

## **Coordinators**

\* Patrizia Donato, Full Professor, LMRS, University of Rouen, <u>Patrizia.Donato@univ-rouen.fr</u>

\* Philippe Jouan, Associate Professor, LMRS, Université de Rouen, Philippe.Jouan@univ-rouen.fr

# **International Partners**

- State University of Tomsk (Russie).
- And are joining us :
- University of Augsburg (Germany)
- University of Naples Federico II (Italy)
- University of Sevilla (Spain).

**Description:** Master of Excellence in Mathematics, applied to modelling in sciences.

The development, the theoretical and the numerical treatment of mathematical models is becoming more and more important in many fields, like natural sciences and engineering sciences but also biology, chemistry, environmental sciences and more recently the medical science.

The MAM program is an International Master's degree, supported by the internationally renowned research laboratories of each partner. It can be professional or research oriented, depending on the choices of students.

Years : 2 over 4 semesters, 30 ECTS.

**Courses:** Teached in each university and coordinated by a common Stearing Committee. A core of introductory courses is common to all the universities of the program. The selected courses will be chosen by each university according to the local scientific research activity. Courses cover mathematical analysis, ordinary differential equations, partial differential equations, optimal control, probability, statistics and their applications (modelling, numerical analysis, scientific computing).

Master thesis: Done in semester 4 (30 credits), mandatory, possibly done in a company.

Lecture languages: English.

**Mobility and Diplome:** Each student will spend at least one semester (maximum one year) in one of the other partner universities. A double master degree, from both the enrolment and the mobility institution is delivered.

**Tutoring:** A tutoring system for each student, assigned to a teacher of the enrolment university is in place.

### **Objectifs**

The aim is to give students a solid background in mathematical analysis with such applications as numerical methods and scientific computing, mathematical modeling, optimization.

### **Openings**

Jobs in industry and service companies or enrolment in a Ph.D. program in applied mathematics.

Admission for Application: Bachelor in Mathematics.

The application form (dossier de validation) is available at the admission office of the university. A recommandation letter from a mathematics teacher of the home institution and a motivation letter are required.

### **Research institutions involved**

\*Laboratoire de Mathématiques R. Salem (LMRS) and the doctoral School SPMII, University of Rouen,

- \*Department of of Mathematics of the University of Salerno,
- \* Faculty of Mathematics and Mechanics of the State University of Tomsk,

\* The research institute of incoming partners.

MAM website: http://lmrs.univ-rouen.fr/Enseigne/mam/index-en.html

Admission Office: <u>Scolarite.Sciencesmad@univ-rouen.fr</u>