8	5
7.	Preparation of the PhD Thesis 1	2	-	-	5
8.	Election Subject V**	3	4	2	10
9.	Election Subject VI**	3	4	2	10
10.	Study Research Work 2	3	-	8	5
11.	Preparation of the PhD Thesis 2	3	-	-	5
12.	Study Research Work 3	4	-	20	20
13.	Preparation of the PhD Thesis 3	4	-	-	10
14.	Study Research Work 4	5	-	20	10
15.	Preparation of the PhD Thesis 4	5	-	-	20
16.	Study Research Work 5	6	-	20	10
17.	Preparation and Defense of the PhD Thesis				20

\* Election Subject I - II are from the list of Election Block 1 and/or Election Block 2

\*\* Election Subject III - VI are from the list of Election Block 2

ELECTION BLOCK 1	ELECTION BLOCK 2
Advances in Biochemistry	Catalyst Deactivation
Liquid Chromatography-Theory and Practice	Industrial Ecology
Chemistry of Free Radicals	Advances in Chemical Engineering Thermodynamics
Chemistry of Coordination Compounds	Advances in Mathematical Methods in Chemical Engineering
Analysis and Computational Modeling of Molecules	Advances in Mathematical Modeling of Chemical and Biochemical Reactors
Organic Reactions During Technological Processes	Advances in Chemical Microprocess Engineering
Natural and Synthetic Antioxidants	Soil Remediation in Chemical Industry
Advances in Instrumental Methods of Analysis	Characterization and Identification of Hydrocarbon Mixtures
Advances in Colloid Chemistry	Analysis of Petroleum Hydrocarbons in Soil and Water
Protein and Biochemical Transformation	Advanced Problems of Process Dynamics and Control
Interactions in Macromolecular Systems	Environmental Risk Management
Advances in Physical Chemistry	Product Life Cycle Analysis
Kinetics of Chemical Reaction	Implementation of Free Software in Chemical Engineering
Packaging and the Environment	Advances in Process Analysis and Simulation
Environmental Microbiology	Selected Chapters of Membrane's Processes
Biology of Production Microorganisms	Advances in Transport Phenomena
Advances in Mechanical Operations	Advances in Reactor Engineering
Selected Chapters of Heat and Diffusion Operations	Advances in Separation Processes
Extraction Systems	Technological Processes in the Fluidized Bed
Probability and Statistics for Engineers	Selected Chapters of Petroleum Refining Processes
Advances in Heat and Mass Transfer	Combustion Processes as Sources of Environmental Pollution
Advances in Enzymology	Industrial production of olefins and aromatics
Biochemistry of Microorganisms	Organic Oxo Compounds
Liquid Chromatography of Biologically Active Compounds	Liquid Fuels Production by Thermochemical and Chemical Conversion of Biomass

	Biogas Technology
	Advances in Air Pollution Control
	Advances in Soil Pollution Control
	Advanced Energy Conversion
	Exergy Analysis of Processes
	Extrusion in Process Industry
	Bioremediation
	Biomass as Energy Source