

SCIENCES, TECHNOLOGIES AND HEALTH

## Master in Industrial engineering

Génie industriel



Target level Baccalaureate +5



ECTS 120 credits



Duration 2 years



Component Grenoble INP, Institut d'ingénierie et de management - UGA



Language(s) of instruction English, French

### Subprograms

- > Industrial engineering portal 1st year
- > Sustainable industrial engineering 2nd year
- > Operations management 2nd year
- > Product development 2nd year
- > Industrial innovation 2nd year

## Presentation



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

The master in Industrial engineering draws on the strength of the Grenoble cluster in the field of production systems, in both teaching (Grenoble INP School of Industrial Engineering and the PHITEM training and research unit) and research (including the G-SCOP 5272 joint research unit laboratory). In particular, it falls within the "Innovation in Markets" theme.

#### This master offers four programs

- Research-oriented programs : Product development, Operations management, Industrial innovation
- Sustainable industrial engineering (SIE) : in English, international program

More information from: Thttp://genie-industriel.grenoble-inp.fr/masters/le-master-genie-industriel-223015.kjsp

This master trains students in the field of industrial engineering and therefore leads to all the professions in this field: from product design through to organisation and management of production systems. By its nature, industrial engineering is aimed at all kinds of industrial or service sectors.

More specifically, this master encompasses an international vocational program, and three research programmes. The first, designed for foreign students, aims to train managers in the field of industrial engineering with a specialisation on sustainability issues relating to the product and its logistics chain. The other three programs are research-oriented and lead to careers in teaching and research (private or public) with, in particular, a target of 50% of students going on to





doctoral studies. Other students tend to go into industry in France or in their countries of origin, in industrial engineering careers. For the "Operations management" program, in the supply chain: production, procurement, logistics engineer..., for the Product development program, in product design careers: product engineer, calculation, simulation... and lastly for the Industrial innovation program, careers in innovation: innovation project management, consultants in innovation, monitoring, etc

Skills

This master offers common skills on the fundamentals of industrial engineering. It trains advanced techniques of innovation and improvement of industrial performance concerning the product and its industrial organization. The 2 1st year programs are distinguished mainly by the language of instruction (100% in English for the international program and mainly in French for the other program) but allow to acquire substantially the same skills. Two UEs (in English) are also common. The 3 courses Operations management, Product development and Industrial innovation are clearly specialized. They share only a common EU on the "research methodology" aspects.

**International education :** Internationally-oriented programmes

# Organisation

## Admission

#### Access conditions

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

For the three programs in French, the choice of program is made after admission to the master in Industrial engineering.

### Candidature / Application

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

### **Target**

The master in Industrial engineering is aimed at French and international students in the following fields:

- · Industrial engineering
- Supply chain, operations management, production management, logistics and transportation, operations research
- Manufacturing, design and product development, mechanical engineering, materials, electrical engineering
- · IT, information systems

## And after

#### Further studies

PhD in the field of industrial engineering

#### Additional information

This multidisciplinary Master primarily covers the strategic research themes defined by two of the site's research clusters: MSTIC (Mathematics, Information & Communication Science and Technologies) and PEM (Physics, Engineering, Materials). Note that the Industrial Innovation Programme is also supported by the laboratories of the SHS1 research cluster (the PACTE, GAEL and CERAG joint research units).

Training co-accredited by Institut polytechnique de Grenoble (Grenoble INP) and Université Grenoble Alpes. This





partnership will result in particular in cross-course offerings for our students and this in particular with :

- These masters are complementary in the sense that they
  do not address the same public (SPI-STIC for industrial
  engineering) and moreover the industrial engineering
  master has clearly for 3 of these courses a research
  vocation
- For the international journey, we make significant use of professionals most often partners of the school: ST Microelectronics, Caterpillar, HP, CEA-INES, Schneider Electric, IDARED, the General Council of Isère, A Raymond, E2V, ...
- To this, it is necessary to add the various interventions in the other optional courses, most often occasional seminars within the framework of the relations of the research laboratories with the invited companies

## Useful info

#### Contacts

#### Program director

#### Khaled Hadj-Hamou

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#### Program administration

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## Course location(s) - City

Grenoble

## Campus

Right Grenoble - Doyen Gosse





# Program

Industrial engineering portal 1st year

Sustainable industrial engineering 2nd year

Operations management 2nd year

Product development 2nd year

Industrial innovation 2nd year

