## **Standard Master program in Physics**

## (Radio Physics and Electronics Engineering)

(Dated October 29<sup>th</sup>, 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			D
				Lecture	Practice	Self- study	Prerequisite
I	General education knowledge		7				
1.	PHI5001	Philosophy	3	30	15	0	
2.	ENG5001	General English	4	30	30	0	
II	Basic and fundamental education knowledge		42				
II.1.	Required		21				
II.1.a	Basic courses		12				
3.	ENG6001	English for Academic Purposes	3	40	0	5	
4.	PHY6000	Mathematics for Physics	3	40	0	5	
5.	PHY6001	Quantum Physics	3	40	0	5	
6.	PHY6002	Solving Physics Problems using Matlab	3	30	15	0	
II.1.b	Fundamental courses		9				

No	Code	Subjects	Credits	Credit hours			
				Lecture	Practice	Self- study	Prerequisite
7.	PHY6031	Advanced Digital Signal Processing	3	30	15	0	
8.	PHY6032	Satellite Communication	3	45	0	0	
9.	PHY6033	Advanced Laboratory Practice	3	0	45	0	PHY6003
<i>II.2.</i>	Elective		21/42				
II.2.a	Basic courses		12/24				
10.	PHY6003	Measurement of Physical Quantities	3	30	15	0	
11.	PHY6004	Nano physics	3	40	0	5	
12.	PHY6005	History of Physics	3	40	0	5	
13.	PHY6006	Advanced Astronomy	3	40	0	5	
14.	PHY6007	Statistics and data analysis for Physics	3	30	15	0	
15.	PHY6008	Topics in Modern Physics	3	40	0	5	
16.	PHY6009	Physics of Earth	3	15	0	30	
17.	PHY6010	Seminar in Research Topics	3	15	0	30	
II.2.b	Fundamental courses		9/18				
18.	PHY6034	Modern Ultrasonics	3	30	15	0	
19.	PHY6035	Nonlinear Oscillations	2	30	0	0	
20.	PHY6036	Antennas and Wave Propagation	3	30	15	0	PHY6003
21.	PHY6037	Image Processing	2	15	15	0	
22.	PHY6038	Advanced Digital Communication	2	20	10	0	
23.	PHY6039	Microwave Engineering	3	30	15	0	
24.	PHY6040	Sensors: Principles and Applications	3	30	15	0	
III		Master thesis	18				

No	Code	Subjects	Credits	Credit hours			Duomagniaita
				Lecture	Practice	Self- study	Prerequisite
	Total						