

# Bachelor: Business Engineering

At Mons - 180 credits - 3 years - Day schedule - In French Dissertation/Graduation Project : NO - Internship : YES Activities in English: YES - Activities in other languages : NO

Activities on other sites: NO

Main study domain : Sciences économiques et de gestion Organized by: Louvain School of Management (LSM)

Programme acronym: INGM1BA - Francophone Certification Framework: 6

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#### **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.

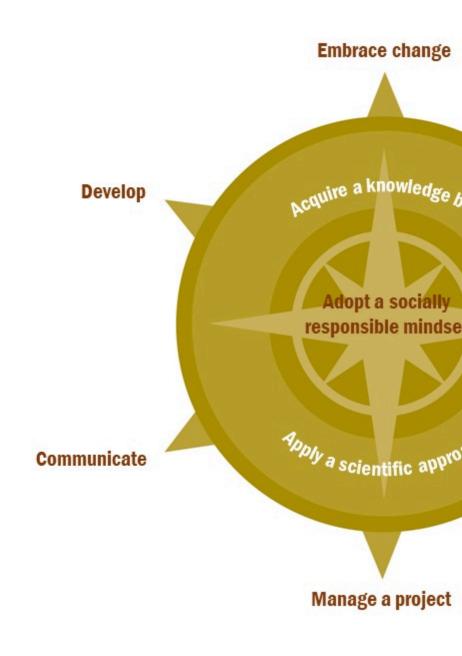
Once they have completed this specific study path, they will have access to a tailored Master's degree in Industrial Engineering, which they can obtain in one year after their Master in Business Engineering. It is therefore possible to obtain two degrees (Master in Business Engineering and Master in Industrial Engineering) after six years of study (www.icarre.eu).

# **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.

8.1 With the target audience in mind, communicate information, ideas, solutions and conclusions with written and oral fluency and in a clear, structured and well-argued manner.

For two foreign languages\* (English and Dutch or Spanish): demonstrate written and spoken fluency and the ability to communicate clearly, coherently, fluently and in a well-argued fashion on general and management-related topics.

- \* 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.

8.5

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, business informatics).

The programme then combines management topics (strategy, finance, production, HR management, management control) with quantitative methods (statistical inference, econometrics, operational research) and business informatics (algorithmics, data management, computer programming), and technology.

You will also continue your studies of economics (microeconomics and macroeconomics) and the corporate legal environment.

In the third year, you have an entrepreneurial project and a professional development project, which will introduce you to the business world. You will also have the opportunity to project yourself into the company of the future through seminars that tackle issues such as social change and the digital transformation of our society and its organisations.

Two language courses, one of which is English, are taught in each year.

The programme of the first year (60 credits) is identical to the first year of the Bachelor in Management programme.

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 both these options is by application and the courses are taught at HELHa.

For students who do not take up one of these options, their whole programme will take place at UCLouvain FUCaM Mons.

### **INGM1BA Programme**

### **Detailed programme by subject**

0	Mandatory
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☼ Optional

△ Not offered in 2023-2024

 $\ensuremath{{\ensuremath{\emptyset}}}$  Not offered in 2023-2024 but offered the following year

⊕ Offered in 2023-2024 but not the following year

 $\Delta \oplus$  Not offered in 2023-2024 or the following year

Activity with requisites

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...)

Year

1 2 3

### o Content:

# o Law

O MDROI1105	Sources and Principles of Law	Ignacio De La Serna	[q1] [45h+0h] [5 Credits]	x	
O MDROI1210	Business Law 📕	Werner Derycke	[q1] [30h+0h] [5 Credits]		X

#### Economics

O MECON110	Economics	Nathalie Gilson	FR [q1] [45h+20h] [5 Credits]	X		
O MECON121	1 Macroeconomics	Nathalie Gilson	[q2] [30h+10h] [5 Credits]	х	(	l
O MECON121	2 Microeconomics	Patrick Scarmure	[q1] [45h+20h] [5 Credits]	Х	(	l

### Management

O MGEST1103	Accounting and Financial Diagnosis	Anne-Catherine Provost	FR [q1] [45h+20h] [5 Credits]	Х	
O MGEST1107	Management Seminar	Isabelle Platten Ingrid Poncin	[q2] [30h+30h] [5 Credits]	X	
O MGEST1108	Marketing	Nadia Sinigaglia	[q2] [45h+20h] [5 Credits]	X	
O MGEST1201	Corporate Strategy	Alain Vas	[q1] [30h+10h] [5 Credits]	3	X
O MGEST1219	Finance	Catherine D'Hondt Isabelle Platten	[q2] [45h+20h] [5 Credits]		X
O MGEST1222	Production Management	Daniel De wolf (compensates Nadine Meskens)	FR [q2] [30h+10h] [5 Credits]	3	x
• MGEST1323	Human Management	Stéphanie Coster (compensates Laurent Taskin) Philippe Depaepe (compensates Laurent Taskin)	[1] [30h+10h] [5 Credits] ∰		x
O MGEST1324	Entrepreneurial Project	Vincent Meurisse (compensates Amélie Jacquemin)	FIX [q1+q2] [30h+30h] [4 Credits]		x
O MGEST1325	Accounting and Management Control	Annick Telle	[q1] [45h+20h] [5 Credits]		X
<b>O</b> MGEST1329	Professional Development Project	Isabelle Platten	□ [q1+q2] [7.5h+75h] [2 Credits] ⊕		X

### o Quantitative Methods

O MQANT1109	Business Informatics	Bertrand Lebichot (compensates François Fouss)	[q2] [30h+15h] [5 Credits]	x	
• MQANT1110	Mathematics for Management I	Corentin Vande Kerckhove Enrico Vitale	[q1] [45h+20h] [5 Credits]	x	
• MQANT1113	Statistics and Probability	Frédéric Vrins	[q2] [45h+20h] [5 Credits]	X	
O MQANT1221	Statistical Inference	Rudy De Winne	[q2] [45h+20h] [5 Credits]	х	

				1	Y 2
MQANT1227	Mathematics for Management 2	Daniel De wolf (compensates Nadine Meskens)	[q1] [45h+20h] [5 Credits]		×
MQANT1324	Econometrics	Mikael Petitjean	[q2] [45h+20h] [5 Credits]		
MQANT1329	Optimization	Daniele Catanzaro	[q1] [30h+15h] [4 Credits]		
Social Scie	nce				
MSHUM1118	Study Skills Seminar	Jean-Luc Depotte	FR [q1+q2] [15h+30h] [5 Credits] ((a)	Х	
MSHUM1122	Ethics and CSR	Vincent Truyens	[q2] [30h+10h] [5 Credits]	x	
MSHUM1301	Questions de sciences religieuses	Stanislas Deprez	[q1] [15h] [2 Credits]  [10]		
	Programming and Algorithms	Marco Saerens	[q2] [45h+20h] [5 Credits]		)
Parcours info MINFO1201	prmatique de gestion	Marco Saerens	[q2] [45h+20h] [5 Credits]		<b>&gt;</b>
		(compensates François Fouss)			
		i iançois i ouss)			
MTECH1201	Industrial Technologies	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings	ि [q1] [30h+10h] [5 Credits] <sup>((()</sup>		)
	Industrial Technologies  Industrial Organization	Laurence Baclin Christine Dhaeyer David Michel	FR [q2] [30h+10h] [5 Credits]		,
<b>)</b> MECON1313		Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings	· 		,
MECON1313  MGEST1302	Industrial Organization	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings Patrick Scarmure	FR [q2] [30h+10h] [5 Credits]		)
MECON1313  MGEST1302  MINFO1301	Industrial Organization  Séminaire: Organisations et transformation digitale	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings Patrick Scarmure Christian De Neef Sylvain Courtain (compensates	[q2] [30h+10h] [5 Credits]		,
MECON1313  MGEST1302  MINFO1301  MINFO1302	Industrial Organization Séminaire : Organisations et transformation digitale  Data Management	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings Patrick Scarmure Christian De Neef Sylvain Courtain (compensates François Fouss)	[q2] [30h+10h] [5 Credits]   [q2] [15h+0h] [2 Credits]   [q2] [30h+15h] [5 Credits]		>
MECON1313  MGEST1302  MINFO1301  MINFO1302  MINFO1328	Industrial Organization  Séminaire: Organisations et transformation digitale  Data Management  Coding Project	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens)	[q2] [30h+10h] [5 Credits]		>
MECON1313  MGEST1302  MINFO1301  MINFO1302  MQANT1328  MSHUM1303	Industrial Organization Séminaire : Organisations et transformation digitale  Data Management  Coding Project Operational Research	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	[q2] [30h+10h] [5 Credits]		)
D MECON1313 D MGEST1302 D MINFO1301 D MINFO1302 D MQANT1328 D MSHUM1303 Parcours teci	Industrial Organization Séminaire: Organisations et transformation digitale  Data Management  Coding Project Operational Research Operational Research Organization and Social Change Seminar	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	[q2] [30h+10h] [5 Credits]		)
D MECON1313 D MGEST1302 D MINFO1301 D MINFO1302 D MQANT1328 D MSHUM1303 Parcours tecl D MHELH1200	Industrial Organization Séminaire: Organisations et transformation digitale  Data Management  Coding Project Coperational Research Coperational Research Coperational Research Coperation and Social Change Seminar  Continue Discription Coperation and Social Change Seminar	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	FR [q2] [30h+10h] [5 Credits]		)
MECON1313 MGEST1302 MINFO1301 MINFO1302 MQANT1328 MGANT1328 MSHUM1303 Parcours tecl MHELH1200 MHELH1201	Industrial Organization Séminaire: Organisations et transformation digitale  Data Management  Coding Project Operational Research Organization and Social Change Seminar  Coding Project Organization and Social Change Seminar  Coding Project Operational Research Organization and Social Change Seminar  Coding Project Operational Research Organization and Social Change Seminar  Coding Project Operational Research Operation Research Operational Research Operation Research Operation Research O	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	[q2] [30h+10h] [5 Credits]		× ×
	Industrial Organization  Séminaire: Organisations et transformation digitale  Data Management  Coding Project  Operational Research  Organization and Social Change Seminar  hnologique biochimie  Sciences du bioingénieur  Chimie et sciences de l'industrie	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	[q2] [30h+10h] [5 Credits]		×
MECON1313 MGEST1302 MINFO1301 MINFO1302 MQANT1328 MGANT1328 MGANT1328 MHELH1200 MHELH1201 MHELH1301	Industrial Organization Séminaire: Organisations et transformation digitale  Data Management  Coding Project Coperational Research Coperation and Social Change Seminar Coperation Coperati	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings  Patrick Scarmure  Christian De Neef  Sylvain Courtain (compensates François Fouss)  Daniele Catanzaro  Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	[q2] [30h+10h] [5 Credits]		>

# ☼ Parcours technologique électromécanique

O MHELH1211	Sciences de l'ingénieur		[q2] [72h] [5 Credits]	X	
O MHELH1212	Fluide et énergie		FR [q2] [64h] [5 Credits] @	X	
O MHELH1311	Mécatronique		8 [q1] [54h] [5 Credits]		K
O MHELH1312	Mécanique thermo appliquée		[q1+q2] [80h] [8 Credits] ⊕	2	(
O MHELH1313	Automatique		[q2] [75h] [7 Credits]	7	K
O MINFO1201	Programming and Algorithms	Marco Saerens (compensates François Fouss)	[q2] [45h+20h] [5 Credits]		K

(compensates François Fouss)

Year

### o Languages

O MANGL1120	English 1	Erika Copriau Bruno Michiels Guy Monfort (coord.) Daniel Schoemans	[91+q2] [30h+30h] [5 Credits]	х
• MANGL1235	English 2	Jessica Degroote Céline Gouverneur Daniel Schoemans Quentin Zèques (coord.)	[q1+q2] [0h+60h] [5 Credits]	x
• MANGL1339	English 3	Jessica Degroote (coord.) Quentin Zèques	[q1+q2] [0h+45h] [4 Credits]	X

### Second Language

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

#### 23 Dutch

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

Spanish 3

MESPA1340

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	Dutch 1	Erika Copriau Bruno Michiels (coord.) Daniel Schoemans	M [q1+q2] [30h+30h] [5 Credits] 🖲	X	
<b>≅</b> MNEER1119	Dutch 1 for LSM Beginners	Daniel Schoemans (coord.)	[q1+q2] [60h] [5 Credits]	X	
O MNEER1236	Dutch 2	Erika Copriau (coord.) Bruno Michiels	N1 [q1+q2] [0h+60h] [5 Credits]		х
O MNEER1341	Dutch 3	Erika Copriau (coord.) Bruno Michiels	NL [q1+q2] [0h+45h] [4 Credits]		Х
3 Spanish					
MESPA1122	Spanish 1	Juan Francisco Hernandez Rodriguez (coord.)	[q1+q2] [30h+30h] [5 Credits]	x	
O MESPA1237	Spanish 2 📙	Juan Francisco Hernandez	[q1+q2] [0h+45h] [5 Credits]		Х

Rodriguez (coord.)

Juan Francisco

Hernandez Rodriguez (coord.) [q1+q2] [0h+45h] [4 Credits]

## Course prerequisites

The **table** below lists the activities (course units, or CUs) for which there are one or more prerequisites within the programme, i.e. the programme CU for which the learning outcomes must be certified and the corresponding credits awarded by the jury before registering for that CU.

These activities are also identified in the detailed programme: their title is followed by a yellow square.

#### Prerequisites and student's annual programme

As the prerequisite is for CU registration puposes only, there are no prerequisites within a programme year. Prerequisites are defined between CUs of different years and therefore influence the order in which the student will be able to register for the programme's CUs.

In addition, when the jury validates a student's individual programme at the beginning of the year, it ensures its coherence, meaning that it may:

- require the student to combine registration in two separate CUs which it considers necessary from a pedagogical point of view.
- transform a prerequisite into a corequisite if the student is in the final year of a degree course.

For more information, please consult the <u>Academic Regulations and Procedures</u> (https://uclouvain.be/fr/decouvrir/rgee.html).

# Prerequisit MANGL1235	ies list "Anglais 2" has prerequisite(s) MANGL1120
MANGL1339	• MANGL1120 - English 1 "Anglais 3" has prerequisite(s) MANGL1235
MDROI1210	• MANGL1235 - English 2 "Droit de l'entreprise" has prerequisite(s) MDROI1105
MECON1211	• MDROI1105 - Sources and Principles of Law "Macroéconomie" has prerequisite(s) MECON1104
MECON1212	MECON1104 - Economics     "Microéconomie" has prerequisite(s) MECON1104
MECON1313	MECON1104 - Economics     "Economie industrielle" has prerequisite(s) MECON1212
MESPA1237	• MECON1212 - Microeconomics "Espagnol 2" has prerequisite(s) MESPA1122
MESPA1340	• MESPA1122 - Spanish 1 "Espagnol 3" has prerequisite(s) MESPA1237
MGEST1325	• MESPA1237 - Spanish 2 "Comptabilité et contrôle de gestion" has prerequisite(s) MGEST1103
MINFO1201	• MGEST1103 - Accounting and Financial Diagnosis "Informatique et algorithmique" has prerequisite(s) MQANT1109
MINFO1302	MQANT1109 - Business Informatics     "Coding Project" has prerequisite(s) MINFO1201
MNEER1236	• MINFO1201 - Programming and Algorithms "Néerlandais 2" has prerequisite(s) MNEER1121 OU MNEER1119
MNEER1341	• MNEER1121 - Dutch 1 • MNEER1119 - Dutch 1 for LSM Beginners "Néerlandais 3" has prerequisite(s) MNEER1236
MQANT1221	• MNEER1236 - Dutch 2 "Inférence statistique" has prerequisite(s) MQANT1113
MQANT1227	• MQANT1113 - Statistics and Probability "Mathématiques de gestion 2" has prerequisite(s) MQANT1110
MQANT1324	MQANT1110 - Mathematics for Management I     "Econométrie" has prerequisite(s) MQANT1221
MQANT1328	• MQANT1221 - Statistical Inference "Recherche opérationnelle" has prerequisite(s) MQANT1227
MQANT1329	MQANT1227 - Mathematics for Management 2 "Optimization" has prerequisite(s) MQANT1227
	MQANT1227 - Mathematics for Management 2

# 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 2023-2024
- O Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ 

  Not offered in 2023-2024 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:

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

#### o Economics

O MECON1104	Economics	Nathalie Gilson	[45h]
			+20h] [5
			Credits]

### o Management

• MGEST1103	Accounting and Financial Diagnosis	Anne-Catherine Provost	[q1] [45h +20h] [5 Credits] (#)
• MGEST1107	Management Seminar	Isabelle Platten Ingrid Poncin	[q2] [30h +30h] [5 Credits]
● MGEST1108	Marketing	Nadia Sinigaglia	[q2] [45h +20h] [5 Credits] (

### o Quantitative Methods

O MQANT1109	Business Informatics	Bertrand Lebichot (compensates François Fouss)	[q2] [30h +15h] [5 Credits] (#)
O MQANT1110	Mathematics for Management I	Corentin Vande Kerckhove Enrico Vitale	[q1] [45h +20h] [5 Credits] (#)
O MQANT1113	Statistics and Probability	Frédéric Vrins	[q2] [45h +20h] [5 Credits] (#)

### o Social Science

O 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

• MANGL1120	English 1	Erika Copriau Bruno Michiels Guy Monfort (coord.) Daniel Schoemans	[q1+q2] [30h +30h] [5 Credits] (#)
			Cicuitaj

### O Second Language

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

#### 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	Dutch 1	Erika Copriau Bruno Michiels (coord.) Daniel Schoemans	[q1+q2] [30h +30h] [5 Credits]
MNEER1119  MNEER1119	Dutch 1 for LSM Beginners	Daniel Schoemans (coord.)	[q1+q2] [60h] [5 Credits]
<b>≅</b> Spanish			
• MESPA1122	Spanish 1	Juan Francisco Hernandez Rodriguez (coord.)	[q1+q2] [30h +30h] [5 Credits]

#### INGM1BA - 2ND ANNUAL UNIT

- Mandatory
- ☼ Optional
- △ Not offered in 2023-2024
- O Not offered in 2023-2024 but offered the following year
- $\ensuremath{\oplus}$  Offered in 2023-2024 but not the following year
- $\Delta \oplus$  Not offered in 2023-2024 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:

#### o Law

O MDROI1210	Business Law	Werner Derycke	FR [q1] [30h
			+0h] [5
			Credits]

#### o Economics

• MECON1211	Macroeconomics	Nathalie Gilson	[q2] [30h +10h] [5 Credits]
• MECON1212	Microeconomics =	Patrick Scarmure	[q1] [45h +20h] [5 Credits]

### o Management

• MGEST1201	Corporate Strategy	Alain Vas	[q1] [30h +10h] [5 Credits]
• MGEST1219	Finance	Catherine D'Hondt Isabelle Platten	[q2] [45h +20h] [5 Credits]
• MGEST1222	Production Management	Daniel De wolf (compensates Nadine Meskens)	[q2] [30h +10h] [5 Credits] (#)

#### Quantitative Methods

<b>O</b> MQANT1221	Statistical Inference	Rudy De Winne	[q2] [45h +20h] [5 Credits] (#)
<b>○</b> MQANT1227	Mathematics for Management 2	Daniel De wolf (compensates Nadine Meskens)	[q1] [45h +20h] [5 Credits] #

### 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%3B-candidature.html).

#### ≅ Parcours informatique de gestion

O MINFO1201	Programming and Algorithms	Marco Saerens (compensates François Fouss)	[q2] [45h +20h] [5
			Credits]

	O MTECH1201	Industrial Technologies	Laurence Baclin Christine Dhaeyer David Michel Nicolas Velings	[q1] [30h +10h] [5 Credits]			
\$	⇔ Parcours technologique biochimie						
	MHELH1200	Sciences du bioingénieur		[q2] [72h] [5 Credits]			
	MHELH1201	Chimie et sciences de l'industrie		[q1+q2] [60h] [5 Credits]			
\$	Parcours tech	nologique électromécanique					
	MHELH1211	Sciences de l'ingénieur		[q2] [72h] [5 Credits]			
	O MHELH1212	Fluide et énergie		[q2] [64h] [5 Credits] ((1)			
0	o Languages						
•	MANGL1235	English 2	Jessica Degroote Céline Gouverneur Daniel Schoemans Quentin Zèques (coord.)	[q1+q2] [0h +60h] [5 Credits] (#)			

### O Second Language

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

#### & 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.



#### INGM1BA - 3RD ANNUAL UNIT

- Mandatory
- ☼ Optional
- △ Not offered in 2023-2024
- O Not offered in 2023-2024 but offered the following year
- $\ensuremath{\oplus}$  Offered in 2023-2024 but not the following year
- $\Delta \oplus$  Not offered in 2023-2024 or the following year
- Activity with requisites
- 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:

#### o Management

• MGEST1323	Human Management	Stéphanie Coster (compensates Laurent Taskin) Philippe Depaepe (compensates Laurent Taskin)	[30h +10h] [5 Credits]
● MGEST1324	Entrepreneurial Project	Vincent Meurisse (compensates Amélie Jacquemin)	[q1+q2] [30h +30h] [4 Credits]
● MGEST1325	Accounting and Management Control	Annick Telle	[q1] [45h +20h] [5 Credits] (#)
● MGEST1329	Professional Development Project	Isabelle Platten	[q1+q2] [7.5h +75h] [2 Credits]

#### o Quantitative Methods

O MQANT1324	Econometrics	Mikael Petitjean	[q2] [45h +20h] [5 Credits] (
O MQANT1329	Optimization	Daniele Catanzaro	[q1] [30h +15h] [4 Credits] (#)

### o Social Science

O MSHUM1301	Questions de sciences religieuses	Stanislas Deprez	ER [q1] [15h] [2
			Credits]

### 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%3B-candidature.html).

### ≅ Parcours informatique de gestion

	. •		
• MECON1313	Industrial Organization 📕	Patrick Scarmure	[q2] [30h +10h] [5 Credits] ((1))
● MGEST1302	Séminaire : Organisations et transformation digitale	Christian De Neef	[q2] [15h +0h] [2 Credits] (#)

	O MINFO1301	Data Management	Sylvain Courtain (compensates François Fouss)	[q1] [30h +15h] [5 Credits]
	O MINFO1302	Coding Project	Daniele Catanzaro	[q1] [30h +15h] [6 Credits] (
	O MQANT1328	Operational Research	Bertrand Mareschal (compensates Nadine Meskens) Jean-Sébastien Tancrez	[30h +15h] [5 Credits]
	MSHUM1303	Organization and Social Change Seminar	Julie Solbreux	[15h +0h] [2 Credits]
\$	3 Parcours tech	nologique biochimie		
	O MHELH1301	De la molécule au vivant		[q2] [64h] [5 Credits]
	O MHELH1302	Fondamentaux de chimie analytique		[q1+q2] [45h] [7 Credits]
	MHELH1303	Approfondissement des connaissances de la matière		[q2] [102h] [8 Credits] (#)
	O MINFO1201	Programming and Algorithms	Marco Saerens (compensates François Fouss)	[q2] [45h +20h] [5 Credits] (#)
\$	3 Parcours tech	nologique électromécanique		
	O MHELH1311	Mécatronique		[q1] [54h] [5 Credits]
	MHELH1312	Mécanique thermo appliquée		[q1+q2] [80h] [8 Credits]
	O MHELH1313	Automatique		[q2] [75h] [7 Credits] (#)
	O MINFO1201	Programming and Algorithms	Marco Saerens (compensates François Fouss)	[q2] [45h +20h] [5 Credits]
0	Languages			
(	MANGL1339	English 3 📕	Jessica Degroote (coord.)	[q1+q2] [0h

### 0

<b>○</b> MANGL1339	English 3	Jessica Degroote (coord.) Quentin Zèques	[q1+q2] [0h +45h] [4
			Credits]

### O Second Language

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

## **窓** 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.



### **Spanish**

# UCL - Université catholique de Louvain Study Programme 2023-2024

INGM1BA: Bachelor : Business Engineering

• MESPA1340	Spanish 3 📕	Juan Francisco Hernandez Rodriguez (coord.)	[q1+q2] [0h +45h] [4
			Credits]

#### **INGM1BA - Information**

# **Access Requirements**

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.

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
- · Access based on validation of professional experience
- Special requirements to access some programmes

## **General access requirements**

Except as otherwise provided by other specific legal provisions, admission to undergraduate courses leading to the award of a Bachelor's degree will be granted to students with one of the following qualifications:

- 1. A Certificate of Upper Secondary Education issued during or after the 1993-1994 academic year by an establishment offering full-time secondary education or an adult education centre in the French Community of Belgium and, as the case may be, approved if it was issued by an educational institution before 1 January 2008 or affixed with the seal of the French Community if it was issued after this date, or an equivalent certificate awarded by the Examination Board of the French Community during or after 1994;
- 2. A Certificate of Upper Secondary Education issued no later than the end of the 1992-1993 academic year, along with official documentation attesting to the student's ability to pursue higher education for students applying for a full-length undergraduate degree programme;
- 3. A diploma awarded by a higher education institution within the French Community that confers an academic degree issued under the above-mentioned Decree, or a diploma awarded by a university or institution dispensing full-time higher education in accordance with earlier legislation;
- 4. A higher education certificate or diploma awarded by an adult education centre;
- 5. A pass certificate for one of the <u>entrance examinations</u> (https://uclouvain.be/fr/etudier/inscriptions/examens-admission.html) organized by higher education institutions or by an examination board of the French Community; this document gives admission to studies in the sectors, fields or programmes indicated therein:
- 6. A diploma, certificate of studies or other qualification similar to those mentioned above, issued by the Flemish Community of Belgium, the German Community of Belgium or the Royal Military Academy;
- 7. A diploma, certificate of studies or other qualification obtained abroad and deemed equivalent to the first four mentioned above by virtue of a law, decree, European directive or international convention;

#### Note

Requests for equivalence must be submitted to the Equivalence department (Service des équivalences) of the Ministry of Higher Education and Scientific Research of the French Community of Belgium in compliance with the official deadline.

The following two qualifications are automatically deemed equivalent to the Certificate of Upper Secondary Education (Certificat d'enseignement secondaire supérieur – CESS):

- European Baccalaureate issued by the Board of Governors of a European School,
- International Baccalaureate issued by the International Baccalaureate Office in Geneva.
- 8. Official documentation attesting to a student's ability to pursue higher education (diplôme d'aptitude à accéder à l'enseignement supérieur DAES), issued by the Examination Board of the French Community.

# Specific access requirements

- Access to bachelor programmes for candidates of nationality outside the European Union who are not assimilated to Belgian nationals is subject to the following criteria:
  - not have obtained a secondary education diploma for more than 3 years maximum. Example: for an admission application for the academic year 2023-2024, you must have obtained your diploma during the academic years 2020-2021, 2021-2022 ou 2022-2023. In the French Community of Belgium, the academic year runs from September 14 to September 13
  - not already hold an undergraduate degree
- Candidates, whatever their nationality, with a secondary school diploma from a country outside the European Union, must have obtained an average of 13/20 minimum or, failing that, have obtained this average, have passed one year of study in Belgium (for example special Maths / sciences). A non-successful year will not be taken into consideration.

- 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 <u>special entrance examination for undergraduate studies in engineering: civil engineering and architect</u> (https://uclouvain.be/fr/facultes/epl/examenadmission.html).
- 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) (https://uclouvain.be/en/study/inscriptions/etudes-contingentees.html).
- 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). (https://uclouvain.be/en/study/inscriptions/etudes-contingentees.html)
- · 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) (https://uclouvain.be/en/study/inscriptions/etudes-contingentees.html).
- 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). (https://uclouvain.be/en/study/inscriptions/etudes-contingentees.html)

Note: students wishing to enrol for a **Bachelor's degree in Medicine** or a **Bachelor's degree in dental science** must first sit <u>an aptitude test (fr)</u> (https://uclouvain.be/en/study/inscriptions/etudes-contingentees.html).

### **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: <a href="https://uclouvain.be/fr/sites/mons/accompagnement-pedagogique.html">https://uclouvain.be/fr/sites/mons/accompagnement-pedagogique.html</a> (https://uclouvain.be/fr/sites/mons/accompagnement-pedagogique.html).

### **Evaluation**

The evaluation methods comply with the <u>regulations concerning studies and exams</u> (https://uclouvain.be/fr/decouvrir/ rgee.html). 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:

- 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

Structure entity SSH/LSM

Denomination Louvain School of Management (LSM)

Sector Human Sciences (SSH)

Acronym LSM

Postal address Place des Doyens 1 - bte L2.01.01

1348 Louvain-la-Neuve

Website http://www.uclouvain.be/lsm

Mandate(s)

• Dean : Matthieu de Nanteuil

· Administrative director : Helena Torres

Commission(s) of programme

• Commission d'enseignement de la Louvain School of management (CLSM)

Academic supervisor: Patrick Scarmure

Other academic Supervisor(s)

• Ingrid Poncin

Jury

- Patrick Scarmure
- Natacha Gilson

#### Useful Contact(s)

- Information for future students (Nicolas Hurtado de Jesus tel. +32 (0)65 323 327): info-mons@uclouvain.be
- Magaly Duquesne
- Ingrid Poncin
- Exclusive address for waiver request for NON-FUNDABILITY: safi@uclouvain.be

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