

Department of Physics
Academic Course Description for Students
Postgraduate Study

Master of Solid Physics and Materials							
First course				Second course			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Quantum mechanic	3	-	3	Semiconductors	3	-	3
Mathematical Physics	3	-	3	Nano	3	-	3
Statistical Mechanics	2	-	2	Optional1	3	-	3
Solid State Physics	2	-	2	Optional2	3	-	3
Materials	2	-	2	English Language	1	-	1
English Language	1	-	1	Research Writing Methods	1	-	fulfilled
				Seminar	1	-	fulfilled

Ph.D. in Solid Physics and Materials							
First course				Second course			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Advanced Quantum Mechanics	3	-	3	Advanced Nano	3	-	3
Advanced Mathematical Physics	3	-	3	Advanced Materials	3	-	3
Advanced solid-state physics	3	-	3	Optional1	2	-	2
Semiconductors	3	-	3	Optional2	2	-	2
English Language	1	-	1	Optional3	2	-	2
Seminar	1	-	fulfilled	English Language	1	-	1
				Seminar	1	-	fulfilled
				Research Writing Methods	1	-	fulfilled

Master of Nuclear and Environmental Physics

First course				Second course			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Quantum mechanic	3	-	3	Advanced Nuclear	3	-	3
Mathematical Physics	3	-	3	Advanced Quantum Mechanics	3	-	3
Statistical Mechanics	2	-	2	Optional1	3	-	3
Electrodynamics	2	-	2	Optional2	3	-	3
Classical mechanic	2	-	2	English Language	1	-	1
English Language	1	-	1	Research Writing Methods	1	-	fulfilled
				Seminar	1	-	fulfilled

Master of Laser and Electro-Optics

First course				Second course			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Quantum mechanic	3	-	3	Advanced laser	3	-	3
Mathematical Physics	3	-	3	Advanced Optics	3	-	3
Electo. optics	2	-	2	Optional1	3	-	3
Electromagnetic theory	2	-	2	Optional2	3	-	3
Statistical Mechanics	2	-	2	English Language	1	-	1
English Language	1	-	1	Research Writing Methods	1	-	fulfilled
				Seminar	1	-	fulfilled

Ph.D. in Laser and Electro-Optics

First course				Second course			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Quantum optics	3	-	3	Quantum mechanic	3	-	3
Advanced Mathematical Physics	3	-	3	Electrodynamics	3	-	3
Nonlinear optics	2	-	2	Advanced Spectra	2	-	2
Advanced Laser	2	-	2	Laser design	2	-	2
Advanced optics	2	-	2	Optional 1	2	-	2
English Language	1	-	1	English Language	1	-	1
				Seminar	1	-	fulfilled
				Research Writing Methods	1	-	fulfilled