

**Standard Master program in Physics
(Theoretical and Mathematical Physics)**

(Dated October 29th, 2015)

The total minimum required number of credits:	67 credits
- General courses (required):	07 credits
- Fundamental and core courses:	42 credits
+ Required:	21 credits
+ Elective:	21/42 credits
- Master thesis:	18 credits

Available curriculum

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
I	General courses		7				
1.	PHI5001	<i>Philosophy</i>	3	30	15	0	
2.	ENG5001	<i>General English</i>	4	30	30	0	
II	Fundamental and core courses		42				
II.1.	Required		21				
II.1.a	Fundamental courses		12				
3.	ENG6001	<i>English for Academic Purposes</i>	3	40	0	5	
4.	PHY6000	<i>Mathematics for Physics</i>	3	40	0	5	
5.	PHY6001	<i>Quantum Physics</i>	3	40	0	5	
6.	PHY6002	<i>Solving Physics Problems using Matlab</i>	3	30	15	0	
II.1.b	Core courses		9				
7.	PHY6011	<i>Quantum field theory I</i>	3	39	0	6	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
8.	PHY6012	<i>Quantum statistical Physics I</i>	3	39	0	6	
9.	PHY6013	<i>Mathematics for Theoretical Physics I</i>	3	39	0	6	
II.2.	<i>Elective</i>		<i>21/42</i>				
II.2.a	Fundamental courses		<i>12/24</i>				
10	PHY6003	<i>Measurement of Physical Quantities</i>	3	30	15	0	
11	PHY6004	<i>Nano physics</i>	3	40	0	5	
12	PHY6005	<i>History of Physics</i>	3	40	0	5	
13	PHY6006	<i>Advanced Astronomy</i>	3	40	0	5	
14	PHY6007	<i>Statistics and data analysis for Physics</i>	3	30	15	0	
15	PHY6008	<i>Topics in Modern Physics</i>	3	40	0	5	
16	PHY6009	<i>Physics of Earth</i>	3	15	0	30	
17	PHY6010	<i>Seminar in Research Topics</i>	3	15	0	30	
II.2.b	Core courses		<i>9/18</i>				
18	PHY6014	<i>Quantum field theory II</i>	3	39	0	6	PHY6011
19	PHY6015	<i>Quantum statistical Physics II</i>	2	24	0	6	PHY6012
20	PHY6016	<i>Mathematics for Theoretical Physics II</i>	3	39	0	6	PHY6013
21	PHY6017	<i>General Relativity</i>	3	39	0	6	
22	PHY6018	<i>Elementary Particle Physics</i>	2	24	0	6	
23	PHY6019	<i>Solid state theory</i>	3	39	0	6	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
24	PHY6020	<i>Soft Matters and Biophysics</i>	2	24	0	6	
III		<i>Master thesis</i>	18				
		Total	67				