

Master of Science Program in Physics

Research Focus

- Mathematical Physics
- Astrophysics and Space Weather
- Relativistic Theory and Cosmology
- Nuclear Physics and High Energy Physics
- Solid State Physics and Material Physics
- Optics and Spectroscopy
- Quantum Physics

Structure of the Program

1. Credit Requirements *

Requirements	Option 1.2
Coursework	24
- Core Courses	18
- Electives	6
Required Non-credit Courses	5
Thesis	12
Total	36

* Minimum credits required

2. Core Courses

Requirements	Option 1.2	
	Course No.	Cr.
Mathematical Methods for Physicists 1	261503	3
Classical Dynamics	261512	3
Quantum Theory 1	261515	3

Requirements	Option 1.2	
	Course No.	Cr.
Quantum Theory 2	261516	3
Statistical Mechanics	261523	3
Classical Electrodynamics	261543	3
Total	6	18

3. Electives

Requirements	Option 1.2	
	Course No.	Cr.
Mathematical Methods for Physicists 2	261504	3
General Relativity 1	261518	3
General Relativity 2	261519	3
Physical Optics and Photonics	261533	3
Quantum Field Theory 1	261546	3
Quantum Field Theory 2	261547	3
Nuclear and Particle Physics 1	261553	3
Nuclear and Particle Physics 2	261554	3
Nuclear Reaction Theory	261555	3
Nuclear Radiation Physics	261556	3
Nuclear Reactor Physics	261557	3
Cosmic Rays	261558	3
Advanced Solid State Physics	261563	3
High Energy Physics	261559	3
Quantum Many-Body Theory	261565	3
Astrophysics	261574	3
Atomic and Molecular Physics	261585	3
Computational Physics	271521	3
Total	≥2	≥6

4. Required Non-credit Courses

Requirements	Option 1.2	
	Course No.	Cr.
Seminar 1	261591	1
Seminar 2	261592	1
Research Methodology in Science and Technology	261593	3
Total	3	5

5. Thesis Credit Requirements

Requirements	Option 1.2	
	Course No.	Cr.
Thesis 1, Option 1.2	261597	3
Thesis 2, Option 1.2	261598	3
Thesis 3, Option 1.2	261599	6
Total	3	12