



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 multi-disciplinary 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

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.

Votre profil

- Gaining insight into the roles various business domains play in organisations and into the economic world surrounding organisations.
- Mastering the necessary mathematical and statistical techniques to analyse and solve business problems.
- Acquiring a solid background in ICT and information management.
- Developing a business perspective on science and engineering.
- Having an analytical and abstract thinking ability. A thorough training in mathematics is a necessity.

Votre futur job

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 - Profil enseignement

COMPÉTENCES ET ACQUIS AU TERME DE LA FORMATION

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.

IV. Know how to use the scientific method

In particular, students will learn to:

- **Apply intellectual rigour in their academic work and to produce intellectually sound analysis**
- **Critically compare the4g00038 3413EII learn to:**

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annuel

1 2 3

⌘ **Language choice : French**

Please select successively:

- *French 1, French 2 and French 3*

PRÉREQUIS ENTRE COURS

Le **tableau** ci-dessous reprend les activités (unités d'enseignement - UE) pour lesquelles existent un ou des prérequis au sein du programme, c'est-à-dire les UE du programme dont les acquis d'apprentissage doivent être certifiés et les crédits correspondants octroyés par le jury avant inscription à cette UE.

Ces activités sont par ailleurs identifiées **dans le programme détaillé** : leur intitulé est suivi d'TJ 3e 2024-2025tableau

	<ul style="list-style-type: none"> • EINGE1151 - Spanish 1
EINGE1252	"German 2" a comme prérequis EINGE1152
	<ul style="list-style-type: none"> • EINGE1152 - German 1
EINGE1253	"Dutch 2" a comme prérequis EINGE1153
	<ul style="list-style-type: none"> • EINGE1153 - Dutch 1
EINGE1254	"French 2" a comme prérequis EINGE1154
	<ul style="list-style-type: none"> • EINGE1154 - French 1
EINGE1255	"French 2 (advanced)" a comme prérequis EINGE1155
	<ul style="list-style-type: none"> • EINGE1155 - French 1 (advanced)
EINGE1256	"Dutch 2 (advanced)" a comme prérequis EINGE1156
	<ul style="list-style-type: none"> • EINGE1156 - Dutch 1 (advanced)
EINGE1314	"Macroeconomics" a comme prérequis BINGE1113
	<ul style="list-style-type: none"> • BINGE1113 - Economics II
EINGE1316	"Management Accounting" a comme prérequis EINGE1110 ET EINGE1111
	<ul style="list-style-type: none"> • EINGE1110 - Financial Accounting A • EINGE1111 - Financial Accounting B
EINGE1331	"Operations research" a comme prérequis EINGE1233 ET EINGE1234
	<ul style="list-style-type: none"> • EINGE1233 - Linear Optimisation • EINGE1234 - Probability Theory and Descriptive Statistics
EINGE1332	"Business Information Systems" a comme prérequis BINGE1135
	<ul style="list-style-type: none"> • BINGE1135 - Foundations of Business Information Management
EINGE1333	"Econometrics" a comme prérequis EINGE1235
	<ul style="list-style-type: none"> • EINGE1235 - Statistics for Data Science
EINGE1342	"Materials: Properties, Selection and Sustainability" a comme prérequis BINGE1243 ET EINGE1133 ET EINGE1134
	<ul style="list-style-type: none"> • BINGE1243 - Conceptual Physics with technical Applications • EINGE1133 - Mathematics for Business Engineers I • EINGE1134 - Mathematics for Business Engineers II
EINGE1350	"Spanish 3" a comme prérequis EINGE1151 ET EINGE1251
	<ul style="list-style-type: none"> • EINGE1151 - Spanish 1 • EINGE1251 - Spanish 2
EINGE1351	"German 3" a comme prérequis EINGE1152 ET EINGE1252
	<ul style="list-style-type: none"> • EINGE1152 - German 1 • EINGE1252 - German 2
EINGE1352	"Dutch 3" a comme prérequis EINGE1153 ET EINGE1253
	<ul style="list-style-type: none"> • EINGE1153 - Dutch 1 • EINGE1253 - Dutch 2
EINGE1353	"French 3" a comme prérequis EINGE1154 ET EINGE1254
	<ul style="list-style-type: none"> • EINGE1154 - French 1 • EINGE1254 - French 2
EINGE1354	"French 3 (advanced)" a comme prérequis EINGE1155 ET EINGE1255
	<ul style="list-style-type: none"> • EINGE1155 - French 1 (advanced) • EINGE1255 - French 2 (advanced)
EINGE1356	"Dutch 3 (advanced)" a comme prérequis EINGE1156 ET EINGE1256
	<ul style="list-style-type: none"> • EINGE1156 - Dutch 1 (advanced) • EINGE1256 - Dutch 2 (advanced)

COURS ET ACQUIS D'APPRENTISSAGE DU PROGRAMME

Pour chaque programme de formation de l'UCLouvain, un [référentiel d'acquis d'apprentissage](#) précise les compétences attendues de tout-e diplômé-e au terme du programme. Les fiches descriptives des unités d'enseignement du programme précisent les acquis d'apprentissage visés par l'unité d'enseignement ainsi que sa contribution au référentiel d'acquis d'apprentissage du programme.

PROGRAMME DÉTAILLÉ PAR BLOC ANNUEL

BBEB1BA - 1er bloc annuel

- Obligatoire
- ✂ Au choix
- △ Exceptionnellement, non organisé cette année académique 2024-2025
- ⊖ Non organisé cette année académique 2024-2025 mais organisé l'année suivante
- ⊕ Organisé cette année académique 2024-2025 mais non organisé l'année suivante
- △ ⊕ Exceptionnellement, non organisé cette année académique 2024-2025 et l'année suivante
- Activité avec prérequis
- 🌐 Cours accessibles aux étudiants d'échange
- 🌐 Cours NON accessibles aux étudiants d'échange

[FR]

o Language : English

o EINGE1150

English 1

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EKULB1339	Short Mobility Economics and Business (Bachelor)		[q2] [6 Crédits]
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BBEB1BA - Informations diverses

CONDITIONS D'ACCÈS

Décret du 7 novembre 2013 définissant le paysage de l'enseignement supérieur et l'organisation académique des études.
Les conditions d'admission doivent être remplies au moment même de l'inscription à l'université.

SOMMAIRE

- [Conditions d'accès générales](#)
- [Conditions d'accès spécifiques](#)
- [Accès par valorisation des acquis de l'expérience](#)
- [Conditions particulières d'accès à certains programmes](#)

Conditions d'accès générales

Sous réserve d'autres dispositions légales particulières et en vue de l'obtention du grade académique qui les sanctionne, ont accès à des études de premier cycle les étudiant-es qui justifient :

- 1° soit du certificat d'enseignement secondaire supérieur délivré à partir de l'année scolaire 1993–1994 par un établissement d'enseignement secondaire de plein exercice ou de promotion sociale de la Communauté française le cas échéant homologué s'il a été délivré par un établissement scolaire avant le 1er janvier 2008 ou revêtu du sceau de la Communauté française s'il a été délivré après cette date, ainsi que les titulaires du même certificat délivré, à partir de l'année civile 1994, par le jury de la Communauté française;
- 2° soit du certificat d'enseignement secondaire supérieur délivré au plus tard à l'issue de l'année scolaire 1992–1993 accompagné, pour l'accès aux études de premier cycle d'un cursus de type long, du diplôme d'aptitude à accéder à l'enseignement supérieur;
- 3° soit d'un diplôme délivré par un établissement d'enseignement supérieur en Communauté française sanctionnant un grade académique délivré en application du présent décret, soit d'un diplôme délivré par une institution universitaire ou un établissement organisant l'enseignement supérieur de plein exercice en vertu d'une législation antérieure;
- 4° soit d'un certificat ou diplôme d'enseignement supérieur délivré par un établissement d'enseignement de promotion sociale;
- 5° soit d'une attestation de succès à un des [examens d'admission](#) organisés par les établissements d'enseignement supérieur ou par un jury de la Communauté française; cette attestation donne accès aux études des secteurs, des domaines ou des cursus qu'elle indique;
- 6° soit d'un diplôme, titre ou certificat d'études similaire à ceux mentionnés aux littéras précédents délivré par la Communauté flamande, par la Communauté germanophone ou par l'Ecole royale militaire;
- 7° soit d'un diplôme, titre ou certificat d'études étranger reconnu équivalent à ceux mentionnés aux littéras 1° à 4° en application d'une législation fédérale, communautaire, européenne ou d'une convention internationale;

Remarques :

Les demandes d'équivalence doivent être introduites auprès du [Service des équivalences](#) du Ministère de l'Enseignement supérieur et de la Recherche scientifique de la Communauté française de Belgique dans le respect des délais fixés par celui-ci.

Les deux titres suivants sont reconnus équivalents d'office au Certificat d'enseignement secondaire supérieur (CESS) :

- baccalauréat européen délivré par le Conseil supérieur de l'Ecole européenne,
- baccalauréat international délivré par l'Office du baccalauréat international de Genève.

8° soit du diplôme d'aptitude à accéder à l'enseignement supérieur (DAES) conféré par le jury de la Communauté française.

Conditions d'accès spécifiques

- L'accès aux études de 1er cycle (bacheliers) aux candidats de nationalité hors Union européenne qui ne sont pas assimilés aux ressortissants belges est conditionné aux critères suivants :
 - ne pas avoir obtenu de diplôme d'enseignement secondaire depuis plus de 3 ans maximum. Exemple: pour une demande d'admission pour l'année académique 2024-2025, vous devez avoir obtenu votre diplôme lors des années académiques 2021-2022, 2022-2023 ou 2023-2024. En Communauté française de Belgique, l'année académique s'étend du 14 septembre au 13 septembre.
 - ne pas être déjà titulaire d'un diplôme de 1er cycle
- Les candidats, quelle que soit leur nationalité, disposant d'un diplôme d'études secondaires d'un pays hors Union européenne, doivent avoir obtenu une moyenne de 13/20 minimum ou, à défaut, d'avoir obtenu cette moyenne, avoir réussi une année d'études en Belgique (par exemple spéciale Maths/sciences).
- Pour tout diplôme d'études secondaires **issu d'un pays de l'Union européenne**, la demande d'admission **doit** contenir l'équivalence de votre diplôme ou, à tout le moins, la preuve du dépôt de la demande d'équivalence auprès de la Fédération Wallonie-Bruxelles (Communauté française de Belgique). Pour toute information relative à l'obtention d'une équivalence, veuillez-vous référer au [service compétent](#).

PÉDAGOGIE

GESTION ET CONTACTS

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 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

Gestion du programme

Faculté

Entité de la structure

Dénomination

Secteur

Sigle

Adresse de l'entité

SSH/ESPB

Faculté des sciences économiques, sociales, politiques et de la communication Saint-Louis ([ESPB](#))

Secteur des sciences humaines ([SSH](#))

ESPB

Boulevard du Jardin Botanique 43 - bte

1000 Bruxelles

Mandat(s)

- Doyen : Abraham Franssen

Responsable académique du programme: [Jean-François Fagnart](#)

Personne(s) de contact

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