

## Parcours Artificial intelligence for one health 2e année

### Présentation

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The AI4Health master is an international program of the Master in Health Engineering. It aims to train students in new developments and applications of artificial intelligence (AI) methods in health, from the management and analysis of health data, taking into account their ethical and legal aspects, up to new diagnostic and predictive tools for improving patient health. After completing this course, participants will have skills in cutting-edge AI methods and tools for Big Data in Health, including data collection (medical devices, smartphones, IoT, social networks), storage and data processing (extraction, scalable relational databases, Hadoop, Spark, etc), their analysis (machine learning, data compression, efficient algorithms, Omics data), and a range of applications for diagnostics, monitoring and the treatment of patients with cancer and chronic disease. This program is aimed at students in Medicine and Pharmacy but also in Engineering and Mathematics who want to apply their knowledge in health domains.

### Admission

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#### Conditions d'admission

The master of AI4Health 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)

You can also consult the prices applying to the public of the continuing education (link : <https://www.univ-grenoble-alpes.fr/consulter-nos-tarifs/>)

#### Candidature

For the 2nd year of the International Master AI4Onehealth : online application entry between the 4<sup>th</sup> of March 2024 and the 29<sup>th</sup> of June 2024 [here](#).

- 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 application dates are as follows: from 01 october 2023 to 15 december 2023. These dates are also listed on the Campus France website.
  - 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.

## Public cible

Applications are open to well-trained students from all around the world who have completed 4 consecutive years of higher education, equivalent to 240 ECTS credits, in a relevant field, such as: clinical sciences, biotechnology, bioengineering, biomedical engineering, pharmacy, medicine, biology, chemical biology, biophysics, health management, computer sciences, life sciences.

240 ECTS credits, even if the student comes from an educational system without ECTS credits, correspond to 4-years of higher education. If you have any doubt, do not hesitate to contact us.

There is no particular computational skills requirement, but during the introduction course, a self-evaluation will determine if the student will have to attend preparatory or refresher courses during the first month of training.

## Droits de scolarité

The tuition fees (€1,800) includes the two intensive schools and access to the complete program through our digital platform.

## Insertion professionnelle

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Find all the information concerning the success rate at the diploma and the future of our graduates (link: <https://www.univ-grenoble-alpes.fr/formation/devenir-de-nos-diplomes/>)

It is also possible to consult our resource documents From studies to employment classified by fields of training (link:

<https://prose.univ-grenoble-alpes.fr/metiers-secteurs/choisir-une-thematique-ou-un-secteur/>)

## Infos pratiques :

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- > Composante : UFR Pharmacie
- > Niveau : Bac +5
- > Durée : 1 an
- > Type de formation : Formation initiale / continue, Formation à distance
- > Lieu : Grenoble - La Tronche domaine de la Merci

## Contacts

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### Responsable pédagogique

Mossuz Pascal  
Pascal.Mossuz@univ-grenoble-alpes.fr

### Secrétariat de scolarité

Scolarité AI4OneHealth  
ai4onehealth@univ-grenoble-alpes.fr

### Ingénieur conseil en formation continue

HONOU Comla  
ingenieur-conseil-fc-sante@univ-grenoble-alpes.fr

## Programme

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**100% Online**

**100% in English**

Programme en cours de saisie, se référer aux MCCC dans les pièces à télécharger.

**Semester 1 (30 ECTS)**

**Core courses (12 ECTS) :**

Course Unit (3 ECTS): [Introduction to AI for Health](#)

The Philippe Sabatier BioHealth Computing School - "Learning for Health Data" (6 ECTS, September 2021)

Course Unit (3 ECTS) : [Data management technologies and policies](#)

**Courses at choice (18 ECTS):**

Course Unit (3 ECTS) : Ethical and societal aspects of Artificial Intelligence

Course Unit (3 ECTS) : [Neural network modelling AI for Health Applications](#)

Course Unit (3 ECTS) : [Machine learning and Deep learning for health data analysis](#)

Course Unit (6 ECTS) : [AI for OMICS data integration](#)

Course Unit (3 ECTS) : Application of AI for Healthcare

Course Unit (3 ECTS) : [IOT and AI for Health](#)

Course Unit (3 ECTS) : [Proteomics for Health Research](#)

**Semester 2 (30 ECTS)**

Internship 24 ECTS (Minimum 5 months in an academic or industrial laboratory)

The Philippe Sabatier BioHealth Computing School - "Accelerating Innovations in Precision Oncology" (6 ECTS) (July 2022)

**Master 2e année**

Semestre 9

Semestre 10