

## Standard Master program in Mathematics (Mathematical Analysis)

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

The total minimum required number of credits:	64 credits
- General courses (required):	07 credits
- Fundamental and core courses:	39 credits
+ Required:	18 credits
+ Elective:	21/57 credits
- Master thesis:	18 credits

### 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		
2.	ENG5001	<i>General English</i>	4	30	30		
<b>II</b>	<b>Fundamental and core courses</b>		<b>39</b>				
<b>II.1.</b>	<b>Required</b>		<b>18</b>				
3.	ENG6001	<i>English for academic purposes</i>	3	45			
4.	MAT6002	<i>Advanced Functional Analysis</i>	3	45			
5.	MAT6007	<i>Selected Topics in Linear Algebra</i>	3	45			

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
6.	MAT6008	<i>Measure and Integration</i>	3	45			
7.	MAT6010	<i>Complex Analysis</i>	3	45			
8.	MAT6100	<i>Partial Differential Equations</i>	3	45			
<b>II.2.</b>	<b>Elective</b>		<b>21/57</b>				
9.	MAT6017	<i>Theory of Distributions and Sobolev spaces</i>	3	45			MAT6008
10.	MAT6001	<i>Theory of Groups and Group Representations</i>	3	45			
11.	MAT6005	<i>Differential Geometry</i>	3	45			
12.	MAT6006	<i>Algebraic Geometry</i>	3	45			
13.	MAT6009	<i>Analysis on Manifolds</i>	3	45			
14.	MAT6016	<i>Dynamical Systems</i>	3	45			
15.	MAT6019	<i>Spectral theory of linear operators</i>	3	45			
16.	MAT6028	<i>Convex analysis</i>	3	35	10		
17.	MAT6122	<i>Differential Equations in Banach spaces</i>	3	45			
18.	MAT6123	<i>Analysis and Dynamic Equations on Time Scales</i>	3	45			
19.	MAT6124	<i>Several complex variables</i>	3	45			MAT6010
20.	MAT6125	<i>Integral Equations</i>	3	45			
21.	MAT6126	<i>Elliptic boundary value problems</i>	3	45			MAT6017
22.	MAT6127	<i>Variational Methods</i>	3	45			
23.	MAT6128	<i>Operator Equations</i>	3	45			
24.	MAT6129	<i>Boundary Value Problems of Analytical Functions</i>	3	45			
25.	MAT6030	<i>Ill-Posed Problems</i>	3	35	10		

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
26.	MAT6021	<i>Stochastic analysis</i>	3	30		15	MAT6002 MAT6008
27.	MAT6003	<i>Algebraic Topology</i>	3	45			
<b>III</b>	<b><i>Master thesis</i></b>		<b>18</b>				
28.	MAT6143	<i>Thesis</i>	18				
<b>Total</b>			<b>64</b>				