

At Bruxelles Saint-Louis - 180 credits - 3 years - Day schedule - In English

Dissertation/Graduation Project : **NO** - Internship : **NO**Activities in English: **YES** - Activities in other languages : **NO**

Activities on other sites: YES

Main study domain:

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 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.

In the Business Engineering programme, you will focus on managing and optimising business processes. You will become acquainted with business economics as well as the different functional domains in companies (e.g. accountancy, financial management, marketing, production and logistics, human resources management). You will learn how a company operates on a daily basis and how its processes are organised. Designing business processes is often at the core of the business engineer's activities, e.g. in companies looking to launch a new production process, optimise it or make their service process run more efficiently. In doing so, you will pay attention to human behaviour and the social phenomena that determine the way we think and act. As you need to know how the economic world surrounding the organization works, you will learn about important economic concepts and methods through economic analysis. Topics dealing with law and tax regulations are also a crucial part of the programme, seeing they can have a major impact on business

In addition to advancing your managerial skills, you will also sharpen your analytical skills. You will master the necessary mathematical and statistical techniques to analyse business problems and work out optimal solutions (e.g. staff planning, organisation of a production process, sales predictions for the next quarter, measuring the impact of an advertising campaign). Considering information is more important than ever, you will also acquire a solid background in ICT skills and information management. As a business engineer, you need to know how companies can manage and analyse information. After an introduction to natural and applied sciences, you will understand critical technological processes and are able to assess the impact of innovation on companies, their environment and sustainability.

The combination of business economics, quantitative methods and technology offers you the opportunity to develop a unique multidisciplinary approach towards business, which makes the Business Engineering programme extremely relevant in today's world. Moreover, the integration of all these disciplines is a priority in many companies, both in production environments and in the service sector (e.g. consultancy or ICT). After all, many solutions to complex business problems require input from a variety of disciplines.

The Business Engineering programme has also a strong international focus. Students can participate in exchange programmes with numerous partners both within and outside Europe.

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 recognizing 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.

Description of the mathematical topics you are expected to have covered before entering the Bachelor of Business Engineering programme, can be found here: Mathematical topics.

We offer a range of opportunities to help you assess and develop your mathematical skills, before you start your bachelor's degree. We have developed an online test that you can take before applying, and which will give you customized feedback and advice on how to bridge possible minor knowledge gaps.

• You can assess your mathematical skills with the following free test by filling in this online form. You can take the free test several times. Free online mathematics test

Bring your mathematics skills up to the required level

Does the online mathematics test reveal any shortcomings in your prerequisite knowledge? The workload in the first year of our Bachelor's programme is very high, making it difficult or almost impossible to catch up on the fly if you have important gaps in your mathematics prerequisites.

Therefore we invite you to start preparing now, by joining our **online preparation track** using the innovative learning platform SOWISO. It will provide you with explanations, examples and endless randomized practice exercises with personal feedback on all answer attempts. Each topic offers an initial test so you can assess what you already master.

Additionally, just before the beginning of the academic year, we offer a four-day refresher course on our Brussels campus.

At the start of their bachelor's studies, all students take an **initial mathematics assessment test**. It is similar in content and style to the free online mathematics test. The test is compulsory and is to be taken on campus; based on this test you will receive feedback on how well you are prepared for the mathematics in the Bachelor of Business Engineering. A score of at least 60% will give you a bonus point for the first semester's mathematics course. A very low score (below 40%) indicates that you may not be ready to start the Bachelor of Business Engineering.

• Practical information preparatory track & refresher course

Two institutions, one programme, one degree

BBEB1BA: Bachelor of Science in Business Engineering

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.

Duration: 3 years (full-time), 180 ECTS

EEA nationals and Non-EEA nationals who reside in Belgium under a valid residence permit can follow less than 60 ECTS per academic year and accordingly spread their studies in several years. This possibility needs to be discussed with a study career consultant. Note that there are no part-time, evening or weekend courses organized for this category of students. Non-EEA nationals who reside in Belgium under a student visa can consult this website.

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.
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EINGE1314	Macroeconomics		□N [q1] [52h] [5 Credits]		i
Manageme	nt				
EKULB1320	Marketing		®N [q1] [52h] [6 Credits] ∰	Х	
EINGE1110	Financial Accounting A		EN [q1] [26h+12h] [3 Credits] 🖲	X	
EINGE1111	Financial Accounting B		[q2] [26h+12h] [3 Credits] 🛞	х	
BECGE1116	Introduction to financial markets	Anouk Claes	[q2] [30h+15h] [4 Credits]	х	
BECGE1216	Human Resource Management	Ralf Caers	EN [q2] [30h] [5 Credits] @		X
EINGE1212	Production and Logistics Management		[q2] [52h] [6 Credits]		Х
EINGE1213	Financial Statement Analysis		[q1] [39h] [6 Credits] #		×
BECGE1328	Management and strategy	Frank Janssen	EN [q1] [30h] [5 Credits] @		
EINGE1315	Business Project		[q2] [16h] [6 Credits] 🕮		
EINGE1316	Management Accounting		EN [q2] [26h] [3 Credits] 🛞		
BECGE1327	Corporate Finance	Anouk Claes	EN [q2] [45h] [5 Credits] 🚇		
Law					
EINGE1120	Introduction to Law		[q2] [52h] [6 Credits] ®	Х	
Computer \$	Science and Quantitative Methods				
EINGE1133	Mathematics for Business Engineers I		[q1] [52h+26h] [6 Credits] #	X	
EINGE1134	Mathematics for Business Engineers II		[q2] [52h+26h] [6 Credits] (#	X	
BINGE1135	Foundations of Business Information Management	Wim Laurier	[q2] [30h+15h] [4 Credits] (#	Х	
EINGE1234					

Year

□ 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.

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SS EINGE1154	French 1	[q1] [52h] [3 Credits] 🕮	X
SEINGE1155	French 1 (advanced)	FR [q1] [26h] [3 Credits] 🖲	X
☎ EINGE1254	French 2		

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 Academic Regulations and Procedures.

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# Prerequisities list
BECGE1215
              "Public economics" has prerequisite(s) BECGE1217
                 • BECGE1217 - Microeconomics
BECGE1217
              "Microeconomics" has prerequisite(s) BECGE1113A
                 • BECGE1113A - Economics I
BECGE1314
              "International Economics" has prerequisite(s) BECGE1217
                 • BECGE1217 - Microeconomics
BECGE1317
              "European Economics" has prerequisite(s) BECGE1113A ET BINGE1113
                 • BECGE1113A - Economics I
                 • BINGE1113 - Economics II
BECGE1327
               "Corporate Finance" has prerequisite(s) EINGE1213 ET BECGE1116
                 • EINGE1213 - Financial Statement Analysis
                 • BECGE1116 - Introduction to financial markets
BECGE1328
               "Management and strategy" has prerequisite(s) EKULB1320
                 • EKULB1320 - Marketing
BECGE1340
               "Seminar in Economic History" has prerequisite(s) BECGE1113A ET EINGE1235
                 • BECGE1113A - Economics I
                 • EINGE1235 - Statistics for Data Science
BECGE1341
               "Public policy seminar" has prerequisite(s) BECGE1217
                 • BECGE1217 - Microeconomics
BESPO1360
              "Ethics and the economy" has prerequisite(s) BECGE1113A ET BINGE1113
                 • BECGE1113A - Economics I
                 • BINGE1113 - Economics II
BINGE1243
               "Conceptual Physics with technical Applications" has prerequisite(s) EINGE1134
                 • EINGE1134 - Mathematics for Business Engineers II
EINGE1212
               "Production and Logistics Management" has prerequisite(s) EINGE1133 ET EINGE1134
                 • EINGE1133 - Mathematics for Business Engineers I
                 • EINGE1134 - Mathematics for Business Engineers II
EINGE1213
               "Financial Statement Analysis" has prerequisite(s) EINGE1110 ET EINGE1111 ET EINGE1120
                 • EINGE1110 - Financial Accounting A
                 • EINGE1111 - Financial Accounting B
                 • EINGE1120 - Introduction to Law
EINGE1233
               "Linear Optimisation" has prerequisite(s) EINGE1133 ET EINGE1134
                 • EINGE1133 - Mathematics for Business Engineers I
                 • EINGE1134 - Mathematics for Business Engineers II
EINGE1234
               "Probability Theory and Descriptive Statistics" has prerequisite(s) EINGE1133 ET EINGE1134
                 • EINGE1133 - Mathematics for Business Engineers I
                 • EINGE1134 - Mathematics for Business Engineers II
EINGE1235
               "Statistics for Data Science" has prerequisite(s) EINGE1133 ET EINGE1134
                 • EINGE1133 - Mathematics for Business Engineers I
                 • EINGE1134 - Mathematics for Business Engineers II
EINGE1236
               "Software Development" has prerequisite(s) BINGE1135
                 • BINGE1135 - Foundations of Business Information Management
EINGE1251
               "Spanish 2" has prerequisite(s) EINGE1151
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• EINGE1151 - Spanish 1

EINGE1252 "German 2" has prerequisite(s) EINGE1152

• EINGE1152

BBEB1BA: Bachelor of Science in Business Engineering

o Language : English

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O EINGE1150	English 1	[q1] [26h] [3 Credits]

BBEB1BA - 2ND ANNUAL UNIT

- O Mandatory
- ☼ Optional
- △ Not offered in 2024-2025
- O 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
- [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 BECGE1217

Microeconomics

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BBEB1BA - 3RD ANNUAL UNIT

- O Mandatory
- ☼ Optional
- △ Not offered in 2024-2025
- O 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...)

o Content:

o Economics

O EINGE1314

Macroeconomics

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

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	[q1] [26h] [3 Credits]

□ Language Immersion Track : Dutch

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

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Contacts

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The Faculty Administration

02 211 78 79 - espo-slb@uclouvain.be

Office: Ommegang 6 - 2nd floor - bureau OM 205 Opening hours: Monday to Thursday, 10am to 12.30pm

Curriculum Management

Faculty

Structure entity

Denomination

Sector Acronym Postal address

Mandate(s)

• Dean : Abraham Franssen

Academic supervisor: Jean-François Fagnart

Useful Contact(s)

• UCLouvain Saint-Louis Bruxelles: espo-slb@uclouvain.be

• KU Leuven: info.campusbrussel@kuleuven.be

SSH/ESPB

Faculty of Economics, Social and Political Sciences and

Communication Saint-Louis (ESPB)

Human Sciences (SSH)

ESPB

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