

Department of Chemistry

Chemistry MS

Study program: General Chemistry

1st Semester

Code	Title	C	T	L	Credits
H-201A	Electrochemistry	4		2	8
H-231	Industrial Chemistry	4		2	8
H-234	Special Topics in Inorganic Chemistry	2	1		4
	Elective 1	3		2	6
	Elective 2	2		2	4

Elective 1:

Bioanalytical chemistry

Chemistry of water and wastewater

Separation methods in chemistry II

Elective 2:

Special Topics in Bioinorganic Chemistry

Chemical Thermodynamics

Chemistry and Technology of Materials

2nd Semester

Module General Chemistry

Code	Title	C	T	L	Credits
H-203A	Advanced Methods and Techniques of Inorganic Compounds Characterization	3	1	1	6
H-232	Organic Stereochemistry	4		2	8
H-236	Molecular Structure and Molecular Spectra	1		2	5
	Elective 3	2		3	6

	Elective 4	2	3	5
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Elective 3:

Mechanisms of Organic Reactions
 Physical Chemistry of the Solid State
 Basis of Kinetic Methods of Analysis

Elective 4:

Chemistry of Free Radicals
 Radiochemistry and Nuclear Chemistry
 Chromatographic Methods of Separation

2nd Semester

Module Chemistry Teacher

Code	Title	C	T	L	Credits
H-240	Chemistry Teaching Methods I	3	4		8
H-238	Chemical Experiments in School I	2		3	6
O-01	Pedagogy	3			6
H-239	History of Chemistry	2			4
H-242	School Practice I	1	6		6

3rd Semester

Module General Chemistry

Code	Title	C	T	L	Credits
H-213A	Advanced Electroanalytical Methods	3		2	6
H-200A	Advanced Optical Methods of Instrumental Analysis	4		2	8
H-235	Principles of Organic Synthesis	4		2	8
	Elective 5	3		2	8

Elective 5:

Special Topics in Organic Chemistry

Mass Spectrometry in Organic Chemistry

Surface and Colloid Chemistry

High Resolution NMR Spectroscopy in Organic Chemistry

3rd Semester**Module Chemistry Teacher**

Code	Title	C	T	L	Credits
H-243	Chemistry Teaching Methods II	4		3	8
H-241	Chemical Experiments in School II	2		3	6
H-262	Chemistry Teaching Methods For Advanced Students	3	2		5
O-02	Psychology	3			5
H-244	School practice II	1	6		6

4th Semester

Code	Title	C	T	L	Credits
H-233	Biochemistry II	3		2	6
	Elective 6	3		2	6
	Elective 7	2		4	6
H-237	Research Work				4
ZROH	Master Thesis				8

Elective 6:

Chemistry of the Atmosphere and Soil

Equilibrium in Analytical Chemistry

Advanced Organic Chemistry

Elective 7:

The Methodology of Scientific Research

Chemistry of Secondary Metabolites