MASTER'S DEGREE

Master 1 / Master 2

BIOLOGY AND HEALTH SCIENCE

NEW PROGRAM

Accessible in:

- Initial education
- Continuing education

ufr3s Sciences de Santé et du Sport | Université de Lille

UNIVERSITY OF LILLE

As a leading European university recognized for the excellence of its research and teaching, the University of Lille has made student success one of its major priorities, and places career development at the heart of its commitment. Backed by cutting-edge research, the University's course offering is designed to keep pace with developments in the socio-economic and socio-professional worlds, in order to contribute to the major transitions in our society and prepare each and every learner, throughout their lives, for the skills and professions of tomorrow.

The University of Lille comprises 11 faculties and 4 partner schools - École Nationale Supérieure des Arts et Industries Textiles (ENSAIT), École Nationale Supérieure d'Architecture de Lille (ENSAPL), École Supérieure de Journalisme de Lille (ESJ Lille), Sciences Po Lille (IEP) - and is a key stakeholder in regional ecosystems, thanks to the many partnerships (related to sports, culture, society at large, business, etc.) we have forged for the benefit of our students and staff. This strong dynamic is also supported by the contributions of 6,500 outside professionals who are involved in our teaching activities, and the development of chairs and cooperative ventures that are aligned with all transition in all its forms.

Inspiring tomorrow!

SCHOOL OF HEALTH AND SPORTS SCIENCES UFR3S

UFR3S Health and sports sciences

The University of Lille has a new component, the Teaching and Research Unit for Health Sciences and Sports, the UFR3S, a result of the merger of five departments: Health Engineering and Management, Medicine, Dentistry, Pharmacy, and Sports Science and Physical Education.

With nearly 23,000 students, 800 teaching and/or research staff, and 600 administrative and technical personnel, UFR3S forms a strong and coherent community united by a common goal: to create and transmit knowledge and build skills in the field of Health Sciences and Sports.

Thirty-four internationally renowned research teams support the interdisciplinary research efforts of UFR3S. These teams are affiliated with major French research centers, including the National Center for Scientific Research (CNRS), the National Institute of Health and Medical Research (INSERM), and the Pasteur Institute of Lille.

As a partner of 115 foreign universities in 38 countries and across 5 continents, the faculties of UFR3S are also internationally recognized contributors to education and research.

UFR3S-Medecine - F-59045 Lille Cedex -Phone number: +33 (0)3 20 62 69 00 - https://medecine.univ-lille.fr/

UNIVERSITY SCHOOL OF SCIENCE & TECHNOLOGY

The School of Science and Technology is a multidisciplinary school and one of the most important faculties in the University of Lille. Located in the Campus of Cit Scientifique in Villeneuve d'Ascq, it brings together 7,000 students, 1,300 staff including 830 teaching and research staff and 470 administrative and technical staff. It is composed by 9 academic departments and 24 internationally renowned research laboratories..

FST - Campus cité scientifique - Bâtiment *formation continue* - 59650 Villeneuve d'Ascq

MASTER : BIOLOGY - HEALTH

MASTER 1

MASTER 2 : TRACKS

Biomedical research on donors bodies	Cellular, Integrative and Translational Neurosciences	Diabetes and cardiovascular diseases	Oncologie fondamentale et clinique, vers une médecine de précision	Immunité, inflammation, infection	Precision Health *Graduate Program*

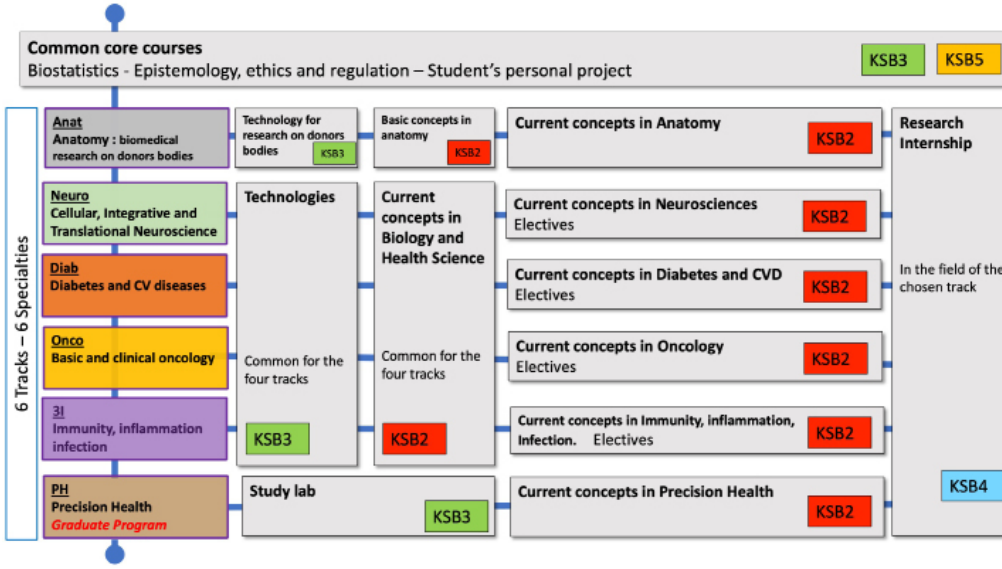
MASTER'S DESCRIPTION

Biology-Health master's degree prepares students in research through research. This master mainly aims to prepare students for further PHD studies. However, it is also possible to work as a research engineer project manager/science officer in the pharmaceutical or biotechnology industry. The program is offered by Lille University School of Medicine in association with the Faculty of Science and Technology and it targets two different audiences: students with a bachelor's degree in life science and students with a bachelor's degree in health (medicine, maïeutics, pharmacy, odontology). The program's duration is 2 years (Master 1st year - Master 2nd year).

OBJECTIVES

Master 1st year provides the bases in biological and health sciences, with progressive specialization.

Master 2nd year offers six different tracks: They all aim to provide students with quality education to pursue a university thesis in their speciality field.



PROGRAM ORGANIZATION

- The program's duration is two years (4 semesters of 30 ECTS). Courses are held in French and English.
- T he courses are organized in Skills and knowledge units (SKU) spread throughout the two-year's program.

SKU1 : Knowing basic concepts in Biology-Health

SKU 2 : Knowing current concepts in Biology-Health in the the chosen special

SKU 3 : Developing and implementing an experimental approach in Biology-Health

SKU 4 : Conducting a research project in Biology-Health

SKU 5 : Understanding and communicating on scientific content in English

- M1 prepares students for the multiples M2 specializations.
- For more details: https://master-biologie-sante.univ-lille.f

Biomedical research on donors bodies

- This track is exclusively reserved for health students. The objective is to deepen the students' knowledge in applied anatomy and to provide the essential skills to carry out research on donor bodies.

Cellular, integrative and translational neuroscience

- Particularly focused on the interface between cellular aspects, the study of neuro-glial networks and the development of integrated models with technological, diagnostic and therapeutic applications in the field of neurological and mental pathologies.

Diabetes and cardiovascular diseases

- Particularly dedicated to recent developments in "Omics", the impact of genetics, the epigenetics and the environment on the development of cardiometabolic diseases, cardiovascular and hepatic complications in diabetes.
- The role of deregulation of the dialogue between organs and tissues in the pathophysiology of diseases associated with diabetes is discussed as well as the identification of therapeutic targets..

Fundamental and clinical oncology, towards precision medicine

- Combining basic research, clinical research and applied research in diagnosis and therapy. It is based on developed themes in the expert research teams in this field at the University of Lille. This pathway provides an integrated vision of cancer pathology and current and future therapies.

Immunity, inflammation and infection

- Based on the developed themes in the research structures at the University of Lille, in particular **(1)** the molecular and cellular dynamics of the pathogenic-host microorganism interactions, **(2)** the immune processes involved in infectious pathologies, **(3)** chronic inflammatory diseases, and **(4)** the relationships between the immune system and the environment (microbiota, pollution, sport, food, etc.). Today's therapeutic strategies aiming to manipulate molecular and immune effectors will also be developed.

Precision Health-Graduate Program

- This is an international pathway that is part of a «Precision Health» graduate program.
- Its distinctive character will be to rely on examples taken from the health sector's key themes, which cover different types of chronic diseases justifying a long-term precision approach, from screening to the prevention of complications.

Graduate Programme Lille

For more information on the national degrees programs offered by the University of Lille, consult the degree catalog:

www.univ-lille.fr/formations

TARGETED **AUDIENCE**

- Students with a bachelors' degree in Life Sciences or an equivalent diploma can apply for the Master 1 "Biology".
- Only students registered in Medicine, Pharmacy, Odontology or Maieutics can apply for the Master 1 - options "Health – single curriculum" and "Health – double curriculum Medicine-Science"

TARGETED **SKILLS**

- To contribute to a research activity in Biology Health in a research laboratory;
- To design an experiment in Biology-Health in the chosen field of specialization by defining a problem and formulating the objectives;
- To implement an experimental approach in Biology-Health
- To analyze data collected in fundamental, clinical or pharmacological research studie
- To communicate scientific data in English, adapting the level of expression and specialization to the target audience

JOB OPPORTUNITIES & FURTHER STUDIES

The program leads mainly to a doctoral degree. Graduates can also apply for the following jobs :

- Design engineer in a public or private laboratory
- Project manager/ science officer in the pharmaceutical or biotechnology industry
- University teacher/researcher (with further doctoral studies

Find the studies and surveys of the ODiF (Observatoire de la Direction de la Formation) on professional integration of graduate students: http://odif.univ-lille.fr

NB : A certified level in French will be required.

FRANCE compétences
CERTIFICATION
enregistrée au RNCP

FOCUS ON **PRECISION HEALTH** TRACK

- International course open to students from scientific, medical/pharmaceutical and (bio)informatics education
- Ten interactive seminars given by national or international experts in the fields of multi-OMICS, artificial intelligence, mathematic modelling of biological systems, state-of-the-art therapies (medical devices and personalized drugs), cohort management, healthcare economics and ethics
- Application examples from the leading themes of the research sector, cancer, diabetes, neurosciences, infection/immuno/inflammation, justifying a precise approach over the long term, from screening to the prevention of complications
- A particular focus toward the business world and bio-entrepreneurship, particularly for the preparation to job integration
- A six month training in research through research in internationally recognized laboratories with a personalized preparation
- PHD fellowships awarded to students motivated to pursue their research training

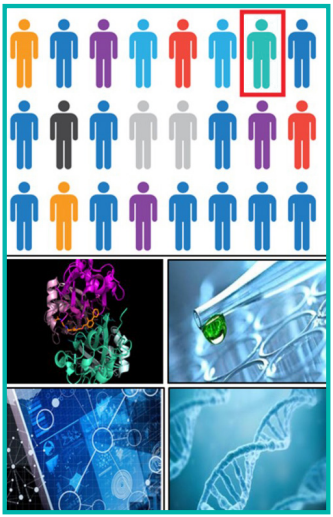
From OMICS to system biology

Imaging

Molecular basis of diseases and treatments

Artificial Intelligence

Mathematic modelling of living organisms



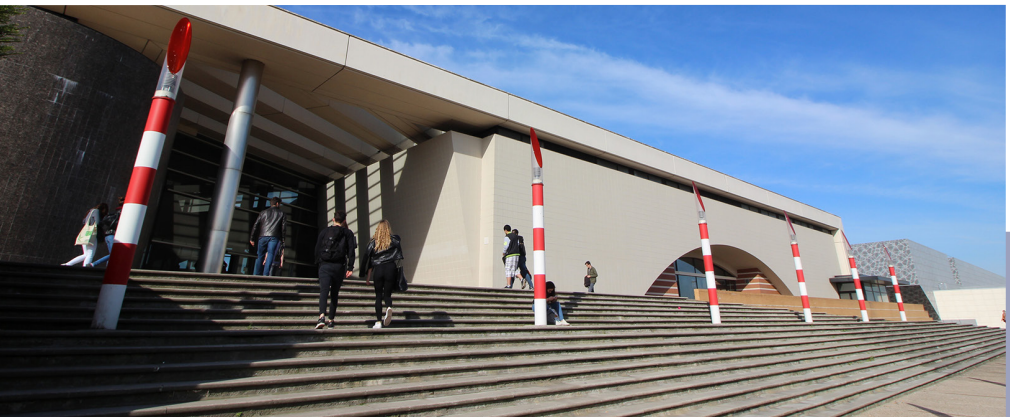
Novel mode of actions for personalized drugs

Medical devices

From cohorts to cutting-edge researches

Public policy and health economics

Ethic, health and society



ADMINISTRATIVE **CONTACT**

UFR3S - Bâtiments Modulaires
1 Rue du Professeur Laguesse - 59000 Lille
(en face du bâtiment Galien de la Faculté de Pharmacie)

http://master-biologie-sante.univ-lille.fr
Métro : Ligne1, station CHU Eurasanté
Phone: +33(0)3 20 62 69 00

APPLICATION AND ADMISSION

MASTER 1

Admission to the first year of the Master's program is subject to the application file examination according to the following procedures:

BIOLOGY STUDENTS

Admission capacity

- 50 places for the Biology option

Selection procedure

- Application file

Application's evaluation criteria

- A Completed Bachelor's degree in life sciences, life and earth sciences, science and biotechnology, biologic health sciences or any other equivalent degree,
- A clear and realistic presentation of a professional project, explained for the short, medium and long term,
- Adequacy between the master's degree and the professional project presented

HEALTH STUDENTS

Admission capacity

- 300 places for the Health - single curriculum option and 15 places for the Health - double curriculum medicine/science option

Application's evaluation criteria

- A clear and realistic presentation of a professional project, explained for the short, medium and long term
- A dequacy between the master's degree and the professional project presented
- To have validated at least completely the second year of health studies (medicine, pharmacy or odontology)

NATIONAL RECRUITMENT PROCEDURE and timetable via www.monmaster.gouv.fr

Applications from 25/02 to 24/03/25 inclusive
Examination of applications from 31/03 to 01/06/25
Transmission of admission proposals to candidates and candidates' replies: from 02/06 to 16/06/25 (main admission phase) and from 17/06 to 17/07/25 (complementary admission phase).

MASTER 2

Access to master 2 degree is possible for students from other universities who have validated a master 1 degree in the field of Biology and Health or in an equivalent field. Please contact the program managers.

PROGRAM **MANAGERS**

Head
Professor **Pr Kathy DUJARDIN**
Study coordinators
Lille University School of Medicin
M1 : Biology option : **Pr Eric ADRIAENSSENS**
M1 : Health options: **Dr Cyril COUTURIER**
M2 : **Pr Fabrice ALLAIN**

SUPPORT SERVICES

INFORMATION AND GUIDANCE

The Guidance department is open to all: information, advice and support, guidance and reorientation, personal interviews.

- **www.univ-lille.fr/formation/sinformer-sorienter**

PREPARATION FOR PROFESSIONAL INTEGRATION

The Internships and Employment Department offers students support for professional integration (internships and first jobs), entrepreneurship and the creation of activities.

- **www.univ-lille.fr/formation/preparer-son-insertion-professionnelle**

APPRENTICESHIP

To acquire skills, a diploma and professional experience at the same time, more than 220 courses are offered on a sandwich course (professionalization or apprenticeship contract).

- **https://formationpro.univ-lille.fr/alternance**

LIFELONG LEARNING

All of the university's degree programmes are accessible through continuing education. The Continuing Education and Work-linked Training Department offers individualised support for your project (VAPP, VAE).

- **https://formationpro.univ-lille.fr/**

ET L'INTERNATIONAL !

The international relations department assists all students with their mobility needs: exchange programs or individual mobility, internships, French courses for international students...

- **https://international.univ-lille.fr/**

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