

BRAS2MC - Introduction

Introduction

Your profile

The training is accessible to Belgian or foreign students who hold a diploma at the end of their second cycle of studies (BAC+5) of type: Bioengineer, Agricultural Engineer, Civil Engineer, Chemical Engineer, Industrial Engineer, Management Engineer, Physician, Master in Chemistry, Biology, Biochemistry, Physics, Geology, Veterinary Medicine, Pharmaceutical Sciences, or any other diploma recognized equivalent by the Faculty of Bioengineers.

Any candidate who is not in one of the automatic admission cases described above, but nevertheless holds a BAC+5 degree in the field of Science and Technology, may submit an application which will be processed by an internal commission at the Faculty of Bioengineers.

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

🔗 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

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](#)

