

## Standard Master program in Chemistry (Analytical Chemistry)

(Dated October 29<sup>th</sup>, 2015)

The total minimum required number of credits:	<b>64 credits</b>
- General courses (required):	<b>07 credits</b>
- Fundamental and core courses:	<b>39 credits</b>
+ Required:	<b>18 credits</b>
+ Elective:	<b>21/41 credits</b>
- Master thesis:	<b>18 credits</b>

### Available curriculum

	Code	Subjects	Credits	Credit hours			Prerequisite
				<i>Lecture</i>	<i>Practice</i>	<i>Self-study</i>	
<b>I</b>		<b>General courses</b>	<b>7</b>				
1	PHI 5001	<i>Philosophy</i>	3	30	15	0	
2	ENG 5001	<i>General English</i>	4	30	30	0	
<b>II</b>		<b>Fundamental and core courses</b>					
<b>II.1.</b>		<b>Required</b>	<b>18</b>				
3	ENG 6001	<i>English for Academic Purposes</i>	3	45	0	0	
4	CHE 6000	<i>Chemometrics</i>	3	35	0	10	
5	CHE 6001	<i>Quantum method in Chemistry</i>	3	35	10	0	
6	CHE 6002	<i>Modern Methods for Structure Analysis</i>	3	35	0	10	
7	CHE 6300	<i>Advanced Spectrochemical Analysis</i>	2	20	5	5	CHE 6002

	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
8	CHE 6301	<i>Modern Electrochemical analysis</i>	2	20	5	5	CHE 6000
9	CHE 6302	<i>Separation methods and Chromatography in analytical chemistry</i>	2	20	5	5	CHE 6002
<b>II.2.</b>		<b><i>Elective</i></b>	<b>21/41</b>				
10	CHE 6303	<i>The selected topics on major and minor Analysis</i>	3	30	10	5	CHE 6300
11	CHE 6304	<i>The selected topics on trace and ultra trace Analysis</i>	3	30	10	50	CHE 6002
12	CHE 6305	<i>Analysis methods in radiochemistry</i>	3	30	10	5	CHE 6304
13	CHE 6306	<i>On-site analytical techniques</i>	3	35	10	5	CHE 6300, CHE 6301
14	CHE 6307	<i>Chemical speciation analytical techniques</i>	3	30	10	5	CHE 6304
15	CHE 6308	<i>Sensor in analytical chemistry</i>	3	30	10	5	CHE 6301
16	CHE 6309	<i>Automatic Analytical methods</i>	3	30	10	5	CHE 6300, CHE 6301, CHE 6302
17	CHE 6310	<i>Catalytic Kinetic Methods of Analysis</i>	3	30	10	5	CHE 6300
18	CHE 6311	<i>Chemometrics in analytical chemistry</i>	3	30	10	5	CHE 6000
19	CHE 6403	<i>Chemical kinetics and catalysis</i>	3	30	15	0	
20	CHE 6404	<i>Adsorption and chemistry of surface</i>	3	30	15	0	
21	CHE 6405	<i>Methods for the Synthesis of polymers and copolymers with controlled architectures</i>	3	35	0	10	

	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
22	CHE 6706	<i>Environmental Monitoring and Analysis</i>	3	30	15	0	
23	CHE 6707	<i>Environmental Toxicity</i>	2	45	0	0	
<b>III</b>	CHE 7203	<b>Master Thesis</b>	<b>18</b>				
		<b>Total</b>	<b>64</b>				