

Standard Master program in Physics (Optics)

(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:	21/45 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				
<i>II.1.</i>	<i>Required</i>		<i>21</i>				
<i>II.1.a</i>	Fundamental courses		<i>12</i>				
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	
<i>II.1.b</i>	Core courses		9				
7	PHY6051	<i>Nonlinear optics</i>	3	40	0	5	
8	PHY6052	<i>Advanced laser physics</i>	3	40	0	5	

No	Code	Subjects	Credits	Credit hours			Prerequisite
				Lecture	Practice	Self-study	
9	PHY6053	<i>Material optics</i>	3	40	0	5	
II.2.	<i>Elective</i>		<i>21/45</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>9/21</i>				
18	PHY6055	<i>Advanced atomic spectroscopy</i>	3	40	0	5	
19	PHY6056	<i>Advanced molecular spectroscopy</i>	3	40	0	5	
20	PHY6057	<i>Speciality practice</i>	3	5	40	0	
21	PHY6058	<i>Laser engineering</i>	3	40	0	5	
22	PHY6054	<i>Modern Optics</i>	3	40	0	5	
23	PHY6060	<i>Photoluminescence</i>	3	40	0	5	
24	PHY6081	<i>Photonics</i>	3	40	0	5	
III		<i>Master thesis</i>	18				
Total			67				