

## Standard Master program in Chemistry (Environmental 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>21/54 credits</b>
- Master thesis:	<b>18 credits</b>

### Available curriculum

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
<b>I</b>		<b>General courses</b>	<b>7</b>				
1	PHI5001	<i>Philosophy</i>	3	30	15	0	
2	ENG5001	<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	CHE6000	<i>Chemometrics</i>	3	45	0	0	
5	CHE6001	<i>Quantum method in Chemistry</i>	3	35	10	0	
6	CHE6002	<i>Modern Methods for Structure Analysis</i>	3	35	0	10	
7	CHE6700	<i>Atmospheric Chemistry</i>	2	30	0	0	
8	CHE6701	<i>Aquatic Chemistry</i>	2	30	0	0	
9	CHE6702	<i>Geochemistry</i>	2	30	0	0	
<b>II.2.</b>		<b>Elective</b>	<b>21/54</b>				
10	CHE6703	<i>Fundamentals of Industrial Wastes</i>	3	45	0	0	
11	CHE6704	<i>Environmental Engineering</i>	3	45	0	0	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
12	CHE6705	<i>Environmental Pollution and Control in Chemical Process Industries</i>	3	45	0	0	CHE6704
13	CHE6706	<i>Environmental Monitoring and Analysis</i>	3	45	0	0	CHE6700, CHE6701, CHE6702
14	CHE6707	<i>Environmental Toxicity</i>	2	30	0	0	
15	CHE6708	<i>Biochemical Processes in Environment</i>	2	30	0	0	
16	CHE6709	<i>Waste Recycling and Reuse Technologies</i>	2	30	0	0	CHE6703
17	CHE6710	<i>Contaminated Site Treatment</i>	2	30	0	0	CHE6700, CHE6701, CHE6702
18	CHE6711	<i>Materials in Environmental Treatment</i>	2	30	0	0	CHE6704
19	CHE6712	<i>Fate and Transport of Pollutants in Environments</i>	2	30	0	0	
20	CHE6713	<i>Catalytic and photocatalytic processes in environmental purification</i>	2	30	0	0	CHE6704
21	CHE6714	<i>Green Chemistry for Environmental Remediation</i>	2	30	0	0	CHE6704
22	CHE6715	<i>Environmental Risk Assessment</i>	2	30	0	0	CHE6707
23	CHE6716	<i>Practical Training in Advanced Environmental Chemistry</i>	2	12	18	0	CHE6704 CHE6706 CHE6712
24	CHE6717	<i>New Trends in Environmental Chemistry-Seminar</i>	2	30	0	0	CHE6704 CHE6714
25	CHE6503	<i>Industrial chemical processes</i>	3	45	0	0	
26	CHE6504	<i>Simulation of Chemical Engineering Processes</i>	3	45	0	0	
27	CHE6505	<i>Process control</i>	3	45	0	0	
28	CHE6602	<i>Industrial catalysis</i>	3	45	0	0	
29	CHE6603	<i>Chemistry of catalysis</i>	3	45	0	0	
30	CHE6604	<i>Chemistry of petrochemical process</i>	3	45	0	0	
31	CHE6610	<i>Pollution control in</i>	2	30	0	0	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
		<i>petrochemical industry</i>					
<b>III</b>	CHE7207	<i>Master thesis</i>	<b>18</b>				
		<b>Total</b>	<b>64</b>				

