

Master of Science in Mathematical Engineering

AIMS

Since 2008 Tor Vergata's Engineering School offers a Master's Degree course in Mathematical Engineering (ME). All students with a Bachelor's Degree in Engineering, Mathematics and Physics can enrol. Students who still have to start their academic training are advised to enrol in the Bachelor's Degree course in [Engineering Sciences](#), a novelty of the Engineering School and entirely taught in English.

COURSE DESCRIPTION AND CAREER PROSPECT

A ME-student has to choose one of the three specializations in Economics and Finance, Nanosystems and Materials and Structures. The ME-course aims at delivering experts with both an advanced knowledge of mathematical physics and direct experience with concrete applications. This makes them particularly suited to and well prepared for a future career in their specific field of specialization.

The ME-course is characterized by the "forma mentis" on which it is based: the student does not only learn to appreciate the principles and basic methods of Mathematics, Physics, Economics, Computer Science etc; he also develops the typical sensibility of an engineer, which is of crucial importance when he needs to apply general methods to overcome the specific difficulties of a concrete problem, the accuracy of the desired solution - without neglecting technological aspects - and sustainable investment of time and money.

WEB SITE: <http://www.uniroma2.it/ppg/im/index-en.html>

ENTRY REQUIREMENTS

For Italian students

At the beginning of September we are waiting for you at our campus for the ADMISSION TEST (generally in September).

Admission procedures are available at the following address: www.engineering-sciences.uniroma2.it

For Foreign students

You will be selected on the basis of your CV and an interview via Skype with Prof. Roberto Verzicco address email verzicco@uniroma2.it.

STUDY PLAN

Courses	CFU
Functional Analysis and Partial Differential Equations	12
Advanced Probability and Models and Methods of Applied Mathematics	12

Quantum and Statistical Mechanics	12
Computational Methods	9
Performance Modeling of Computing Systems and Networks	6
Continuum Mechanics	9
Solid-State Physics	6
Mechanics of Materials and Structures	9
Optimal Control	6
Stochastic Calculus and Elements of Finance	9
Financial Engineering	6
Micro- and Nano-Systems and Interface Electronics	9
Biological and Molecular Electronics	6
Tutor-guided Learning	8
Thesis – 16 CFU	