

# BioHealth engineering 2nd year

Master in Health engineering



**Duration**  
1 year



**Component**  
UFR Médecine,  
UFR Pharmacie



**Language(s) of instruction**  
French, English

## Presentation

This program gives access to multidisciplinary courses in health sciences. According to their professional aims, students can build courses related to three main topics: biotechnologies, health-environment relationships or innovative medical devices. This 12 months program is particularly suitable for non-french speaking students.

**International education** : Education with formalized international partnerships

## Admission

### Access conditions

**The master of Health engineering is open in initial training and continuing education.** The 2nd year is accessible on file (and / or interview) to the candidates having validated the 1st year of master of a compatible course or else by a validation of studies or acquired according to the conditions determined by the university or training

Public continuing education : You are in charge of continuing education :

- if you resume your studies after 2 years of interruption of studies
- or if you followed training under the continuous training regime one of the previous 2 years

- or if you are an employee, job seeker, self-employed. If you do not have the diploma required to integrate the training, you can undertake a validation of personal and professional achievements (VAPP)

## Candidature / Application

**Do you want to apply and register for a course at the University of Grenoble Alpes? How to apply depends on your profile and your country of residence**

- You are a student of French nationality, or you reside in the EU, or you reside in a country not covered by the Studies in France procedure (see below), you must apply via the ecandidat application on the dates below :
- For the 1st year of the master in Health engineering : entry of online applications between 18/03/2020 and 06/05/2020. Interviews for those pre-selected in early june 2020
- For the 2nd year of the master in Health engineering - whatever your mention and your course of 1st year's master (master 1st years IS are therefore also concerned) : entry of online applications between 10/02/2020 and 14/06/2020
- You live in one of the countries below. You are therefore subject to the Studies in France procedure: online applications are entered on the Campus France site. The dates for applications are specified on this site. The "Studies in France" procedure only concerns students residing in one of the following 41 countries : Algeria, Argentina, Benin, Brazil, Burkina Faso, Burundi, Cameroon, Chile, China, Colombia, Comoros, Congo

Brazzaville, South Korea, Ivory Coast, Djibouti, Egypt, United States, Gabon, Guinea, India, Indonesia, Iran, Japan, Kuwait, Lebanon, Madagascar, Mali, Morocco, Mauritius, Mauritania, Mexico, Peru, Democratic Republic of Congo, Russia, Senegal, Singapore, Taiwan, Togo, Tunisia, Turkey and Vietnam.

- For more information, we invite you to consult the website of the [Master in Health Engineering](#)
- Contact : [✉ scolaritemasteris@univ-grenoble-alpes.fr](mailto:scolaritemasteris@univ-grenoble-alpes.fr)

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## Target

Non french speaking students with a background in:

- Molecular biology, cellular biology and biotechnologies (biotechnology courses)
- Biology, biochemistry, toxicology (health-environment courses)
- Medical imaging, signal processing, informatics ... (innovative medical devices courses)

This program is also open to students with a medical or pharmaceutical background. This MSc can also be selected by french speaking students wishing to follow courses in english and to include a mobility in their 2nd year's master (courses or internship).

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## Useful info

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### Contacts

#### Program director

Ahcene Boumendjel

✉ [Ahcene.Boumendjel@univ-grenoble-alpes.fr](mailto:Ahcene.Boumendjel@univ-grenoble-alpes.fr)

#### Program administration

Education mention of master's degree Health Engineering

✉ [scolaritemasteris@univ-grenoble-alpes.fr](mailto:scolaritemasteris@univ-grenoble-alpes.fr)

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## Partner schools

Lebanese University, Lebanon

✉ <https://www.ul.edu.lb/default.aspx?lang=2>

Soochow University, China

✉ <https://www-en.scu.edu.tw/>

Manipal University, India

✉ <https://manipal.edu/mu.html>

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## Course location(s) - City

📍 Grenoble

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## Campus

🏠 Grenoble - La Tronche domaine de la Merci

# Program

## Master 2nd year

### Semester 9

	Nature	CM	TD	TP	Crédits
UE Computer-based medicine for chronic diseases (ESI summer school archamps)	Teaching Unit (UE)	40h	35h	15h	6 credits
UE Molecular tools for the diagnosis and treatment of genetic diseases	Teaching Unit (UE)	21h	8h		3 credits
UE Proteomics for health research	Teaching Unit (UE)	11h	14h		3 credits
UE Technological innovation in health	Teaching Unit (UE)				
UE Computational biology	Teaching Unit (UE)				
UE French as a foreign language	Teaching Unit (UE)				
UE other UGA's mentions	Teaching Unit (UE)				
UE other UGA's mentions	Teaching Unit (UE)				
UE Research project - long internship	Teaching Unit (UE)				
UE Research project - short internship 1	Teaching Unit (UE)				
UE Computer-aided drug design : therapeutic applications	Teaching Unit (UE)	17h		9h	3 credits
UE Innovative cell and gene therapies	Teaching Unit (UE)	50h	10h	15h	6 credits
UE Animal experimentation	Teaching Unit (UE)	21h		7h	3 credits
UE Environmental epidemiology	Teaching Unit (UE)				
UE Regulations in health and environmental safety	Teaching Unit (UE)				

UE Modeling in environmental health	Teaching Unit (UE)			
UE Methods in environment, health and GIS	Teaching Unit (UE)			
UE Micro and nanotechnologies for health	Teaching Unit (UE)	24h	6h	3 credits
UE Pollutants and health	Teaching Unit (UE)	23h	3h	3 credits

## Semester 10

	Nature	CM	TD	TP	Crédits
UE Big data for healthy living (ESI summer school archamps)	Teaching Unit (UE)	40h	35h	15h	6 credits
UE Safer ecodesign for nanomaterials (ESI summer school archamps)	Teaching Unit (UE)				
UE Augmented reality in surgery	Teaching Unit (UE)				
UE Technological innovation in health	Teaching Unit (UE)				
UE Research project - long internship	Teaching Unit (UE)				
UE Research project - short internship 2	Teaching Unit (UE)				