



Durée
1 an



Composante
UFR Médecine,
UFR Pharmacie



Langue(s)
d'enseignement
Français,
Anglais

Présentation

With the rapid advance of biomedical engineering, life sciences and physical sciences have converged to create a new discipline: biomedicine. This convergence is helping scientists to make important breakthroughs, such as nanoscale systems for disease detection and drug delivery, predictive computer models of disease progression and drug response, and increasingly affordable forms of biometric analysis for personalized medicine.

Over the past 150 years, average life expectancy has increased by approximately 4 to 5 years per generation. the gap between the active and inactive has widened, and pressure on health and social care costs for society has increased. as chronic disease becomes more prevalent and populations continue to age, eu healthcare systems are striving to shift the burden of care from hospitals to the community and the individual. There is consequently a growing need for biomedical innovations to be more user-centred, empowering patients to manage their healthy living and active ageing. Postgraduate recruits to the fast-growing sector of biomedical engineering will need to bring not only their expertise in a particular field, but also a thorough grounding in a range of technologies and the ability to apply their knowledge and skills to the design of new products and services. Health4life addresses this need with a novel programme combining education and research.

Formation internationale : Formation ayant des partenariats formalisés à l'international

Organisation

Stage à l'étranger : En France ou à l'étranger

Admission

Conditions d'admission

The master of Health Engineering is open in initial training and continuing education. The 1st year of master is accessible on file (and / or interview) to the candidates justifying a national diploma conferring the degree of license in a field compatible with that of the master or via a validation of studies or of acquired according to the conditions determined by the university or the training. 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

How to apply depends on your profile.

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 e-candidat 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

You must also fill in the APPLICATION FORM FOR THE MASTER 1 HEALTH ENGINEERING (IS)

MASTER 2 WISHES SHEET AND imperatively attach it to your application file. MASTER 1 APPLICATION HEALTH ENGINEERING (IS) MASTER 2 WISHES SHEET To be attached to each application file

- For the 2nd year of the Master in Health Engineering : online application entry between 04/01/2020 and 05/29/2020 except for the track **Healthy Living - Health 4 Life Engineering 2nd year Master**: application from 28 Feb 2020 to 20 April 2020.

You live in one of the countries below. You are therefore subject to the Studies in France procedure: online applications entered on the Campus France site

The dates of candidacies 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 the Congo, Russia , Senegal, Singapore, Taiwan, Togo, Tunisia, Turkey and Vietnam.

For more information, we invite you to consult the Master of Health Engineering website or the training catalog.

Public cible

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 programme 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 M2 year (courses or internship).

Et après

Poursuite d'études

Health4life leads on naturally to PhD positions and/or R&D careers in world-leading industries, high-potential start-ups, teaching hospitals and universities, where students are able to utilise their skills in collaborative cutting-edge research and innovation projects, translating technologies into viable applications for the benefit of all.

Secteur(s) d'activité(s)

Research in the biohealth field, particularly in the following areas: biotechnologies, environmental toxicology, public health, innovative medical devices.

Infos pratiques

Contacts

Responsable pédagogique

Corinne Ravelet

✉ Corinne.Ravelet@univ-grenoble-alpes.fr

Responsable pédagogique

Ahcene Boumendjel

✉ Ahcene.Boumendjel@univ-grenoble-alpes.fr

Secrétariat de scolarité

Scolarité Mention de Master Ingénierie de la Santé

✉ scolaritemasteris@univ-grenoble-alpes.fr

Établissement(s) partenaire(s)

ESI - BioHC Summer Schools

🔗 <http://www.esi-archamps.eu/Thematic-Schools/Discover-bioHC>

Lieu(x) ville

📍 Grenoble

Campus

🏠 Grenoble - La Tronche domaine de la Merci

En savoir plus

Site web du master Ingénierie de la santé

🔗 <https://master-ingenierie-sante.univ-grenoble-alpes.fr/>

Programme

Master 2e année

Semestre 9

	Nature	CM	TD	TP	Crédits
UE Computer-based medicine for chronic diseases (ESI summer school archamps)	UE	40h	35h	15h	6 crédits
UE Proteomics for health research	UE	11h	14h		3 crédits
French as a foreign language	UE				3 crédits
UE other UGA's mentions	UE				
UE other UGA's mentions	UE				
UE Innovative cell and gene therapies	UE	50h	10h	15h	6 crédits
UE Animal experimentation	UE	21h		7h	3 crédits
UE Modeling in environmental health	UE				
UE Micro and nanotechnologies for health	UE	24h	6h		3 crédits
UE Pollutants and health	UE	23h	3h		3 crédits
UE Anglais	UE		24h		3 crédits
UE Application of AI for Healthcare	UE	12h	12h		3 crédits
UE Artificial intelligence for OMICS	UE	40h	10h		6 crédits
UE BioHC School "Learning for health data"	UE	20h	30h		6 crédits
UE Biomedicines innovative project	UE	15h	15h		6 crédits
UE Regenerative medicine innovative project	UE	15h	15h		6 crédits
UE In vitro diagnostics innovative project	UE				6 crédits
UE Treatment and prophylaxis of infectious diseases	UE	27h	3h		3 crédits
UE Data analysis in health and environment	UE				3 crédits
Data management technologies, policies and ethics	UE				3 crédits
UE Drug repositioning	UE			8h	3 crédits
UE Ethical and societal aspects of Artificial Intelligence	UE	12h	10h		3 crédits
UE Genetics and epigenetics of infertility	UE	24h			3 crédits
UE Internet of things and AI for Health	UE				3 crédits
UE Introduction to AI for Health	UE				3 crédits
UE Machine learning and Deep learning for health	UE				3 crédits

UE Market analysis, finance, strategy	UE	30h	3 crédits
UE Methods and means for biohealth research	UE		6 crédits
UE Neural network modelling AI for Health Applications	UE		3 crédits
UE Biomarkers and In Vitro Diagnostics	UE		6 crédits

Semestre 10

	Nature	CM	TD	TP	Crédits
UE Ecole BioHC (Une école au choix parmi les écoles organisées)	UE				6 crédits
UE Entrepreneurship essentials (EIT)	UE				6 crédits
UE Projet Tutoré	UE				6 crédits
UE Stage EIT	UE				18 crédits
UE Stage 24 ECTS	UE				24 crédits
UE Stage	UE				30 crédits