

At Mons - 180 credits - 3 years - Day schedule - In French

### **INGM1BA - Introduction**

# Introduction

#### Introduction

The Bachelor in Business Engineering programme combines management studies with quantitative methods and business informatics. It also provides students with a broad knowledge base in economics, human science, law and two foreign languages.

This Bachelor's degree aims to facilitate the acquisition of transferable skills specific to the university, such as rigorous, methodical and critical analysis, the ability to work independently and as part of a team, and communication and creativity skills.

This Bachelor's programme fully embraces a long-term vision of our society, in terms of both sustainable development and digital transformation

By the end of the first cycle, you will have acquired:

- a multidisciplinary background, with a cross-disciplinary approach to management functions;
- skills geared towards quantitative methods and business informatics but also data analysis and technologies, with a vision of a sustainable society:
- a scientific approach and a socially responsible mindset.

### Your profile

When you embark on a business engineering course, it is most important that you have had a good general education. Having opted for a strong mathematics bias in the last two years of secondary school could be an advantage. An interest in project management, IT systems design, data management, logistics or sustainable development are excellent reasons to take up the challenge.

#### Your future job

Business Engineering graduates make a career for themselves in many sectors, including industry, banking and insurance, auditing and large-scale retail, in private companies, public organisations, SMEs, multinationals and consultancy firms.

They hold positions of responsibility, such as project manager, data analyst/scientist, IT consultant, sales manager, purchasing manager, logistics manager, management controller or financial analyst.

#### Your programme

The Bachelor's programme offers you:

- gradual acquisition of the knowledge you need to take up a "decision-maker" role in a company;
- courses focused on quantitative methods and business informatics, and also on data analysis and technologies;
- the ability to work independently and as part of a team;
- communication and creativity skills;
- language training (English and Dutch/Spanish) throughout the degree course as well as support (in English or Dutch) linked to the internship.

From the second year onwards, students can undertake a student mobility programme with the Haute Ecole Louvain en Hainaut (HELHa) and, during the second and third year, can opt for a technology course in electromechanics or biochemistry. Access to this mobility programme, called i², is by application.

#### Your parcours

This Bachelor's degree gives access to various Master's programmes, including the Master in Business Engineering.

Students who have taken the electromechanics or biochemistry technology option will be able to pursue their studies and obtain 25 extra credits at HELHa during their Master's degree in Business Engineering.

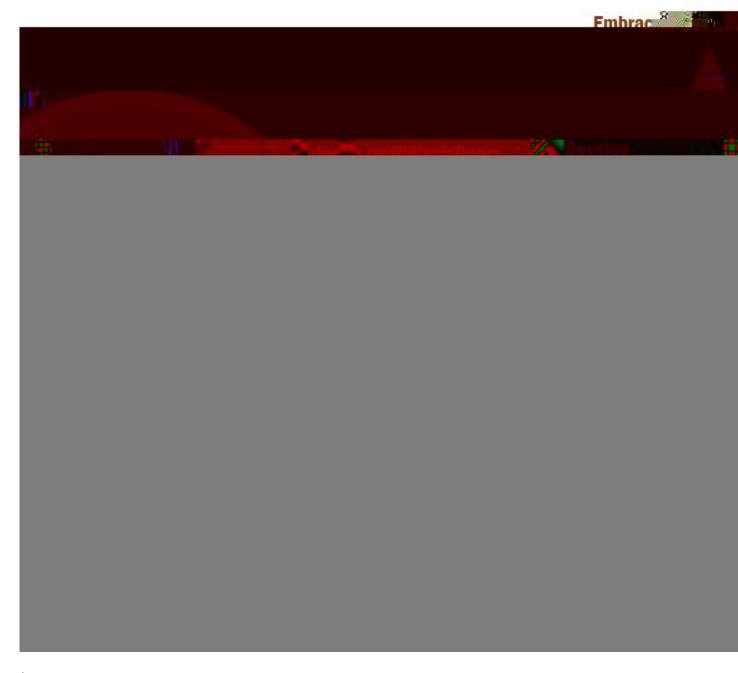
Once they have completed this specific study path, they will have access to a tailored Master's degree in Industrial Engineering, which they can obtain in one year after their Master in Business Engineering. It is there991 ca cs mextra09dl Tm [Businers to 0s8 Tothe knowledge you need2

# **INGM1BA - Teaching profile**

# **Learning outcomes**

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

The profile of Bachelor in Business Engineering graduates is set out in the **Louvain School of Management (LSM) competency framework**. This framework centres around the following three skills: acquiring a knowledge base, applying a scientific approach and adopting a socially responsible mindset.



1.

Adopt a socially responsible mindset

Think and take decisions responsibly, taking account of ethical and civic values.

- 1.1 Demonstrate the ability to reason independently and adopt a considered and critical approach to knowledge (academic and common sense).
- 1.2 Consider ethical and humanistic values, integrity, the laws and conventions, civic solidarity and sustainable development in all interactions with the community.
- 1.3 Analyse a situation responsibly, taking into account the economic, social and environmental impact on the various stakeholders.

2.

#### Acquire a knowledge base

Actively acquire a knowledge base in different subjects (management, human science, economics, law, quantitative methods) that are essential for analysing issues in the various fields of management.

- 2.1 Understand the basic concepts and theories in each of the fields of management and economics.
- 2.2 Acquire a knowledge base in human science and law.
- 2.3 Acquire a knowledge base in quantitative, IT and digital methods.
- 2.4 Apply knowledge gained from different subjects to solve a simple but concrete management problem.

3

#### Apply a scientific approach

Use a scientific approach to analyse concrete management problems and situations.

- 3.1 Understand and selectively use scientific texts and works in French and English.
- 3.2 Apply clear and structured analytical reasoning, conceptual frameworks and science-based models to describe and analyse a simple but concrete problem and offer a solution.
- 3.3 With the help of dedicated software tools, collate, select and analyse relevant information using basic statistical and data analysis methods.
- 3.4 Analyse and interpret results or proposals, and provide a well-argued critique, for a simple but concrete management problem.
  3.5

Demonstrate rigour and discernment (validity and relevance) in the collation of information sources, and precision in their referencing.

4.

#### Embrace change

Adopt a positive approach to change in assignments and projects carried out individually or in groups.

- 4.1 Identify opportunities for innovation and be creative in putting forward useful and original ideas.
- 4.2 Identify situations of resistance to change and overcome them.
- 4.3 Be part of a collective change dynamic.

4.4

Identify opportunities linked to the digital transformation of companies, sustainable development and organisational changes in the workplace and suggest solutions to management problems based on ESG criteria.

5

#### Adopt a multidisciplinary and professional mindset

Compare different motives and rationales for action to understand a concrete problem a company is facing.

- 5.1 Understand the internal workings of a company of limited size and complexity.
- 5.2 Understand these workings, place them in their socio-economic context and identify the interdisciplinary issues.
- 5.3 Combine different areas of knowledge (apply concepts from different fields and compare different rationales for action) to understand a concrete problem of a company or organisation of limited size and complexity.
- 5.4 Use software from different fields to solve a management problem.

6.

#### Become a team player

Become a team member and player.

- 6.1 Know and understand the principles of collaborative learning.
- 6.2 Recognize and take into account the different points of view of team members.
- 6.3 Manage group relations in a joint project.

7.

### Manage a project

Organise and complete a project, taking into account the pre-defined objectives and the constraints of the project environment.

- 7.1 Organise the process: working as a team, and with consideration for the pre-defined objectives, plan and develop all the stages of a project and commit to it collectively, having allocated the tasks.
- 7.2 Share information and expertise to help progress the project and contribute to the team's success with a view to effectively achieving the objective set.

8.

### Communicate

Communicate and interact effectively in French and two foreign languages.

- \* For English (all language skills), Level B2 of the Common European Framework of Reference (CEFR). For Dutch 3, Level B1+/B2 of the CEFR. For Spanish 3, Level A2+/B1 of the CEFR.
- 8.3 Engage effectively and respectfully with peers and teachers, demonstrating listening skills, empathy and assertiveness.
- 8.4 Using computer tools, create graphs and tables that meet scientific standards.

Ω 5

Master basic software for effective communication.

9.

#### Develop

Demonstrate self-awareness and autonomy, the ability to adapt quickly to new situations and progress in your learning journey.

- 9.1 Self-management: define your priorities, plan ahead and organise all aspects of your work over time, be rigorous and structured in your approach
- 9.2 Self-awareness and self-control: be aware of, and control, your own feelings and emotions, manage stress, stand back and cast a critical eye over your own output and actions to identify your strengths and weaknesses.
- 9.3 Self-motivation: design your own training plan and define its direction in line with your own values and aspirations.
- 9.4 Adapt to, and take advantage of, a variety of learning situations.
- 9.5 Independently assimilate new knowledge and skills to enable you to solve concrete, well-defined management problems.

# **Programme structure**

The first year is given over to a course on ethics and corporate social responsibility, a core element of the LSM teaching plan, and courses on management (accounting and financial analytics, marketing, a management seminar), economics, the theoretical foundations of management, and management tools and methods (management mathematics, statistics and probability, rc1ineal

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Year

## o Social Science

0	MSHUM1118	Study Skills Seminar	Jean-Luc Depotte	[q1+q2] [15h+30h] [5 Credits] (#)	X	
0	MSHUM1122	Ethics and CSR	Vincent Truyens	[q2] [30h+10h] [5 Credits] @	X	
0	MSHUM1301	Questions de sciences religieuses	Stanislas Deprez	[q1] [15h] [2 Credits] @		X

## Science and Technology

Three tracks are available: the computer management track, the technological track in biochemistry and the technological track in electromechanics. These last 2 tracks, organized in partnership with the HELHa, are accessible upon application and confirmed after achievement of the 1st annual unit in one academic year (application form: https://intranet.uclouvain.be/fr/myucl/ sites/mons/parcours-i%26sup2%2m q 6 0.be/fr/myucl/ sites/mons/parcours-i

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# 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.

# Detailed programme per annual block

## **INGM1BA - 1ST ANNUAL UNIT**

- O Mandatory
- ☼ Optional
- △ Not offered in 2024-2025
- O Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- $\Delta \oplus$  Not offered in 2024-2025 or the following year
- Activity with requisites
- Open to incoming exchange students
- Mot 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...)

## o Content:

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O MDROI1105	Sources and Principles of Law	Ignacio De La Serna	[45h +0h] [5
			Credits]

### o Economics

● MECON1104	Economics	Nathalie Gilson	ER [q1] [45h
			+20h] [5
			Credits]

# Management

• MGEST1103	Accounting and Financial Diagnosis	Anne-Catherine Provost	[q1] [45h +20h] [5 Credits] #
<b>O</b> MGEST1107	Management Seminar	Isabelle Platten Ingrid Poncin	[q2] [30h +30h] [5 Credits] #

# o Social Science

<b>○</b> MSHUM1118	Study Skills Seminar	Jean-Luc Depotte	[q1+q2] [15h +30h] [5 Credits] (#)
• MSHUM1122	Ethics and CSR	Vincent Truyens	[q2] [30h +10h] [5 Credits] #

# Languages

Guy Monfort (coord.) Daniel Schoemans Sabine Vandersmissen (compensates Guy Monfort) Marine Volpe (coord.)
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# O Second Language

The student chooses and keeps the same second language for the entire bachelor cycle.

#### Butch Dutch Dutch

In the first annual block, the default learning unit is MNEER1121 Dutch 1.

At the end of a placement test, the teacher will decide whether or not to register for the learning unit MNEER1119 Dutch 1 LSM beginner.

• MNEER1121	Erika Copriau Bruno Michiels (coord.) Daniel Schoemans	[q1+q2] [30h +30h] [5
S MNEER1119		Credits

## **INGM1BA - 2ND ANNUAL UNIT**

- Mandatory
- ☼ Optional
- △ Not offered in 2024-2025
- ⊘ Not offered in 2024-2025 but offered the following year
- $\ensuremath{\oplus}$  Offered in 2024-2025 but not the following year
- $\Delta \, \oplus \, \text{Not offered in 2024-2025}$  or the following year
- Activity with requisites
- Open to incoming exchange students
- M 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...)

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# INGM1BA - 3RD ANNUAL UNIT

• Mandatory

O MINFO1301	Data Management	François Fouss	[q [30h
			+15h] Credits
• MINFO1302	Coding Project	Daniele Catanzaro	[q [30h +15h] Credits
O MQANT1328	Operational Research	Jean-Sébastien Tancrez	[q [30h +15h] Credits
MSHUM1303	Organization and Social Change Seminar	Julie Solbreux	[15h +0h] Credits
Parcours tech	nnologique biochimie		
O MHELH1301	De la molécule au vivant		[64h] Credits
MHELH1302	Fondamentaux de chimie analytique		[q1+q [45h] Credits
MHELH1303	Approfondissement des connaissances de la matière		[102h] Credits
MINFO1201	Programming and Algorithms	François Fouss	[45h +20h] Credits
Parcours tech	nnologique électromécanique		
O MHELH1311	Mécatronique		[54h] Credits
MHELH1312	Fluide Avant 2024-2025 : Mécanique thermo appliquée		[80h] Credits
O MHELH1313	Automatique		[75h] Credits
MINFO1201	Programming and Algorithms	François Fouss	[45h +20h] Credits
_anguages			
MANGL1339	English 3	Jessica Degroote (coord.) Quentin Zèques	[q1+c [0h +45h] Credits

In the first annual block, the default learning unit is MNEER1121 Dutch 1.

At the end of a placement test, the teacher will decide whether or not to register for the learning unit MNEER1119 Dutch 1 LSM beginner.

O MNEER1341	Dutch 3 💆	Erika Copriau (coord.) Bruno Michiels	[q1+q2] [0h +45h] [4 Credits]
Spanish			
O MESPA1340	Spanish 3 📕	Juan Francisco Hernandez Rodriguez (coord.) Fernando Juan San Basilio Pardo	

- For any secondary school diploma **from a European Union country**, the admission request must contain the equivalence of your diploma or, at the very least, proof of the filing of the equivalence request with the Wallonia-Brussels Federation (French Community of Belgium). For any information relating to obtaining an equivalence, please refer to the following site.
- For any secondary school diploma **from a country outside the European Union**, the admission application must contain the equivalence of your diploma issued by the Wallonia-Brussels Federation (French Community of Belgium). If you have a restrictive equivalence for the programme of your choice, in addition of it, you **must** have either the DAES or a certificate of successful completion of the examination giving access to 1<sup>st</sup> cycle studies when you submit your application

# Access based on validation of professional experience

Admission to undergraduate studies on the basis of accreditation of knowledge and skills obtained through professional or personal experience (Accreditation of Prior Experience)

Subject to the general requirements laid down by the authorities of the higher education institution, with the aim of admission to the undergraduate programme, the examination boards accredit the knowledge and skills that students have obtained through their professional or personal experience.

This experience must correspond to at least five years of documented activity, with years spent in higher education being partially taken into account: 60 credits are deemed equivalent to one year of experience, with a maximum of two years being counted. At the end of an assessment procedure organized by the authorities of the higher education institution, the Examination Board will decide whether a student has sufficient skills and knowledge to successfully pursue undergraduate studies.

After this assessment, the Examination Board will determine the additional courses and possible exemptions constituting the supplementary requirements for the student's admission.

# Special requirements to access some programmes

- Admission to undergraduate studies in engineering: civil engineering and architect
- Pass certificate for the special entrance examination for undergraduate studies in engineering: civil engineering and architect.

  Admission to these courses is always subject to students passing the special entrance examination. Contact the faculty office for the programme content and the examination arrangements.
- Admission to undergraduate studies in veterinary medicine
- Admission to undergraduate studies in veterinary medicine is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).
- Admission to undergraduate studies in physiotherapy and rehabilitation
- Admission to undergraduate studies in physiotherapy and rehabilitation is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).
- · Admission to undergraduate studies in psychology and education: speech and language therapy
- Admission to undergraduate studies in psychology and education: speech and language therapy is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).
- Admission to undergraduate studies in medicine and dental science
- Admission to undergraduate studies in medecine and dental science is governed by the Decree of 16 June 2006 regulating the number of students in certain higher education undergraduate courses (non-residents).

Note: students wishing to enrol for a **Bachelor's degree in Medicine** or a **Bachelor's degree in dental science** must first sit an aptitude test (fr).

Access to Bachelor of Science in Business Engineering

The Bachelor of Science in Business Engineering is a joint program organised by KU Leuven and UCLouvain Saint-Louis Bruxelles. In order to register, all candidate must first submit an application via the KU Leuven admission platform. The conditions of access to this programme are specific.

# **Teaching method**

Moving from secondary school to university involves change, with new subjects, new demands, a new environment and meeting new people. To ease this transition to UCLouvain FUCaM Mons, the educational support team offers a range of measures for students before the start of the academic year, during the year and during the university holidays; individual support is also available.

Before the start of the academic year, students are invited to take part in **preparatory courses** to get to know the university, the teaching staff, the other students and all members of the university community. These courses are also a good way to practise note-taking, get to grips with the working method and update your subject knowledge (maths, Dutch, etc.).

During the year there are other collective activities available, such as **tutorials**, **supervised exam revision** and methodology seminars (e.g. time management) on offer. The educational advisers are also available to **meet with students individually** and assess their situation in order to offer them **personalised assistance** (e.g. methodological supervision, a listening ear and support).

In the summer, the educational support team continues to **keep an eye on students** and offers tutorials on subjects that students had difficulty with during the academic year... another little helping hand on your path to success!

For more information about all the support measures available at UCLouvain FUCaM Mons, visit our web page: https://uclouvain.be/fr/sites/mons/accompagnement-pedagogique.html.

## **Evaluation**

The evaluation methods comply with the <u>regulations</u> 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".

Written and oral exams are designed to check the extent to which students have mastered and understood concepts, theories, basic information and skills in the various subjects.

Some teaching activities (exercises) are subject to continuous assessment.

To obtain a student's average, the grades awarded for each course unit are weighted by the number of credits allocated to each unit.

# Mobility and/or Internationalisation outlook

Each year, a growing number of young Europeans undertake an exchange at a foreign university for several reasons, including cultural enrichment, the opportunity to become proficient in other languages and internationalisation of the job market. UCLouvain FUCaM Mons has always appreciated the usefulness of international exchanges in university education. In the third year of the Bachelor's programme, students have the opportunity to spend one term at one of our partner universities outside Belgium. To further facilitate the mobility of all students, regardless of their socio-economic situation, financial aid is available to cover part of the cost of their trip abroad.

#### Europe or further afield

Students enrolled on a daytime course at UCLouvain FUCaM Mons have the opportunity to take part in exchange programmes at the end of their Bachelor's (and Master's) cycle. They can spend time at one of several renowned universities, including the Università Commerciale Luigi Bocconi in Milan (Italy), Maastricht University (Netherlands), the University of Glasgow (UK), the CEU San Pablo (Spain), the Norwegian School of Economics (Norway) and Laval University (Quebec).

### **Belgium**

Various study options (e.g. at Antwerp University or Ghent University) are available through the Erasmus Belgica programme.

# Possible trainings at the end of the programme

## Position in the degree programme

The Bachelor in Business Engineering offers direct, unconditional access with no additional studies, to the Master's degree of the same name available at:

- UCLouvain: Master [120]: Business Engineering (Mons campus) and Master [120]: Business Engineering (Louvain-la-Neuve campus)
- any other university in the Wallonia-Brussels Federation.

Students who have taken the electromechanics or biochemistry technology option will be able to pursue their studies and obtain 25 extra credits at HELHa during their Master's degree in Business Engineering. Once they have completed this specific study path during their business engineering studies, they will have access to a tailored Master's degree in Industrial Engineering, which they can obtain in one year after their Master in Business Engineering. It is therefore possible to obtain two degrees (Master in Business Engineering and Master in Industrial Engineering) after six years of study.

#### Other courses available at the end of the programme

Bachelor in Business Engineering graduates have direct access to the following Master's programmes at the same faculty:

INGM1BA: Bachelor : Business Engineering

- Master [120] in Management and Master [60] in Management (Mons campus)
- Master [120] in Management and Master [60] in Management (Louvain-la-Neuve campus)

Bachelor in Business Engineering graduates also have access to the Master's courses run by the Faculty of Economic, Social and Political Sciences and other faculties, provided they meet the programme requirements:

- Master [120] in Economics: General and Master [60] in Economics: General
- Master [120] in Economics: Econometrics

There are a number of UCLouvain Master's programmes (generally stand-alone) that are widely accessible to UCLouvain FUCaM Mons Bachelor's graduates, including:

- Master [120] in Population and Development Studies (direct access for all Bachelor's graduates),
- Master [120] in European Studies (open to all Bachelor's graduates with a minor in European Studies),
- Master [120] in Ethics (open to all Bachelor's graduates, subject to additional course requirements).

# **Contacts**

# **Curriculum Management**

Faculty

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