

# MoSIG

Master of Science in Informatics at Grenoble

The Master of Science in Informatics at Grenoble offers access to worldwide graduate training in computer science domains where the research community, academic and industrial, in Grenoble is particularly strong. MoSIG is a highly competitive, two-year European standard (LMD) graduate program, entirely taught in English.



Artificial Intelligence - Cloud Computing - Data Science - Vision Robotics - IoT

<http://mosig.imag.fr>



## Academic program

### First Semester

The first semester is a 12-week (September - January) academic program composed of foundational courseware:

Principles of Operating Systems • Mathematics for Computer Science • Software Engineering • Introduction to Visual Computing • Programming Languages and Compiler Design • Algorithmics and Problem Solving / (6 ECTS). English and/or French language training • Programming Project / (6 ECTS).

### Second Semester

The second semester is composed of a 12-week (February - May) academic program that combines advanced work on fundamental topics as well as introduction to more specialized subjects, followed by participation in a 4-week internship (6 ECTS) in a research group (June).

Students should select 8 courses (3 ECTS each):

Database Foundations • Operations Research • Computer Networks Principles • Intelligent Systems: Reasoning and Recognition • 3D Graphics • Robotics and IoT • Introduction to Cryptology • Human Computer Interaction • Introduction to Distributed Systems • Introduction to Modeling and Verification of Digital Systems • Parallel Algorithms and Programming • Fundamental Computer Science.

### Third Semester

The third semester is composed of a 12-week (September - January) academic program which includes 30 ECTS. Students should select one of the specialized programs:

Advanced Information Systems & Software Engineering • Artificial Intelligence and the Web • Data Science • Digital Infrastructure • Graphics, Vision and Robotics • High-confidence Embedded and Cyberphysical Systems • Ubiquitous and Interactive Systems.

### Fourth Semester

The final semester from February to July is devoted to an individual research project conducted in a company or in a research laboratory.

### Admission

Candidates must have previously completed their undergraduate studies and been awarded a Bachelor's degree in either Science (BSc) or Engineering (BEng) in Computer Science, Computer Engineering, Informatics or Applied Mathematics and solid practice in programming. Students can apply either to the full program (2 years) or for the 2<sup>nd</sup> year of the program. For admission directly to the second year of the program you must have a Bachelor's Degree (4-year program), or be currently enrolled in a Master's study.

Requirement: English language competence B2

Application deadline for non-EU students: mid-March

Application deadline for EU students: mid-May

Contact: [mosig@ensimag.fr](mailto:mosig@ensimag.fr)

<https://relint.ensimag.fr/MainEn/Admission>



This program is offered jointly by Grenoble INP - Ensimag school of engineering in Applied Mathematics and Informatics and the Department of Informatics and Mathematics of Université Grenoble Alpes, IM<sup>2</sup>AG.