MASTER OF SCIENCE IN FOOD TECHNOLOGY

MAJORS: FOOD SCIENCE AND TECHNOLOGY • POSTHARVEST AND FOOD PRESERVATION ENGINEERING
International Course Programme (ICP): Master's Programme organised by Ghent University, KU Leuven and supported by the Flemish Interuniversity Council (VLIR-UOS)

120 ECTS CREDITS – LANGUAGE: ENGLISH – DEGREE: MASTER OF SCIENCE

COURSE CONTENT

The general objective of IUPFOOD is to provide a multidisciplinary and specialised professional training in areas of food technology, with emphasis on postharvest and food preservation engineering on the one hand and food science and technology on the other hand, to equip future personnel with the necessary technological and managerial knowledge, skills, and attitudes, which are required to successfully contribute to solving problems related to food security. The IUPFOOD programme particularly focuses on developing countries where food security (delivering enough nutritious, high-quality safe food) is a current and future major concern and key challenge.
Today it is recognised that post-production considerations or activities such as postharvest handling, storage, processing, preservation, marketing, distribution and utilizations need to form part of agricultural development programmes because there are many opportunities for food to be lost between harvest and consumption. These postharvest food losses represent a loss of valuable nutrients and money, especially in developing countries. Food should not only be produced, it should also be delivered to the ultimate consumer in an acceptable form if it is to fulfil its nutritional destiny. To bring foods to the consumer in an acceptable form, on the one hand processing technologies are used to convert edible raw materials into foods with decreased inherent stability; on the other hand preservation technologies are required to increase the stability and shelf life of foods.
Based on these considerations, two technological dimensions of prime and crucial importance in food processing and preservation are the key objectives and programme options in IUPFOOD:

- The transformation (processing) of raw materials into products suited for human consumption.
- The role of postharvest and food preservation unit operations in delivering safe and nutritious foods to the end consumer.

These two concerns are directly translated in the focus points of the IUPFOOD training programme.

COURSE STRUCTURE

The programme builds on the integrated expertise in research and education of KU Leuven and UGent in the field of food technology. IUPFOOD offers two years of academic education, leading to a
MSc degree 'Master of Science in Food Technology'. In the first year of the MSc programme, in-depth knowledge in food science, engineering and food engineering is obtained, in order to achieve a common base level between students of different backgrounds. The first year is common to all participants. The first semester is organised at UGent while the second semester is organised at KU Leuven. The second year of the MSc programme provides a broad knowledge in food technology and in-depth understanding in either 'Postharvest or Food Preservation Engineering' (PFPE) or 'Food Science and Technology' (FST), depending on the major chosen.
The second year of the programme therefore consists of specific courses on each major (PFPE and FST), optional courses and dissertation research. The major, the optional courses and the dissertation topic are chosen after completing the first year.
For the optional courses the student may choose among the courses of the other specialisation and the additional optional courses offered. This enables the participants to compile a tailor-made study curriculum according to their individual needs and interests. The specialisation 'Food Science and Technology' (FST) is organised at UGent, while the specialisation 'Postharvest and Food Preservation Engineering' (PFPE) is organised at KU Leuven.

> Master's dissertation

The master's dissertation integrates the acquired knowledge with the personal education/development of the student and is programmed in the third and fourth semester. It represents an important study load (30 credits) because it is considered to be an outstanding example of guided self-tuition, an integration of all aims and objectives and an instrument for evaluation of the end terms of the master's programme. The master's dissertation represents a considerable volume of experimental work, analytical processing, interpretation and communication and is performed within a research group in KU Leuven or UGent.

CAREER PERSPECTIVES

It is the objective of IUPFOOD to offer a programme that takes into account the specific needs and approaches in developing countries. The IUPFOOD programme prepares students for different tasks, particularly in a professional teaching and research environment.
IUPFOOD alumni are mainly active in the following sectors: academic institutes (as teaching and/or research staff), research institutes (as research staff), non-governmental organisations (in different capacities), governmental institutes (e.g. in research programmes, quality surveillance programmes or national nutritional programmes) and private industry (in particular quality control related jobs). A number of IUPFOOD alumni complete further PhD studies in an early phase of their career.

FACULTY OF BIOSCIENCE ENGINEERING

2017–18

BW11

MASTER OF SCIENCE IN FOOD TECHNOLOGY

120 ECTS CREDITS – LANGUAGE: ENGLISH – DEGREE: MASTER OF SCIENCE

TOELATINGSVOORWAARDEN VOOR HOUDERS VAN EEN VLAAMS DIPLOMA

Rechtstreeks:
- Ba bio-ingenieurswetenschappen

Via voorbereidingsprogramma:
- Ba chemie
- Ba biochemie en biotechnologie
- Ba biologie
- Ba farmaceutische wetenschappen
- Ba diergeneeskunde
- Ba biomedische wetenschappen
- Ba ingenieurswetenschappen: chemische technologie en materiaalkunde
- Ba industriële wetenschappen:
  - chemie
  - milieukunde
- Ba Industrial Sciences: Chemical Engineering
- Ba biowetenschappen

TAAL
Je voldoet aan de taalvoorwaarden op basis van je Vlaams diploma.

ADMISSION REQUIREMENTS FOR INTERNATIONAL DEGREE STUDENTS

Each application will be evaluated by a board of admission of the specific programme and has to be approved by the Faculty Council and by the Rector's office.

Entry conditions:
Applicants must have a Bachelor's degree of minimum 3 years with good overall scores (at least a second class upper or equivalent, preferably higher) from a university or recognized equivalent.

Specific academic requirements:
International applicants must have obtained an academic Bachelor of Science degree (in developing countries typically a 4-year programme) in a discipline related to the content of the programme from a recognized University, College or Institute. Candidates are expected to have basic science training (demonstrable in the transcripts) in at least three out of four of the following fields: (i) mathematics, statistics and physics, (ii) chemistry and biochemistry, (iii) biology and microbiology and (iv) engineering, with an end result of at least second class upper or equivalent. Each application will be evaluated by the Educational Committee for admission.

LANGUAGE
The applicant must be proficient in English.
More details on the requirements at www.itc.ugent.be.

Last update: January 2017

PRAKTISCHE INFORMATIE

Studieprogramma:
https://studiegids.ugent.be
> faculteiten > opleidingstypes > ga naar de opleiding van je keuze

Alternatieve trajecten - doorstroomprogramma's
Ben je in het bezit van een masterdiploma waarvan het bachelorvoortraject bij de toelatingsvoorwaarden vermeld staat onder de categorie "via voorbereidingsprogramma", dan kan je eventueel – na toelating op basis van dossieronderzoek – onmiddellijk starten in de betreffende masteropleiding (horizontale instroom). Je volgt dan een geïndividualiseerd traject van minstens 120 sp. De trajectbegeleider is je contactpersoon.
Meer info: www.ugent.be/bw/start-een-master

Infomomenten
Masterbeurs
www.ugent.be/masterbeurs

PRACTICAL INFORMATION

Study programme
www.ugent.be/coursecatalogue
> by Faculty > Programme types > select your programme

Application deadline
Consult www.itc.ugent.be for programme specific application procedures and deadlines.

Enrolling institution
Alternating: Ghent University and KU Leuven (2017-18: Ghent Uni.)

Tuition fee
Standard tuition fees apply. www.ugent.be/tuitionfee
This programme is supported by (VLIR-UOS and other) scholarships.
www.ugent.be/bw/en/international-training-centre/scholarship
More information at www.itc.ugent.be.

Trajectbegeleiding/Learning path counsellor
Mevr. Isabelle Vantornhout
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Contact
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