



MoSIG

Master of Science in Informatics at Grenoble

International master's program fully taught in English.

This program is offered jointly by Grenoble INP – Ensimag, UGA school of engineering in Applied Mathematics and Computer Science and the Department of Computer Science, Mathematics and Applied Mathematics IM²AG, both part of Université Grenoble Alpes / France



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.

<https://mosig.imag.fr>

Academic program

Each semester is composed of **30 ECTS**.

SEMESTER 1

SEPTEMBER > JANUARY

This program is composed of **foundational coursework** (approx. 3 ECTS each):

Programming language and Compiler Design, Software Engineering, Principles of Operating Systems, Algorithmic Problem Solving, Mathematics for Computer Science, Introduction to Visual Computing, Introduction to Artificial Intelligence, Programming Project.

SEMESTER 2

FEBRUARY > MAY

This program is followed by **participation in a 4-week internship in a research group**. Students should select **21 ECTS** from the following courses (3 ECTS each), in addition to the **research internship (6 ECTS)** and **Technical Writing and Speaking (3 ECTS)**.

Introduction to Modeling and Verification of Digital Systems, Operations Research, Data Base Foundations, Introduction to Distributed Systems, Human-Computer Interaction, Algebraic Algorithms for Cryptology, Computer Networks Principles, 3D Graphics, Introduction to Mobile Robotics, Introduction to Cryptology, Parallel Algorithms and Programming, Fundamental Computer Science, Foundations of Data Science, Low Tech.

SEMESTER 3

SEPTEMBER > JANUARY

This program provides **specialized training** in the following themes:

> **Theme 1 : Cloud Computing & Data Infrastructures** : Provides students with a high education in designing, implementing, and optimizing cutting-edge technologies for managing large-scale data systems, cloud-based solutions and Information Security

> **Theme 2 : Applied Artificial Intelligence and Interactive Systems** : Covers a broad spectrum of technologies dealing with the application of AI techniques and interactive systems. Topics include : Natural Language Processing, Computer Vision, Robotics, Human-Computer Interaction, Computer Graphics, Information Visualization, etc.

This specialization is common with the master of Artificial Intelligence.

SEMESTER 4

FEBRUARY > JULY

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



ADMISSIONS

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**, with a solid practice in programming.

Candidates can apply either to the full program (2 years) or for the 2nd year of the program.

To be admitted directly to the second year of the program, one must have a Bachelor's Degree (4-year program), or be currently enrolled in a Master's program.

REQUIREMENT

English language competence B2 (see English test scores accepted on our admission webpage)

APPLICATION DEADLINE

End of April



Contacts

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<https://ensimag.grenoble-inp.fr/fr/formation/masters>

