

BRAS2MC - Teaching profile

Learning outcomes

For candidates who have prior training in fields such as biochemistry, microbiology and other aspects of engineering, this course offers special training for the brewery sector and enables them to gain a high-level, professional qualification.

On successful completion of this programme, each student is able to :

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.

Programme structure

This programme is designed to provide training and preparation for professional practice in the brewery sector. It comprises theoretical and practical training as well as a placement- dissertation in industry.

- Schematic description of the course components

1. Theoretical training

The theoretical training includes the biochemistry, chemistry and the microbiology of procedures used in the malting house and the brewery. It also covers the practical and technological aspects linked to these two industries as well as the organoleptic aspects. It will widen students' knowledge of related subjects such as the chemistry and microbiology of foodstuffs.

2. Placement-dissertation

The aim of this work is to enable students to discover the brewery sector in a practical context. They will familiarize themselves with the activity of a team working on a specific problem related to the production of malt or beer. They will have to use the theoretical knowledge they have acquired in the framework of a piece of scientific research (ability to analyze the context of the problem from all perspectives, understand the methodology adopted and analyze the team's results). In addition, students will become more familiar with the different analytic techniques (e.g. GC-MS and HPLC) applied to brewing/malting.

This work is sponsored by a lecturer from the Master programme and a manufacturer. It forms the subject of a written report and a public oral defence before a group of lecturers and researchers whose work relates to the area of the placement.

BRAS2MC Programme

Detailed programme by subject

CORE COURSES [60.0]

- Mandatory
- ⊗ Optional
- △ Not offered in 2024-2025
- ⊙ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫🌐 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

○ LBRAL2103A	Food Chemistry	Sonia Collin	FR [q1] [30h] [3 Credits] 🌐
○ LBRAS2301	Malt Biochemistry and Technology	Pablo Alvarez Costales Sonia Collin (coord.) Charles Nouwen	FR [q1] [30h+15h] [4 Credits] 🌐
○ LBRAS2302	Chimie du houblon et technologies associées	Sonia Collin	FR [q1] [30h+30h] [5 Credits] 🌐
○ LBRAS2303	Hop Chemistry and Technology for wort boilong and dry-hopping	Pablo Alvarez Costales Stephan Declerck (coord.) Charles Nouwen	FR [q1] [30h+15h] [4 Credits] 🌐
○ LBRAS2304	Qualités organoleptiques et microbiologiques de la bière et du vin	Sonia Collin (coord.) Margaux Simon	FR [q1] [15h+30h] [4 Credits] 🌐
○ LBRAS2305	Questions spéciales de brasserie	Sonia Collin (coord.) Margaux Simon	FR [q1] [45h] [5 Credits] 🌐
○ LBRAS2310	Stage-mémoire		FR [q1+q2] [] [27 Credits] 🌐

○ Courses to chosen for 8 credits amongst the following list:

This list is not exhaustive. Students can propose to follow another course to the academic coordinator.

⊗ LANGL1881	English : reading and listening comprehension of texts in Bioengineering	Charline Coduti (compensates Anne-Julie Toubeau) Ariane Halleux Sandrine Me01 rg BT /F1 6.944 Tf 1 0 01n7000046 Tm [(Char0 0 re f -1 12.45199966 5
-------------	--	--

🔗 LBRAL2104	Food microbiology	Annika Gillis	EN [q2] [30h+22.5h] [5 Credits] 🌐 > French-friendly
🔗 LBRAL2202	Technological quality control	Vincent Baeten	FR [q1] [30h] [3 Credits] 🌐
🔗 LBRPP2211	Biological control and plant health	Claude Bragard Stephan Declerck Anne Legrève (coord.)	EN [q2] [37.5h+0h] [4 Credits] 🌐 > English-friendly

The programme's courses and learning outcomes

For each UCLouvain training programme, a [reference framework of learning outcomes](#) specifies the the skills expected of every graduate on completion of the programme. Course unit descriptions specify targeted learning outcomes, as well as the unit's contribution to reference framework of learning outcomes.

BRAS2MC - Information

Access Requirements

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

Decree of 7 November 2013 defining the landscape of higher education and the academic organization of studies.

The admission requirements must be met prior to enrolment in the University.

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed on this page are to be understood as those issued by an institution of the French, Flemish or German-speaking Community, or by the Royal Military Academy.

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

SUMMARY

- [General access requirements](#)
- [Specific access requirements](#)

General access requirements

Translated from https://www.gallilex.cfwb.be/fr/leg_res_01.php?ncda=39681&referant=l02

Art. 112. of the "Décret définissant le paysage de l'enseignement supérieur et l'organisation académique des études" :

§ 1. In accordance with the general requirements established by the academic authorities, students who have:

1. a master's degree;

Teaching method

Commission(s) of programme

The teaching staff on the programme have a wide variety of backgrounds, both academic and industrial, and at an international level : this enables candidates to acquire the multidisciplinary knowledge necessary to understand these complex subjects. Being able to join a unit at the forefront of brewing research and undertaking a research placement sponsored by a manufacturer are major benefits for candidates who wish to improve their knowledge of the brewery world.

Evaluation

The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".

The methods by which students are assessed include written and/or oral examinations as well as a placement which forms the subject of a written report and a public oral defence before a group of lecturers and researchers whose work relates to the area of the placement.

Mobility and/or Internationalisation outlook

The wide variety of participants on the programme for the Advanced Master in Bio-engineering : Brewery gives it a strong international outlook and offers many useful opportunities for exchanging experiences. There is special emphasis in the syllabus on globalization of the sector e.g. sourcing raw materials or problems in production methods. It is possible to undertake a placement in an international unit: this is clear evidence of the international scope of this Master.

Possible trainings at the end of the programme

This programme may only be taken after gaining a first Master's degree for 2nd cycle studies worth at least 300 credits. It may lead to doctoral training.

Contacts

Curriculum Management

Faculty

Structure entity

SST/AGRO cm BT /F1 8 Tf 1 0 0erihp5.4289 cm BT /F1 8 Tf 1 0 0 -1 0 7.64400005

Useful Contact(s)

- Responsable du programme: [Sonia Collin](#)

