



BEB1BA

2024 - 2025

BBEB1BA - Introduction

Introduction

Introduction

PLEASE NOTE: 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.

The Bachelor of Science in Business Engineering in Brussels is a joint English-taught programme organised by the Faculty of Economics and Business of **KU Leuven** and the Faculty of Economics, Social and Political Sciences and Communication of the **UCLouvain Saint-Louis – Bruxelles**. Both institutions are situated in the heart of the city, near Brussels Central Station. Students will attend courses and take exams at both institutions and obtain a **joint degree**.

Companies and organizations today operate in a highly complex and interconnected world, where they must navigate rapid technological changes, global competition, and evolving consumer expectations. To thrive in this environment, they make critical decisions that affect every aspect of their operations, from financial planning to marketing strategies, production efficiency and human resource management.

The Business Engineering programme equips students with the skills and knowledge to understand and optimize these decisions. The approach is multidisciplinary and includes a thorough study of all major business domains such as finance, accounting, marketing, logistics and human resources, as well as the economic, legal and social landscape in which businesses operate. Additionally, the programme emphasizes the development of strong analytical skills. Students learn how to use data analysis, mathematical modeling and IT tools to make informed decisions, optimize business processes, predict outcomes and assess risks.

Since analytical skills are a core part of the Business Engineering programme, students are expected to come with a solid background in mathematics. They will also need to anticipate working in multiple languages, a natural extension of living and studying in multi-lingual Belgium and Brussels. Students refine their abilities in English through courses and workshops whilst studying at least one other language to encourage familiarity with today's polyglot business environment.

Mathematics and Statistics: crucial building blocks

Today's business engineers often use mathematical and statistical models to describe reality in a logical way. The language of mathematics and statistics is a powerful tool to describe and explore those models. By learning this language you develop your skills in recognising structures, systematic problem-solving, and checking the plausibility of the obtained result. You will also refine and apply your knowledge of mathematics and statistics in various courses, including linear optimisation, operations research, econometrics, accounting, finance, sciences and technologies.

[Learn more on what prior knowledge is required](#)

Two institutions, one programme, one degree

The Faculty of Economics and Business of KU Leuven and the Faculty of Economics, Social and Political Sciences and Communication of the Université Saint-Louis – Bruxelles jointly organise the English-language Bachelor programme in Business Engineering.

KULeuven

Founded in 1425, KULeuven has been an acclaimed centre for learning and teaching for almost six centuries. Today, it is Belgium's highest-ranked university as well as one of the oldest and most renowned universities in Europe.

As a leading European research university and co-founder of the League of European Research Universities (LERU), KU Leuven has a wide variety of programmes in English on offer, supported by high-quality interdisciplinary research. Boasting an outstanding central location in the heart of Europe, KU Leuven provides students with a truly international experience, high-quality education, world-class research and cutting-edge innovation.

Site Saint-Louis - Bruxelles

Established in 1858, Université Saint-Louis - Bruxelles specialises in human and social sciences. In 2007, the Institute for European Studies was created within USL-B. It has since gained an excellent reputation for multilingual education. Conveniently located in the capital's centre, it is just a five-minute walk away from KU Leuven Brussels campus.

Your profile

If you would like to:

- gain insight into the roles various business domains play in organisations and into the economic world surrounding organisations,
- master the necessary mathematical and statistical techniques to analyse and solve business problems,
- acquire a solid background in ICT and information management,
- and if you are also fascinated by the international and intercultural dimensions of business,

then this programme is a great fit.

Your future job

A degree in Business Engineering opens many doors in a wide range of sectors. Generally speaking, business engineers take up managerial functions in various business domains, including, but not limited to, marketing and finance. They usually start their careers taking on expert positions within companies (e.g. banking and insurance, ICT, telecom, logistics), in research or in consulting services, and move up to executive functions.

Clearly, with a degree in Business Engineering, you are well-prepared for management roles in any department of a company or organisation. Moreover, a business engineer's unique profile is highly appreciated by companies in both Belgium and abroad. Thanks to language courses and many opportunities to train partly at a foreign partner institution, you will be prepared to embark on an international career.

BBEB1BA - Teaching profile

Learning outcomes

At the end of the programme students will:

I. Be conversant with the discipline's core teachings and methods

Students will acquire:

- **A practical command of the fundamental concepts and models of economics and management**
- **The basic methodological tools needed to undertake academic work in economics and management.**

More specifically, students will:

- Acquire, step-by-step, the ability to model economic phenomena.
- Acquire, step-by-step, a command of the principal fields of management.
All CU in BAS 1 and 2 in economics and management.
- Acquire the ability to analyse real economic and management phenomena.
The CU of Economics I, II, Introduction to financial markets, Business Project.
The advanced courses in economics and management in BAS 2 and 3.
- Develop a sophisticated understanding of the ethical and political dimensions of economic analysis.
In particular the elective CU in BAS 3 in economics, in their critical reflective dimension. The CU introducing the interdisciplinary dimension (Geopolitics, Ethics and the Economy).

Students will acquire:

- **The ability to use mathematics and computer models to support analytical reasoning. In particular, students will learn to:**
 - Apply mathematical modelling to economic and societal problems.
 - Exploit mathematical and statistical tools to resolve economic and management problems.
All the CU in quantitative methods at the introductory and advanced levels.
 - Reason in the abstract using standard disciplinary language and develop a critical approach to this process.
All CU in quantitative methods; Set of CU in computer science and data management.

II. Possess a grounding in fields that are complementary to economics and management

Students will acquire:

- **A practical command of core academic knowledge and skills in the human, legal, and social sciences that are essential for the analysis of economic and management questions. In particular, students will acquire:**
- **A grounding in the major fields of thought that underpin the human and social sciences.**
Introduction to Law, Communication science, Ethics and the Economy, Geopolitics, Elective courses.

III. Possess a grounding in science

Students will acquire:

- **An understanding of the scientific underpinnings of technological processes and information management and their respective implications in a management perspective. In particular, students learn/acquire:**
 - The fundamental concepts in chemistry and physics.
 - The basic technologies in chemistry and physics.
 - Experimental experience of the complexity of the processes of industrial chemistry and physics and discuss these with specialists in the field who are active in a business context.
Science and Technology courses.
 - A command of the basics of how ICT software functions and be able to set out problems in an algorithmic form.
Foundations of Business Information Management, Statistics for Data Science, Software Development.

At the end of the Programme students will be able to:

• **Use written and oral communication skills in English and be able to defend a scholarly argument or present a piece of research in accordance with academic ethics. In particular students will acquire:**

- The ability to produce intellectually rigorous personal reasoning and to defend it both in written and oral forms ;
- The ability to produce university-quality research work, notably through the manipulation of statistical information ;
- The ability to produce scholarly writing in accordance with academic norms.

LO of the practical classes for all economics and management courses; the CU of Business Project.

- Oral and written (passive and active) communication skills in English and another foreign language, - and ability to converse in everyday and specialised language (in the fields of the human and social sciences) in either of these two languages;
- The programme includes a period of 'immersion' in a language other than the student's mother tongue (language trips abroad).
ERASMUS exchanges in BAS 3.

Programme structure

The Bachelor of Business engineering programme is structured along five domains:

- Management of Business Domains
- Design of Business Processes
- Mathematical and Statistical Techniques - Research Skills
- Natural and Applied Sciences
- Economic Analysis and International Orientation

The combination of these domains makes the Business Engineering programme very relevant in today's world. The unique combination of business economics, quantitative methods and technology will offer you the opportunity to cultivate a much sought after multi-disciplinary approach towards business.

The study programme may change slightly every year. The official study programme that applies to the year in which you are studying can be consulted from 15 July onwards in [KU Leuven's online programme catalogue](#), which is best viewed on a large screen.

In the second and third year, students will immerse themselves in specialized courses essential for a deep understanding of core business domains in companies like accountancy, financial management, marketing, operations management, strategic management, ...) In addition to advancing their managerial skills, they will also sharpen their analytical skills. They will master the necessary mathematical and statistical techniques to analyse business problems and work out optimal solutions. Additionally, students will gain practical skills along with insights into technical aspects.

The curriculum also incorporates language studies, offering options such as Spanish, German, Dutch, and French at varying levels. The flexibility of elective courses in the third year allows students to tailor their academic journey to align with their career goals. This

- 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 \(objectives, methods, evaluation...\)](#)

Year

1 2 3

○

Year

1 2 3

3

o Other Human and Social Sciences

○ BINGE1160	Global Economic History	Robrecht Declercq	EN [q1] [30h] [5 Credits]	X	
○ BESPO1164	Geopolitics	Jeroen Joly	EN [q2] [30h] [5 Credits]		
○ BESPO1360	Ethics and the economy	Yannick Vanderborght	EN [q1] [30h] [5 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 purposes 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 [Academic Regulations and Procedures](#)

- EINGE1151 - [Spanish 1](#)
- EINGE1252** "[German 2](#)" has prerequisite(s) EINGE1152
- EINGE1152 - [German 1](#)
- EINGE1253** "[Dutch 2](#)" has prerequisite(s) EINGE1153
- EINGE1153 - [Dutch 1](#)
- EINGE1254** "[French 2](#)" has prerequisite(s) EINGE1154
- EINGE1154 - [French 1](#)
- EINGE1255** "[French 2 \(advanced\)](#)" has prerequisite(s) EINGE1155
- EINGE1155 - [French 1 \(advanced\)](#)
- EINGE1256** "[Dutch 2 \(advanced\)](#)" has prerequisite(s) EINGE1156
- EINGE1156 - [Dutch 1 \(advanced\)](#)
- EINGE1314** "[Macroeconomics](#)" has prerequisite(s) BINGE1113
- BINGE1113 - [Economics II](#)
- EINGE1316** "[Management Accounting](#)" has prerequisite(s) EINGE1110 AND EINGE1111
- EINGE1110 - [Financial Accounting A](#)
- EINGE1111 - [Financial Accounting B](#)
- EINGE1331** "[Operations research](#)" has prerequisite(s) EINGE1233 AND EINGE1234
- EINGE1233 - [Linear Optimisation](#)
- EINGE1234 - [Probability Theory and Descriptive Statistics](#)
- EINGE1332** "[Business Information Systems](#)" has prerequisite(s) BINGE1135
- BINGE1135 - [Foundations of Business Information Management](#)
- EINGE1333** "[Econometrics](#)" has prerequisite(s) EINGE1235
- EINGE1235 - [Statistics for Data Science](#)
- EINGE1342** "[Materials: Properties, Selection and Sustainability](#)" has prerequisite(s) BINGE1243 AND EINGE1133 AND EINGE1134
- BINGE1243 - [Conceptual Physics with technical Applications](#)
- EINGE1133 - [Mathematics for Business Engineers I](#)
- EINGE1134 - [Mathematics for Business Engineers II](#)
- EINGE1350** "[Spanish 3](#)" has prerequisite(s) EINGE1151 AND EINGE1251
- EINGE1151 - [Spanish 1](#)
- EINGE1251 - [Spanish ve Statistics](#)

BBEB1BA - 1ST ANNUAL UNIT

- 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 \(objectives, methods, evaluation...\)](#)

o Content:

o Economics

o Language : English

o EINGE1150	English 1		EN [q1] [26h] [3 Credits]
o EINGE1250	English 2		EN [q2] [26h] [3 Credits]

BBEB1BA - 2ND ANNUAL UNIT

- 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...)

o Content:**o Economics**

○ BECGE1217	Microeconomics ■	Koen Declercq	EN [q1] [45h] +15h] [6 Credits] 🌐
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o Management

○ BECGE1216	Human Resource Management	Ralf Caers	EN [q2] [30h] [5 Credits] 🌐
○ EINGE1212	Production and Logistics Management ■		EN [q2] [52h] [6 Credits] 🌐
○ EINGE1213	Financial Statement Analysis ■		EN [q1] [39h] [6 Credits] 🌐

o Computer Science and Quantitative Methods

○ EINGE1234	Probability Theory and Descriptive Statistics ■		EN [q1] [26h] [3 Credits] 🌐
○ EINGE1236	Software Development ■		EN [q1] [26h] [3 Credits] 🌐
○ EINGE1233	Linear Optimisation ■		EN [q2] [0h +26h] [3 Credits] 🌐
○ EINGE1235	Statistics for Data Science ■		EN [q2] [52h] [6 Credits] 🌐

o Science and Technology

○ BINGE1243	Conceptual Physics with technical Applications ■	Sébastien Toussaint	EN [q1] [60h] [6 Credits] 🌐
○ BINGE1244	electronic circuits, system and data processing	Sébastien Toussaint	EN [q2] [45h] [5 Credits] 🌐

o Other Human and Social Sciences

○ BESPO1164	Geopolitics	Jeroen Joly	EN [q2] [30h] [5 Credits] 🌐
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o Language choice

You will follow 1 language of choice. The language of the secondary school diploma cannot be chosen.

Students who have already taken 'course 3' of the chosen language in the second phase do not take this course in the third phase.

⌘ **Language choice : French**

Please select successively:

- French 1, French 2 and French 3

No prior knowledge is required. Students who have obtained a Flemish secondary school diploma are excluded from these courses. Students with a secondary school diploma other than a Flemish one but who have an intermediate level of French are not allowed to follow these courses either.

- French 1 (advanced), French 2 (advanced) and French 3 (advanced)

Prior knowledge is required. Only students who are independent users of French may register for these courses.

⌘ EINGE1154	French 1		18 [q1] [52h] [3 Credits]
⌘ EINGE1155	French 1 (advanced)		18 [q1] [26h] [3 Credits]
⌘ EINGE1254	French 2 🟡		18 [q2] [52h] [3 Credits]
⌘ EINGE1255	French 2 (advanced) 🟡		18 [q2] [26h] [3 Credits]

⌘ **Language choice : German**

Please select successively: No prior knowledge is required. Students who are independent users of German may register for these courses.

⌘ EINGE1152	German 1		18 [q1] [26h] [3 Credits]
⌘ EINGE1252	German 2 🟡		18 [q2] [26h] [3 Credits]

⌘ **Language choice : Dutch**

Please select successively:

- Dutch 1, Dutch 2 and Dutch 3

No prior knowledge is required. Students who have obtained a Flemish secondary school diploma are excluded from these courses. Students with a secondary school diploma other than a Flemish one but who have an intermediate level of Dutch are not allowed to follow these courses either.

- Dutch 1 (advanced), Dutch 2 (advanced) and Dutch 3 (advanced).

BBEB1BA - 3RD ANNUAL UNIT

- 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 \(objectives, methods, evaluation...\)](#)

⌘ BECGE1314	International Economics 🇺🇸	Jean-François Fagnart	EN [q2] [30h] [5 Credits] 🌐
⌘ BECGE1341	Public policy seminar 🇺🇸	Gilles Grandjean (coord.) Hélène Latzer	EN [q2] [30h] [5 Credits] 🌐
⌘ BECGE1215	Public economics 🇺🇸	Tom Truys	EN [q2] [45h +15h] [5 Credits] 🌐
⌘ BCOMU1213	Intercultural communication	Greet De Baets	EN [q2] [30h] [5 Credits] 🌐
⌘ BCOMU1313	International communications	Georgios Terzis	EN [q2] [30h] [5 Credits] 🌐

⌘ **Language Immersion Track : Dutch**

Students take 9 credits of this track. Students follow these courses in the third stage in Dutch, together with students of the Dutch programme *Handelswetenschappen* at KU Leuven Campus Brussels. Students can only choose this option provided they have achieved a cumulative study efficiency (CSE) of at least 75%.

EKULB1333	Ondernemerschap en business planning	
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EKULB1339	Short Mobility Economics and Business (Bachelor)		[q2] [6 Credits]
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BBEB1BA - 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 [entrance examinations](#) 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 2024-2025, you must have obtained your diploma during the academic years 2021-2022, 2022-2023 ou 2023-2024. 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

- UCLouvain Saint-Louis Bruxelles: espo-slb@uclouvain.be
- KU Leuven: info.campusbrussel@kuleuven.be

