

# Department of Chemistry

## Chemistry MS

### Study program: Applied Chemistry

#### 1st Semester

Code	Title	C	T	L	Credits
H-200	Advanced Optical Methods of Instrumental Analysis	4		2	8
H-201	Electrochemistry	4		2	8
H-202	Chemistry of Organic Polymers	4		2	8
	Elective 1	3		2	6

#### Elective 1:

Environmental Chemistry II

Separation Methods in Chemistry II

#### 2nd Semester

Code	Title	C	T	L	Credits
H-203	Advanced Methods and Techniques of Inorganic Compounds Characterization	3	1	1	6
H-204	Industrial Chemistry I	4		2	8
H-205	Applied Organic Chemistry	3		3	7
	Elective 2	2		3	5
	Elective 3	2		2	4

#### Elective 2:

Industrial Electrochemistry

Food Analysis

Water Chemistry and Technology

Chemistry of Textile Materials and Industrial Dyes

#### Elective 3:

Agricultural Chemistry

Inorganic Environment Chemistry  
 Inorganic Compounds in Medicine and Pharmacy  
 Inorganic Chemistry of Food

### 3rd Semester

Code	Title	C	T	L	Credits
H-206	Bioanalytical Chemistry	3		2	6
H-207	Inorganic Materials in The Industry	3	1	1	6
H-208	Synthesis of Macro Quantities of Organic Compounds	3		3	7
H-213	Advanced Electroanalytical Methods	3		2	6
	Elective 4	2		3	5

#### Elective 4:

Toxic Substances Analytical Methods  
 Industrial Processes  
 Catalytic Membranes and Membrane Processes  
 Chromatographic Methods of Separation  
 Physico-Chemical Processes in the Environment

### 4th Semester

Code	Title	C	T	L	Credits
H-209	Industrial Chemistry II	4		2	8
	Elective 5	3		2	6
	Elective 6	2		4	6
H-210	Research Work				4
ZRP	Master Thesis				8

#### Elective 5:

Forensic chemistry  
 Organic Toxic Substances  
 Kinetics and Catalysis

**Elective 6:**

Synthesis of Bioactive and Pharmacologically Active Compounds

The Methodology of Scientific Research

Control of Pharmaceutical Preparations