

# Master in Signal and image processing

## Presentation

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### **Course co-accredited by the National Polytechnic Institute of Grenoble (Grenoble INP) and Université Grenoble Alpes**

This master takes into account developments in techniques and knowledge in the field of signal and image processing. In particular, it offers an approach with a greater focus on tools for modelling, analysing and formatting information, enabling the transition to the massive data scale.

This master offers one programme: Signal & Image Processing Methods and Applications (SIGMA)

The course will benefit from the resources of the CEA-GIPSA "common laboratory" (CEA/Grenoble-INP framework agreement), which has been active since 2008. This project has already resulted in the creation of more than eight areas of cooperation, which have led to more than 10 doctorates being supported.

The master's strong foundation within the Université Grenoble Alpes and the SICOM engineering course of the Grenoble INP-ENSE3 and PHELMA components enables the shared organisation of exchanges, lectures and seminars offered by the industrial partners of the engineering courses (Thalès, Trixel, STMicro, EDF, Areva, etc.).

Two representatives from the world of R&D (if possible from companies with a broad international base) will be invited to participate in the training development committee.

## Objectives

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- Doctorate in the field of ICST
- Employment in R&D in the industrial sector, in SIP or information science

## Registration and scholarships

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To be accepted for a master 1, you must hold a bachelor degree (licence 3) or equivalent. To be accepted for a master 2, you must hold a master 1 degree or equivalent.

Your previous studies must be compatible with the master you wish to study.

The recruitment and registration conditions are stated for each speciality

See Grenoble INP website : <http://www.grenoble-inp.fr/fr/formation/les-admissions>

## Further studies

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Doctorate in the field of ICST

## Practicals informations :

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- > **School** : Grenoble INP
- > **level** : Baccalaureate +5
- > **Duration** : 2 years
- > **Credits** : 120
- > **Course type** : Initial and Continuing Education
- > **Location(s)** : Grenoble - Scientific Polygon

> **Contacts :**

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## Program

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**Master 1:**

The very close cooperation between the M1 and the second year of the [SICOM](#) course means that it is not possible to guarantee that 100% of the teaching will be in English. All supporting documents will however be available in English.

**Master 2:**

12 ECTS shared with the third year of [SICOM](#); these comprise the "basic" courses in the field. 3 ECTS can be replaced by courses selected from the Université Grenoble Alpes training offer, to be determined at the beginning of the year with the course managers. These must be courses in a scientific field related to the themes of the Master. More than just an introduction, these courses should help reinforce knowledge on more specific methodological aspects, related to SIP.

18 original ECTS, broken down into two fundamental modules (6 ECTS each) and one research introduction module (6 ECTS), established on the basis of a winter school and a cycle of seminars.

These modules that are not shared with [SICOM](#) (12 ECTS) are established on the basis of three courses. If agreed by their Master managers, the students will be able to replace one course in each module by an opening course from the other masters of the site (Sciences Co, MisCit, MSIAM, Astro, Geoscience).

All of the teaching and supporting documentation (100%) for the M2 is in English.

The M2 end-of-course internship (27 ECTS) and the language courses (3 ECTS) round off the training.