

First direction of the Master's program

Computational Science

Valid from 2011-12

Upgrading the first direction in the Master's program of the Department of Informatics and Telecommunications is meant to improve and modernize the curriculum.

The new program's courses represent more effectively the current trends in Theoretical Computer Science and corresponds to the scientific interests of our Faculty.

Core courses are typically offered every year, but Optional courses are not.

Core Courses

ΠΜΣ 503	Scientific Computing
ΠΜΣ 505	Graphics, Visualization, Fractals
ΠΜΣ 506	Combinatorial Optimization
ΠΜΣ 557	Algorithms
ΠΜΣ 558	Computational Complexity
ΠΜΣ 559	Semantics of Programming Languages
ΠΜΣ 560	Computational Geometry
ΠΜΣ 561	Parallel Algorithms
ΠΜΣ 562	Approximation Algorithms
ΠΜΣ 563	Algorithmic Game Theory
ΠΜΣ 564	Cryptography
ΠΜΣ 565	Probabilistic Algorithms

Optional Courses

ΠΜΣ 546	Computational Algebra
ΠΜΣ 566	Algorithms in Structural Bioinformatics
ΠΜΣ 567	On-line Algorithms
ΠΜΣ 568	Algorithmic Graph Theory
ΠΜΣ 569	Linear and Non-Linear Optimization
ΠΜΣ 556	Special Topics in Theoretical Computer Science

All courses take 4 hours/week and have 4 credits each. The postgraduate degree of expertise requires the acquisition of at least 40 credits of which at least 28 must be obtained from the core courses. The remaining 12 credits can be acquired from any course of the postgraduate program.