

## Information ERASMUS + 2023-2024



Louvain-la-Neuve, January 19, 2023

Dear colleagues,

The Faculty of Bioscience Engineering of the Université catholique de Louvain is glad to have a fruitful collaboration with your university in the frame of the ERASMUS+ programme.

It is our pleasure to include below our updated documentation about our training programs. These are organized into three cycles and intended for your students who would like to stay in our university during the academic year 2023-2024.

Our Faculty proposes research/master thesis internships as well.

We remain at your disposal for any further information and invite you to visit our website for more details: <https://uclouvain.be/en/faculties/agro/international-exchanges.html>. We are looking forward to welcoming your students very soon.

Sincerely yours,

P.O.

Mrs Stéphanie Hansen  
Mobility officer

Mrs Adeline Paulet  
Mobility officer

Prof. Claude Bragard  
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Coordinator

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# Bioscience Engineer



## Master's Programmes in Bioscience Engineering:

- Agricultural Sciences (120 ECTS)
- Chemistry and Bioindustries (120 ECTS)
- Environmental Sciences and Technology (120 ECTS)
- Forests and Ecosystem Management (120 ECTS)

[www.uclouvain.be/agro](http://www.uclouvain.be/agro)



# Welcome to the Faculty of Bioscience Engineering



Thanks to its human scale, the UCLouvain Faculty of Bioscience Engineering enables students, members of staff and lecturers to mix with one another in a very friendly atmosphere.

This is a place where responses are worked out to the major challenges facing our society : the environment and the future of our planet, the management of renewable natural resources, the preservation of biodiversity, food safety and security, the evolution of agriculture and biotechnologies, the optimal use of genetic resources and more.

Located on a pleasant and lively campus, as part of a university with an international reputation, the programmes offered at the Faculty include a great number of courses given in English.

## THE FACULTY OF BIOSCIENCE ENGINEERING IS:

- 1,500 first-, second- and third-cycle students;
- 600 members of staff: professors, researchers, technical and administrative staff;
- specialisations in all fields of bioscience engineering;
- a stimulating study environment where exchanges between the disciplines enrich research and teaching.

The Faculty develops teaching and research activities in four areas such as: agronomy, chemistry, the environment, the management of forests and natural areas.

Come and meet the administrative and pedagogical team and attend teaching activities at events organized throughout the year.

<https://uclouvain.be/fr/etudier/rdvinfos>

## Our Master programmes

### MASTERS IN BIOSCIENCE ENGINEERING

120 ECTS, 2 years

- **Chemistry and Bioindustries**
- **Forests and Ecosystem Management**
- **Agricultural Sciences**
- **Environmental Sciences and Technology**

### PHD

- **Doctorate in Agronomical Sciences & Bioscience Engineering**

### THE FACULTY OF BIOSCIENCE ENGINEERING WELCOMES

- international students wishing to do their entire master's course at UCLouvain (admission conditions: [www.uclouvain.be/enrolment](http://www.uclouvain.be/enrolment))
- students who would like to participate an Erasmus-type exchange
- students who want to do a research placement or an internship in a laboratory or part of their master's thesis.

The bioscience engineering programmes organised by UCLouvain are recognised by the Commission des Titres d'Ingénieur (engineering accreditation body) and therefore benefit from the European EUR-ACE label attesting to their quality and international reputation.

[www.cti-commission.fr](http://www.cti-commission.fr) • [www.enaee.eu](http://www.enaee.eu)



### A TOP UNIVERSITY RIGHT AT THE HEART OF EUROPE

UCLouvain is one of Belgium's and Europe's leading universities. For almost 600 years, it has welcomed students from across the world, without regard to their political or religious beliefs. The University strives to be highly multi-cultural, multilingual, open and tolerant.

- 31,000 students, of whom 5,700 come from abroad and represent 120 nationalities
- 5,800 academics, scientists, administrative and technical collaborators
- 195 Master's programmes in all fields of study
- 49 doctoral schools
- 22 research institutes, 25 technology platforms
- 3 science parks, 68 spin-offs
- 242 million euros in research grants per year
- 150,000 alumni worldwide.

With one Nobel Prize in medicine, 21 Francqui Prizes and 27 ERC Grants, UCLouvain enjoys a world-class reputation and is well placed in international rankings : top 1.25% in the world (THE, QS Rankings)

- 128th in the "world university ranking" \*
- 4th comprehensive French-speaking university in the world \*\*
- Included amongst the world's elite institutions in 28 of the 46 subjects ranked in QS Rankings 2017 \*\*\*

\*Times Higher Education ranking 2016-2017 – \*\*QS ranking 2016-2017 – \*\*\*QS ranking by subject 2017



# Bioengineers work today to improve the world of tomorrow

## **A response to the challenges of the 21st century**

University-level bioengineering training provides the best tools to take up the main environmental challenges facing our planet in the 21st century: preservation of biodiversity, extension of responsible farming and forestry production, natural resources management, development of renewable energies and biomaterials, high quality food production, prevention of cancers and other chronic diseases, depollution of industrial sites.

## **An engineer of the living world**

Bioengineers are engineers with a wide-ranging knowledge of the living world and the ability to devise production methods and technological processes adapted to the requirement of the sustainable world. They have the capacity to devise, implement and manage complex projects, taking account of their human, environmental, economic and technical dimensions.

## **Scientific versatility**

Versatile scientists who can understand biological, chemical and physical phenomena as well as economic and social processes, bioengineers are also innovators and entrepreneurs.

## **Human values**

During their studies, bioengineers learn to work as part of a multidisciplinary team in a spirit of solidarity and respect for opinions and cultures. They open up to the world and form their own convictions through their many contacts with professionals in a wide range of organisations, from local associations to multinational companies.

## **A wide variety of prospects**

Bioengineering studies grant access to a wide range of jobs in a variety of fields, from support for farming practices to the design of power stations, from brewing to the management of tropical forests, from soil depollution to the development of new vaccines, from the management of epidemiological databases to land-use planning.

## **High employment level**

The rate of employment among newly qualified bioengineers exceeds 90% in the year following the completion of their studies. Most of these jobs are related to bioscience engineering. Many opportunities to progress and diversify then arise during the professional careers of bioengineers.

## JOB DAYS

Industry days as well as the bir@work event offer a meeting place between companies and future graduates.

## JOBS PROSPECTS

Bioengineers fill a wide variety of positions (research fellow, scientific expert, project leader, production manager, etc.) in many different fields and sectors (industries, agricultural or forestry sector, agri-food sector, biomedical, chemical or environmental fields, health, etc.).

## THE SKILLS YOU WILL HAVE ACQUIRED BY THE TIME YOU COMPLETE YOUR BIOSCIENCES ENGINEERING DEGREE

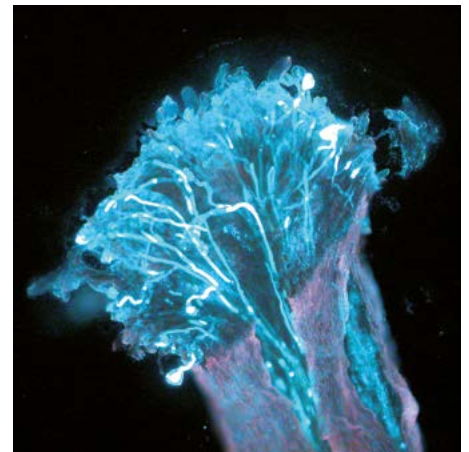
- You will master a multi-disciplinary body of scientific knowledge which will serve as a basis for you to act with expertise in one of the fields of bioengineering.
- You will build up a knowledge base in engineering and management.
- You will devise and apply strict and innovative scientific approaches to resolve complex problems in contexts that may sometimes be unfamiliar.
- You will manage multi-disciplinary projects, alone and as part of a team, with those concerned, taking into account objectives and integrating scientific, technical, environmental, economic and human components.
- You will communicate, argue and convince in French and English.
- You will act as a critical and responsible citizen, placing the global stakes of sustainable development at the heart of your concerns.
- You will constantly acquire new knowledge and develop new skills.

## THE FACULTY OF BIOSCIENCE ENGINEERING

has a large international network and actively engages abroad through

- Welcoming exchange students
- Possibilities of studying abroad for students
- Internships abroad
- Master internships
- Development cooperation
- Bilateral agreements between universities in research, education or services to society
- Teachers and researchers exchange, in particular in European and international networks

The Faculty has concluded exchange students agreements with more than 50 institutions, in more than 20 countries and regions (Flanders, Canada and South America).



## A VARIED AND HIGH-PERFORMANCE WORKING ENVIRONMENT

### University of Louvain farms

- **Lauzelle Farm** in Louvain-la-Neuve University farm specialising in the study of organic market gardening, as well as a space for reflection and experimentation.
- **A. de Marbaix Farm** in Corroy-le-Grand Forty-hectare testing facility dedicated to field crops and breeding in sustainable and organic agriculture.

### Other areas of experimentation

- 2,000 square meters of greenhouses The most efficient greenhouses in Europe, for carrying out botanical experiments.
- Lauzelle Forest in Louvain-la-Neuve Lauzelle is a private forest integrating different objectives: education, logging, scientific study, nature conservation, public reception.
- **The Michamps Centre** in Bastogne
- The lake in Louvain-la-Neuve
- The forest in Chimay
- ...

## MASTER'S PLACEMENTS

All master programmes include a socio-professional work placement lasting several months in a company or research laboratory.

## LEARNING LANGUAGES

UCLouvain is a French-speaking university but above all, it is 'English friendly'. In addition to the possibility of following courses given entirely in English, you will have the chance to acquire or improve your knowledge of French, particularly in the Institute of Modern Languages, which is equipped with the latest language-learning technologies.

## ERASMUS EXCHANGES

The Faculty of Bioscience Engineering welcomes many exchange students every year, mainly through the Erasmus + programme.

These students can choose a certain number of credits and thereby supplement their programme with courses in French or make their selection from over 130 course credits in English.

Information: [www.uclouvain.be/exchange-student](http://www.uclouvain.be/exchange-student)

## LOUVAIN-LA-NEUVE: A STIMULATING LIVING ENVIRONMENT

The pedestrian campus of Louvain-la-Neuve spans over a 2 km (1.3 miles) radius and is bordered by 300 hectares (750 acres) of woods. This calm yet connected environment has also been chosen to host offices of approximately 270 companies with among them world leaders such as AGC Glass Europe HQs, Ion Beam Application (IBA), Lhoist or GlaxoSmithKline (GSK).

The Faculty of Bioscience Engineering offers a stimulating environment for both students and researchers. It also favours personal development and well-being. Sport is a good way to meet others and integrate with the student population. With an offer of over 90 sports during the academic year, UCLouvain gives you the opportunity to practice your favorite sports or discover new ones. The Blocry Center offers both indoor facilities -24 sports halls, a major climbing wall (1,900m<sup>2</sup>, 16m high- 6,200 square feet, 52ft high) a new athletic track, and 13 ha (32 acres) of outdoor fields. UCLouvain students have access to all these infrastructures and services for only 50€ as the university covers part of the costs.

A strong emphasis is also put on culture. Theatre, cinema, concerts, shows, exhibitions, conferences - cultural activities abound at UCLouvain. This is hardly surprising as the university invests heavily in culture inviting each year an artist in residence and organizing a cultural season comprising as many as 50+ cultural events. Finally, our Faculty enjoys the proximity of the university museum.

## THE QUALITY OF TEACHING AND TUTORING

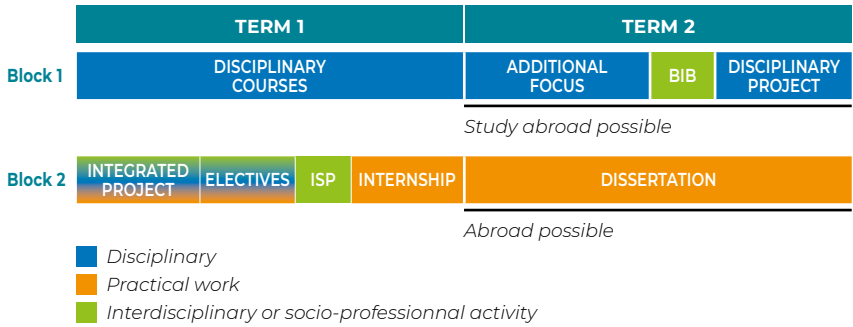
Innovation is second nature to UCLouvain. The University applies to research but also to teaching, constantly re-examining its purpose and methods.

UCLouvain is particularly attentive and sensitive to offer to its students the welcome and support they might need. Whether this involves lending assistance in finding accommodation or completing all the enrolment formalities, offering a personalized welcome to the faculty and easy access to language courses or providing welfare, psychological and educational support where needed, every effort is made to ensure that newcomers quickly feel part of the student community.

# FOUR MASTER'S DEGREES IN BIOENGINEERING

## COMMON STRUCTURE

The four master's degrees share a common structure upon which a specific course of study is based.



## STUDENTS TAKE CHARGE

Students build their master's course by choosing a dissertation subject, an additional focus, electives, an internship, and whether to study and/or conduct dissertation work abroad.

## AN APPRENTICESHIP TO THE PROFESSIONAL WORLD

Learning activities mobilise students' skills in order to gradually prepare them for professional challenges, particularly through project-based learning that emphasises, among other means, group work and oral and written expression. The internship takes place during the second year, although it can be replaced by an alternative programme.

## FROM DISCIPLINARY TO MULTIDISCIPLINARY, FROM LECTURES TO CONTINUOUS EVALUATION

After having acquired solid knowledge in the discipline, students carry out two projects, the first disciplinary and the second multidisciplinary. Students thus learn to mobilise skills in order to solve a scientific and/or industrial problem. Learning assessment also evolves, with exams giving way to continuous evaluation.

## STUDY ABROAD

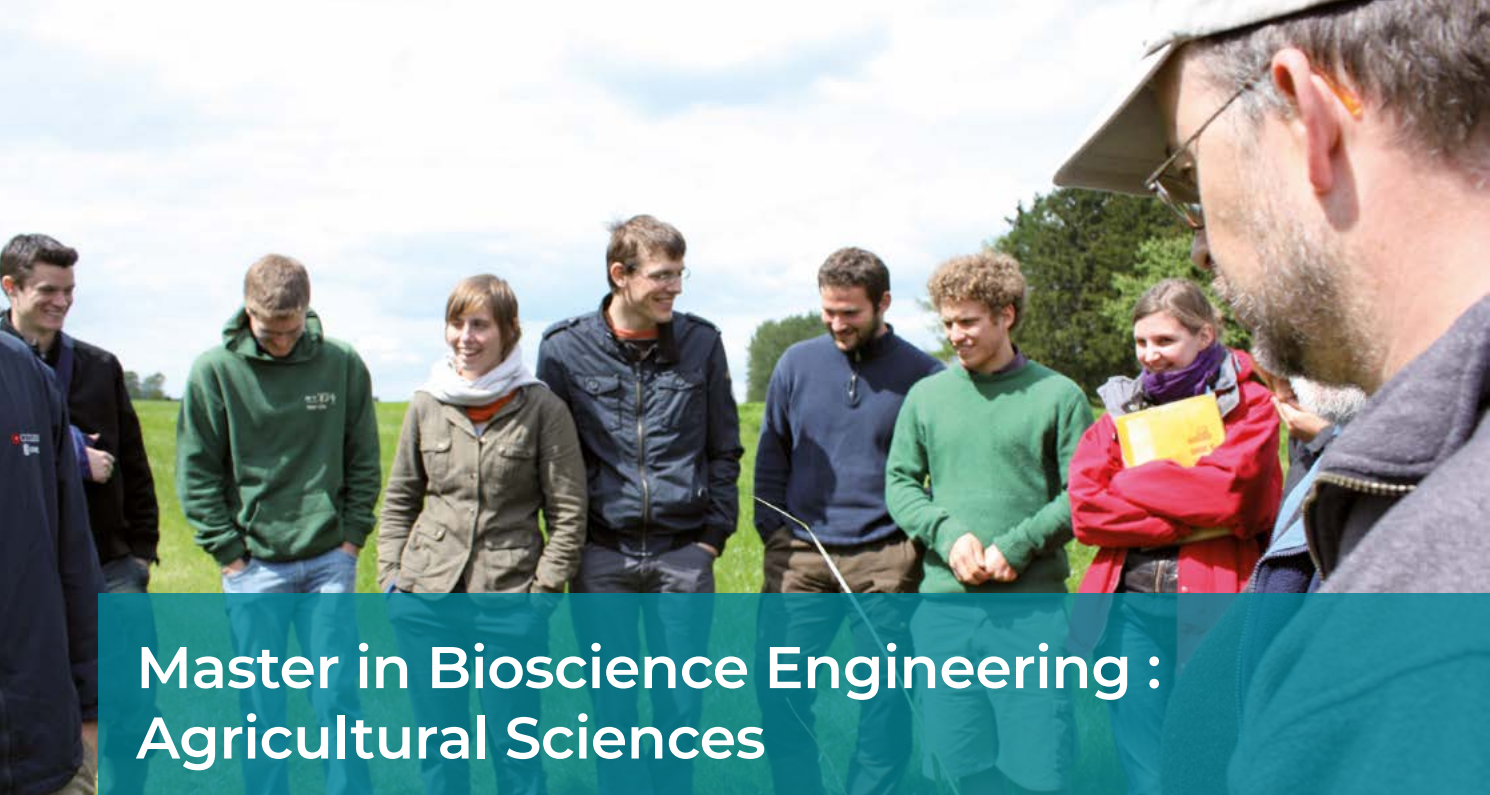
The four master's degrees include the option of spending a term abroad at a partner university. The Faculty of Bioengineering offers a wide range of destinations.

## CHOOSE ENGLISH-LANGUAGE COURSEWORK

Students can choose a course conducted mainly in English. The dissertation is written in English.







# Master in Bioscience Engineering : Agricultural Sciences

[www.uclouvain.be/en-prog-bira2m](http://www.uclouvain.be/en-prog-bira2m)

- Campus: Louvain-la-Neuve
- Day Schedule
- Duration: 2 years
- Language: French
- Activities in English: YES
- Activities in other language: NO
- Internship: YES

This programme offers bioengineers a specialisation in sustainable animal and plant production in response to the challenges of the environmental balance, the socio-economic constraints of the rural world, food safety and security imperatives and consumer's needs in terms of nutritional and health qualities.

## PROGRAMME

CORE COURSES AND PROFESSIONAL FOCUS	25 ECTS	<ul style="list-style-type: none"> <li>■ Livestock production</li> <li>■ Crop production</li> <li>■ Agrarian systems</li> <li>■ Agricultural and rural policies</li> <li>■ Data analysis</li> <li>■ Plant medicine</li> <li>■ Current issues</li> <li>■ Ethical issues</li> </ul>
MASTER THESIS	30 ECTS	Master thesis + Master thesis' accompanying seminar
ELECTIVES	5 ECTS	
INTERNSHIP	10 ECTS	Professional internship (or alternative programme)
PROJECTS	20 ECTS	<ul style="list-style-type: none"> <li>■ Disciplinary project</li> <li>■ Interdisciplinary project</li> </ul>
OPTIONS COURSES	30 ECTS	<ul style="list-style-type: none"> <li>■ Food nutrition and health</li> <li>■ Water and soil resources</li> <li>■ Integrated agronomy</li> <li>■ Plant health</li> <li>■ Data science</li> <li>■ Agricultural and resource economics</li> <li>■ Human health</li> <li>■ Interdisciplinary training in entrepreneurship</li> <li>■ Sustainability engineering</li> </ul>



# Master in Bioscience Engineering : Chemistry and Bio-industries

[www.uclouvain.be/en-prog-birc2m](http://www.uclouvain.be/en-prog-birc2m)

- Campus: Louvain-la-Neuve
- Day Schedule
- Duration: 2 years
- Language: French
- Activities in English: YES
- Activities in other language: NO
- Internship: YES

The master's degree in chemical and bioindustrial bioengineering trains students capable of understanding complex chemical, biochemical and (micro)biological processes at various scales and of designing new technological processes in fields as varied as chemistry, biotechnology, nanotechnology, microbiology, biomaterials, agri-food, energy, pollution control, recycling, and the environment.

## PROGRAMME

<b>CORE COURSES AND PROFESSIONAL FOCUS</b>	<b>31 ECTS</b>	<ul style="list-style-type: none"> <li>■ Biochemical analysis</li> <li>■ Biochemical and microbial engineering</li> <li>■ Process engineering: unit operations</li> <li>■ Industrial processes for the production of base chemicals OR Bioinformatics: DNA and protein sequence</li> <li>■ Spectroscopic methods of analysis</li> <li>■ Physical chemistry II</li> <li>■ Ethical issues</li> </ul>
<b>MASTER THESIS</b>	<b>30 ECTS</b>	Master thesis + Master thesis' accompanying seminar
<b>ELECTIVES</b>	<b>5 ECTS</b>	
<b>INTERNSHIP</b>	<b>10 ECTS</b>	Professional internship (or alternate programme)
<b>PROJECTS</b>	<b>20 ECTS</b>	<ul style="list-style-type: none"> <li>■ Team bibliographical project</li> <li>■ Integrated chemical analysis project</li> <li>■ Chemical and biotechnology engineering industrial project</li> </ul>
<b>OPTIONS COURSES</b>	<b>24 ECTS</b>	<ul style="list-style-type: none"> <li>■ Biomolecules and cells</li> <li>■ Molecular &amp; cells</li> <li>■ Nano(bio)materials and catalysis</li> <li>■ Environmental technology</li> <li>■ Human health</li> <li>■ Data science</li> <li>■ Interdisciplinary training in entrepreneurship</li> <li>■ Sustainability engineering</li> </ul>



# Master in Bioscience engineering : Environmental Sciences and Technology

[www.uclouvain.be/en-prog-bire2m](http://www.uclouvain.be/en-prog-bire2m)

- Campus: Louvain-la-Neuve
- Day Schedule
- Duration: 2 years
- Language: French
- Activities in English: YES
- Activities in other language: NO
- Internship: YES

This engineering programme offers a specialisation in the field of environmental science and engineering with a view to working for the restoration, preservation and sustainable use of natural resources and the environment in general. It trains professionals in the development of innovative solutions and the management of projects related to the complex environmental issues of sustainable development.

## PROGRAMME

<b>CORE COURSES AND PROFESSIONAL FOCUS</b>	22 ECTS	<ul style="list-style-type: none"> <li>■ Applied geomatics</li> <li>■ Applied pedology</li> <li>■ Water, soil, and air quality assessment</li> <li>■ Decision tools for environmental management</li> <li>■ Data analysis OR Data science</li> <li>■ Agrarian Systems OR</li> <li>■ Renewable energy</li> <li>■ Ethical questions</li> </ul>
<b>MASTER THESIS</b>	30 ECTS	Master thesis + Master thesis' accompanying seminar
<b>ELECTIVES</b>	5 ECTS	
<b>INTERNSHIP</b>	10 ECTS	Professional internship (or alternative programme)
<b>PROJECTS</b>	10 ECTS (+10)	<ul style="list-style-type: none"> <li>■ Disciplinary project</li> <li>■ Integrated project</li> <li>■ pollution management</li> </ul>
<b>OPTIONS COURSES</b>	43 ECTS	<ul style="list-style-type: none"> <li>■ Environmental technology</li> <li>■ Land use planning</li> <li>■ Water and soil resources</li> <li>■ Data science</li> <li>■ Interdisciplinary training in entrepreneurship</li> <li>■ Sustainability engineering</li> </ul>



# Master in Bioscience Engineering : Forests and Ecosystem Management

[www.uclouvain.be/en-prog-birf2m](http://www.uclouvain.be/en-prog-birf2m)

- Campus: Louvain-la-Neuve
- Day Schedule
- Duration: 2 years
- Language: French
- Activities in English: YES
- Activities in other language: NO
- Internship: YES

The master's degree in Bioscience Engineering : Forests and Ecosystem Management trains bioengineers active in the management, monitoring, facilitation and direction of projects in connection with such ecosystems and their sectors, with an emphasis on innovation. It provides a solid training in forestry sciences and open environments and exposes the bioengineer to the disciplines of ecology, economics and sociology in order to impart a comprehensive understanding of the issues.

## PROGRAMME

<b>CORE COURSES AND PROFESSIONAL FOCUS</b>	<b>52 ECTS</b>	<ul style="list-style-type: none"> <li>■ Applied geomatics</li> <li>■ Tree and forest stand measurement</li> <li>■ Wood anatomy and properties</li> <li>■ Forestry and dendrology</li> <li>■ Habitat and species analysis and management</li> <li>■ Principles of economics and forest engineering</li> <li>■ Tropical silviculture and international forestry issues</li> <li>■ Spatial planning principles</li> <li>■ Biometrics or data science</li> <li>■ Ethical issues</li> <li>■ Applied pedology</li> <li>■ Wood processing and industries</li> <li>■ Forest ecology and health</li> <li>■ Forests, natural environments and territories excursion</li> </ul>
<b>MASTER THESIS</b>	<b>30 ECTS</b>	Master thesis + Master thesis' accompanying seminar
<b>ELECTIVES</b>	<b>5 ECTS</b>	
<b>INTERNSHIP</b>	<b>(15 ECTS)</b>	Professional internship (or alternative programme)
<b>PROJECTS</b>	<b>18 ECTS</b>	<ul style="list-style-type: none"> <li>■ M1 project: Environmental impact assessment</li> <li>■ M2 project: Integrated project in forest and natural spaces</li> </ul>
<b>OPTIONS COURSES</b>	<b>15 ECTS</b>	<ul style="list-style-type: none"> <li>■ Land use planning</li> <li>■ Water and soil resources</li> <li>■ Data science</li> <li>■ Tropical ecosystems</li> <li>■ Interdisciplinary training in entrepreneurship</li> <li>■ Sustainability engineering</li> </ul>



# Why choosing this bioscience engineering degree at UCLouvain ?

## FOR ITS INTERNATIONAL FOCUS

The Faculty of Bioscience Engineering offers its students an international dimension via contributions from foreign professionals to the courses and through placements or internships all over the world: professional immersion during the bachelor's course, Erasmus exchanges, socio-professional work placements, research residencies as part of the master's thesis.

## FOR ITS ADVANCED SCIENTIFIC ENVIRONMENT

The university degree offered to future bio-engineers in Louvain-la-Neuve is based on high-performance research programmes organised in three institutes linked to the Faculty of Bioscience Engineering: the Institute of Condensed Matter and Nanosciences, the Institute of Life Sciences and the Earth and Life Institute. These institutes have a total of over 600 researchers and benefit from structured collaborations with leading international research centres.

## FOR ITS HIGH-PERFORMANCE EQUIPMENT AND ITS NUMEROUS FIELDS OF EXPERIMENTATION

The Faculty provides specialised laboratories, modern classrooms, discipline-specific libraries and large-scale experimentation sites:

- 200 ha forest, two state-of-the-art research farms at walking distance from Louvain-la-Neuve, an agronomy field research center near Bastogne in the Ardennes,
- 2,000 m<sup>2</sup> state-of-the-art greenhouse in Europe among the most advanced in Europe and 2 experimental farms.

## FOR THE SETTING IN LOUVAIN-LA-NEUVE

Louvain-la-Neuve is a modern and open university town that provides an ideal setting for an enriching and instructive university life, thanks to its interdisciplinary, international and inter-generational character and its wide range of cultural activities, its advanced sports infrastructure accessible to all students and its rich and diverse range of clubs and societies.

## FOR ITS QUALITY

The Faculty of Bioscience Engineering is renowned for its high-quality training and received the European 'EURACE' label awarded by the 'Cti' - Commission des Titres d'Ingénieur (engineering accreditation body) for its four bioscience engineering master courses.

## BUT ALSO:

- for the friendly atmosphere in the Faculty of Bioscience Engineering, established on a human scale where mutual support combines with the concern for excellence and efficiency;
- to be part of a prestigious university with an international reputation.
- a university with a comprehensive range of courses, offering 44 bachelor's and 99 master's degrees. You will meet students from sectors as different as health science, science and technology and human science.
- In addition, teaching in the Faculty of Bioengineering is provided by specialized professors, involved in research.

## UNIVERSITÉ CATHOLIQUE DE LOUVAIN

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- **Studying at UCL**  
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[www.uclouvain.be/cio](http://www.uclouvain.be/cio)
- **Register at UCL**  
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[www.uclouvain.be/inscription](http://www.uclouvain.be/inscription)
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<https://uclouvain.be/prog-2020-envi2mc>

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# Advanced Master in Brewing Engineering

(60 ECTS)



[www.uclouvain.be/agro](http://www.uclouvain.be/agro)



# Advanced Master's Degree in Brewing Engineering

[www.uclouvain.be/en-prog-bras2mc](http://www.uclouvain.be/en-prog-bras2mc)

- Campus : Louvain-la-Neuve
- Daytime schedule
- Duration: one year
- Language of instruction: French
- Activities in English: YES
- Internships: YES



The world's first university French-language brewing course trains and prepares students for a career in the brewing industry.

The programme imparts the multidisciplinary knowledge necessary for students to gain a comprehensive understanding of the entire brewing process. The course emphasises the fundamentals of chemistry, biochemistry and brewing microbiology as an essential basis for optimal process utilization. The diversity of participating professors, whose university and/or industry careers are international in scope, guarantees an array of complementary approaches.

Another major asset is the programme's placement of students in a laboratory where they make multiple outside contacts and experience the cutting edge of brewing research.

Completing a research internship sponsored by an industrialist, visiting companies and sharing experiences with students of diverse origins allow students to settle on a career path leading to the fulfilment of their goals.

## PROGRAMME

### MANDATORY COURSES

4 ECTS	Malt Biochemistry and Technology
5 ECTS	Hop Chemistry and Technology for Wort Boiling and Dry-hopping
4 ECTS	Brewing Fermentation Genetics, Biochemistry and Technology
4 ECTS	Organoleptic and Microbiological Qualities of Beer and Wine
5 ECTS	Special Focus on Recent Brewing Developments
3 ECTS	Food Chemistry
27 ECTS	Internship - Dissertation

### ELECTIVES

5 ECTS	Food Microbiology
3 ECTS	Technological and statistical quality control
3 ECTS	Surface and colloid chemistry
5 ECTS	Physiological and nutritional biochemistry

## CAREER PROSPECTS

A resurgence in the brewing sector has been driven in part by the creation of a large number of 'craft breweries' throughout the world, but also by the genuine need of large multinationals to find qualified staff. The master's degree opens doors to the brewing industry at the level of large multinational research and development departments as well as of production and technical management in breweries of various sizes.

The brewery is probably one of the most complete food industry, performing an extensive sequence of thermal, separation and fermentation processes. The versatility of our graduates makes them particularly attractive to the many other agri-food industries that frequently approach them.

## YOUR SKILLS AND KNOWLEDGE UPON EARNING THE MASTER'S DEGREE

- You will be an expert in the field of brewing engineering, able to diagnose and solve problems related to malting, mashing, boiling, fermentation and beer filtration.
- You will have broadened your knowledge and skills in order to make diagnoses and implement solutions in a professional context, being able to self-assess and communicate by adapting to others.
- Multipurpose and multidisciplinary, the advanced master's degree emphasises acquiring knowledge and skills by combining theory and technique. It will make you an expert who masters a variety of scientific and technological tools, empowering you to take effective action in a broad range of professional situations.

## ADMISSION REQUIREMENTS

Holders of a Belgian university master's degree in engineering, chemical engineering, bioindustrial engineering, agricultural engineering, bioengineering, or civil engineering, and holders of a degree recognised as equivalent by the Faculty of Bioengineering, are granted direct admission to this programme.

For all other academic degrees, an application for admission must be submitted online to the Admissions Office, which will transfer the application to the Faculty of Bioengineering.

Admission via 'Accreditation of Prior Experience' (Valorisation des acquis de l'expérience, VAE) is also possible, depending on your prior experience.

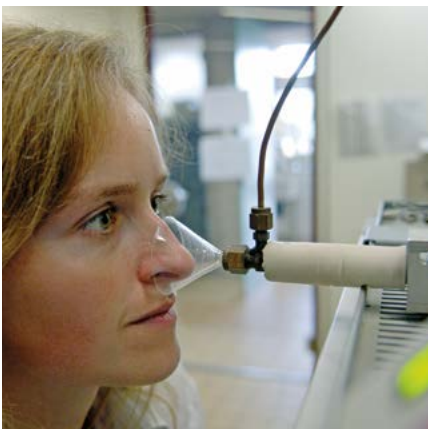
[www.uclouvain.be/en-prog-bras2mc-cond\\_adm](http://www.uclouvain.be/en-prog-bras2mc-cond_adm)

## UCLouvain APPLICATION PROCEDURE

Whether you are a Belgian or international student, the application procedure begins online at [www.uclouvain.be/enrolment](http://www.uclouvain.be/enrolment). IF YOU DO NOT HOLD BELGIAN NATIONALITY, PLEASE RESPECT THE FOLLOWING DEADLINES:

- **30 April:** online application deadline for non-EU nationals who do not reside in Belgium.
- **31 August:** online application deadline for EU nationals who do not reside in Belgium.
- **15 September:** deadline for both online application and receipt of application files for applicants of any nationality who reside in Belgium.

[www.uclouvain.be/enrolment](http://www.uclouvain.be/enrolment)







## Why choose UCLouvain to pursue a master's degree in brewing engineering?

### TO POSITION YOURSELF INTERNATIONALLY

UCLouvain is the world's first university French-language offering a brewing programme. It has been developed in synergy with other international courses. In addition, the programme incorporates a two-week international exchange, with the Université de Bourgogne Franche-Comté, which aims to illustrate the similarities and differences between beer and wine.

### FOR THE EXCELLENCE OF ITS COURSEWORK

The programme is taught by professors with demonstrable university and/or industrial experience at the international level, which guarantees genuine complementarity in their educational approaches.

The master's degree meets market needs in terms of both theory and practical training, by taking into account the latest industry advances.

### FOR ITS OPENNESS TO THE PROFESSIONAL WORLD

Via the possibility to pursue an internship sponsored by an industrialist or/and to visit numerous companies, the master's programme offers you the opportunity to firmly position yourself in your chosen career path.

### AND ALSO...

- to join a prestigious, internationally renowned university;
- to benefit from the Louvain-la-Neuve campus, which offers the ideal environment for an enriching student lifestyle and that facilitates cultural activities, international exchange and engagement.

This master's programme is organised with the support of AB-InBev. **ABInBev**



- **Studying at UCL**  
Centre d'information et d'orientation (CIO)  
[www.uclouvain.be/cio](http://www.uclouvain.be/cio)
- **Register at UCL**  
Service des inscriptions (SIC)  
[www.uclouvain.be/inscription](http://www.uclouvain.be/inscription)
- **Financial assistance**  
Service d'aide aux étudiants (AIDE)  
[www.uclouvain.be/aide](http://www.uclouvain.be/aide)
- **Accommodation**  
Service des logements (LOGE)  
[www.uclouvain.be/logement](http://www.uclouvain.be/logement)

