



# Bachelor in Business engineering

## Option Anglais

BA-INGE | BA-INGEE | 2024-2025

### Programme mnemonic

BA-INGE

> Option *Anglais* : BA-INGEE

### Exists also in

> Option *Français* : BA-INGEF

### Studies level

Bachelor

### Learning language

english

### Schedule

office hours

### Studies category / subcategory

Economics and business management / Business management

### Campus

Solbosch

theory, human resources management, management control, etc. This rigorous and varied program allows students to later specialize in numerous management areas.

### \*\*Pedagogical Methods and Team\*\*

The pedagogical methods advocated by Ernest Solvay have established the reputation of the Solvay Brussels School of Economics and Management. The quality of its programs relies on a demanding regime that combines theory with practice. Thus, students benefit from a quality scientific background, rigorous training in economic and management sciences, numerous opportunities for mobility, and language learning.

Constantly adapting, the programs reflect the evolutions of various disciplines in Economics and Management. Recently adjusted to the changes in the economic world, the pedagogical methods rely notably on case studies, seminars, and group projects. This approach maximizes opportunities for interaction between students and faculty. The curriculums aim to stimulate entrepreneurship, analytical capability, decision-making, listening to others, teamwork, and global awareness.

Support for success is implemented from the beginning of the program to allow students, on a voluntary basis, to address any initial deficiencies (see below "support for success").

## Programme objectives

This bachelor's program equips students with a comprehensive set of foundational knowledge and skills in management and exact sciences, supplemented by courses in general culture and languages. It also aims to prepare students for advanced studies in management sciences at the master's level. This program enables students to grasp the full range of organizational aspects of a business.

The curriculum includes a broad core component, enhanced by elective courses organized into "minors." These minors allow students to gradually begin their specialization. These minors are not organized for the year 2024-2025, as only Bloc 1 will be programmed.

This entails advanced training in sciences and quantitative methods (chemistry, physics, mathematics, and statistics), the study of two foreign languages, according to the student an apprenticeship path, and courses social sciences focused on management and economics, psychology, and corporate management; private, commercial, and tax law; economic history and geography; sociology, and marketing. The latter part of the program introduces several management disciplines: financial

## Programme's added value

This versatile program combines theory and practice, providing students with the fundamental academic underpinnings of management for seamless integration into the management environment. The Business Engineering program blends exact sciences (chemistry, physics, mathematics) with management aspects, complemented by courses in law, humanities, statistics, and economics, as well as solid foundations in English and Dutch.

### \*\*Solvay Brussels School's Assets\*\*

- > A Faculty of the ULB, an international university located at **the heart of Europe**.
- > An **international faculty** composed of high-level researchers and recognized professionals, ensuring that teachings reflect the current state of knowledge and adapt to the evolutions of the economic and financial sectors.
- > **Demanding and rigorous** teachings based on a multidisciplinary and analytical approach, fostering the development of critical thinking and problem-solving skills.
- > **Varied pedagogical methods** (case studies, seminars, group projects), optimizing interactions between students and teachers.



- **Students from diverse backgrounds** (up to 80% international students in some programs).
- A **comprehensive Faculty**, offering training from bachelor to tailor-made programs for businesses to best meet the needs of economic and financial sectors.
- **International accreditations**: EQUIS (European Foundation for Management Development) and AMBA (Association of Master of Business Administration). AACSB (Association to Advance Collegiate Schools of Business) accreditation is pending.

#### **\*\*Professional Assets\*\***

To facilitate our students' integration into the workforce, the faculty has established several programs and services offered to students:

- Credited internships [<http://www.solvay.edu/credited-internship-programme>] in companies (full-time, minimum 3 months - maximum 6 months, abroad or in Belgium) give students the opportunity to gain their first professional experience, test their training, and develop their professional network.
- The Career Service [<http://www.solvay.edu/career-services>] advises and guides students in their job search (Job Day, conferences, Career Book, various job search training sessions). Over time, the Faculty has developed an extensive network of recruiters and numerous contacts with companies in Belgium and around the world.
- A Faculty with an **active network of 23,000 alumni**, spread across 100 countries.

#### **\*\*International Assets\*\***

The Faculty offers varied opportunities to study abroad (at master's level):

- The international exchange program, [<http://www.solvay.edu/outgoing-students>] with over 130 partners in 40 countries
- 3 double degrees [<http://www.solvay.edu/double-degrees>]
- QTEM network [<http://www.solvay.edu/master-qtem>] masters.

## Succeed in your studies

### Choose

The information and guidance counsellors at the InfOR-études [<https://www.ulb.be/en/studies-info-desk-1>] service will help you choose your studies throughout the year.

### Succeed

Take part in preparatory courses [<https://www.ulb.be/en/studies-info-desk-1>] or get help to succeed [<https://www.ulb.be/en/studies-info-desk-1>], before or during your studies.

### Get help

Apply for financial aid, look for accommodation or a student job, get support [<https://www.ulb.be/fr/aides-services-et-accompagnement/aid-services-and-support-1>] for your specific needs.

## International/Openness

In the current context of globalization and internationalization, SBS-EM deems it essential for students to study abroad. With

over 130 university or school partners, it offers students an exceptional opportunity to discover new pedagogical methods, adapt to another educational system, and study subjects. The exchange program also allows students to deepen their language skills, explore the world, discover new cultures, and different lifestyles. By learning to acclimate to a less familiar living environment, students will broaden their horizons, improve their adaptability, and be implicitly exposed to new values, such as tolerance and intellectual curiosity.

### **\*International Exchange Program**

Since 1990, the international exchange program has evolved to become one of the Faculty's most significant components. Today, partnerships have been established with over 130 schools or universities in more than 40 countries.

More information at [www.solvay.edu/outgoing-students](http://www.solvay.edu/outgoing-students).

### **\*QTEM Master Network**

The Quantitative Techniques for Economics and Management network was initiated by SBS-EM. This international network offers students the opportunity to undertake two international experiences (two exchanges or one exchange and one internship). Additionally, they will benefit from an immersion in an international company during an internship. The network currently has 23 partners and is expanding. More information at [www.qtem.org](http://www.qtem.org).

### **\*Double Degrees**

SBS-EM offers several double degree options:

- In Business Engineering, with Politecnico di Milano
- In Economics or Business Engineering, with HEC Montréal
- In Economic Governance and Public Policy in Europe, with LUISS Guido Carli
- In Business Economics, with the Universiteit Antwerpen

More information at [www.solvay.edu/double-degrees](http://www.solvay.edu/double-degrees) [<http://www.solvay.edu/double-degrees>].

### **\*Triple Degrees**

SBS-EM offers triple degree Bachelor diploma in Business Economics with Goethe University in Frankfurt, and LUISS University in Rome.

More information at <https://sbsem.ulb.be/international/outgoing-students/triple-degrees>

## Job opportunities

### Prospects

Pursuing an education at Solvay Brussels School does not entail committing to a single career path, but rather enables access to a diverse array of professional trajectories, both in Belgium and on an international scale. The multidisciplinary nature of our programs facilitates entry into a wide spectrum of vocations.

By augmenting a bachelor's degree with a master's in business engineering, Management Science, or Economic Sciences, students broaden their prospects significantly:

- Consultant in management, strategy, or information technology
- Entrepreneur
- Human resources management
- Brand or product manager in marketing or distribution sectors





- Financial analyst, specialist in mergers and acquisitions
- Logistics manager
- Auditor
- Project manager
- Business analyst
- Management controller
- Consultant in economics
- Economist
- Policy advisor or analyst in an economic policy "think tank"

- Researcher in economics
- Statistical analyst

Please note, this list of prospects is not exhaustive and is provided for illustrative purposes only.

**Jury President**

Germain VAN BEVER

**Jury Secretary**

Bertrand COLLIGNON



# Bachelor in Business engineering

## Option Anglais

### Bloc 1 | BA-INGEE | BA-INGE

## Compulsory courses

CHIM-S171	<b>Chemistry</b>   Antoine Aerts (Coordinator) ⌚ 5 credits [lecture: 36h, tutorial classes: 24h] 📅 first and second terms 🗨 English
ECON-S1702	<b>Introduction to microeconomics</b>   Chrissopighi BRAILA (Coordinator) and Paula GOBBI ⌚ 5 credits [lecture: 36h, tutorial classes: 24h] 📅 first term 🗨 English
ECON-S1703	<b>Introduction to macroeconomics</b>   Fabio Blasutto (Coordinator) ⌚ 5 credits [lecture: 36h, tutorial classes: 24h] 📅 second term 🗨 English
ENVI-S171	<b>System theory : from science to a sustainable society</b>   Bertrand COLLIGNON (Coordinator) ⌚ 5 credits [lecture: 30h, tutorial classes: 12h] 📅 first term 🗨 English
GEST-S171	<b>Introduction to accounting</b>   Marie-Pierre Lenain (Coordinator) ⌚ 5 credits [lecture: 36h, tutorial classes: 8h] 📅 second term 🗨 English
HIST-S171	<b>Economic history and economic geography</b>   Gilles VAN HAMME (Coordinator) and Julien del Marmol ⌚ 5 credits [lecture: 48h] 📅 second term 🗨 English
MATH-S1711	<b>Mathematics : calculus</b>   Germain VAN BEVER (Coordinator) ⌚ 5 credits [lecture: 30h, tutorial classes: 30h] 📅 first term 🗨 English
MATH-S1712	<b>Mathematics : linear algebra</b>   Bram DE ROCK (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 second term 🗨 English
PHYS-S1701	<b>Physics: electromagnetism</b>   Spencer Jolly (Coordinator) ⌚ 5 credits [lecture: 30h, tutorial classes: 24h] 📅 second term 🗨 English
STAT-S172	<b>Statistics 1</b>   Afrae Hassouni (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first term 🗨 English

## First language

*One course chosen from the following*

LANG-S1003 (optional)	<b>French I</b>   Béatrice Vermeulen (Coordinator) ⌚ 5 credits [language practice: 48h] 📅 first and second terms 🗨 English/French
LANG-S1701 (optional)	<b>Academic english</b>   Anne Thérèse Carpenter (Coordinator) ⌚ 5 credits [personal assignments: 48h] 📅 first and second terms 🗨 English

## Second language

*One course chosen from the following*

LANG-S1004 (optional)	<b>Dutch I</b>   Evie TOPS (Coordinator) and Pascale THIELEMANS ⌚ 5 credits [language practice: 48h] 📅 first and second terms 🗨 English
LANG-S1005 (optional)	<b>German I</b>   Barbara OBST (Coordinator) ⌚ 5 credits [language practice: 48h] 📅 first and second terms 🗨 English

# Bachelor in Business engineering

## Option Anglais

### Bloc 2 | BA-INGEE | BA-INGE

## Compulsory courses

CHIM-S201	<b>Industrial applications of chemistry</b>   Prakash VENKATESAN (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 24h, practical work: 12h] 📅 second term 🗨 English
DROI-S2701	<b>Economic law and private law</b> ⌚ 5 credits [lecture: 48h] 📅 first term 🗨 English
ECON-S273	<b>Monetary theory</b> ⌚ 5 credits [lecture: 36h] 📅 first term 🗨 English
GEST-S2002	<b>Sustainable Development, Business and Policy</b>   Estelle CANTILLON (Coordinator), Bertrand COLLIGNON and Bruno VAN POTTELSBERGHE ⌚ 5 credits [lecture: 48h] 📅 second term 🗨 English
GEST-S2701	<b>Accounting &amp; financial statement</b> ⌚ 5 credits [lecture: 36h, tutorial classes: 24h] 📅 first and second terms 🗨 English
INFO-S2701	<b>Computer sciences</b> ⌚ 5 credits [lecture: 24h, tutorial classes: 36h] 📅 first term 🗨 English
MATH-S272	<b>Mathematics 2</b> ⌚ 5 credits [lecture: 30h, tutorial classes: 30h] 📅 first term 🗨 English
PHYS-S271	<b>Applied physics</b> ⌚ 5 credits [lecture: 24h, tutorial classes: 24h, practical work: 12h] 📅 second term 🗨 English
STAT-S272	<b>Statistics 2</b> ⌚ 10 credits [lecture: 48h, tutorial classes: 36h] 📅 first and second terms 🗨 English

## First language

*One course chosen from the following*

LANG-S2003 (optional)	<b>French II</b> ⌚ 5 credits [language practice: 60h] 📅 first and second terms 🗨 English
LANG-S202 (optional)	<b>Anglais II</b>   Mady DECRICK (Coordinator) and David Albert BEST ⌚ 5 credits [language practice: 60h] 📅 academic year 🗨 English

## Second language

*One course chosen from the following*

LANG-S212 (optional)	<b>Néerlandais II</b>   Evie TOPS (Coordinator), Sofie VAN GEIJN and Gert Van Der Plas ⌚ 5 credits [tutorial classes: 60h] 📅 academic year 🗨 Dutch
LANG-S220 (optional)	<b>Allemand II</b>   Dorothea GASSENMEYER (Coordinator) ⌚ 5 credits [language practice: 36h] 📅 academic year Accessible uniquement sur dossier

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### Bloc 3 | BA-INGEE | BA-INGE

## Compulsory courses

DROI-S3002	<b>Psychologie et droit du travail</b>   Vanessa DE GREEF (Coordinator) and Alba Jasini ⌚ 5 credits [lecture: 48h] 📅 first and second terms 🗨 French
DROI-S3701	<b>Tax law</b> ⌚ 5 credits [lecture: 36h] 📅 second term 🗨 English
GEST-S204	<b>Economic and social development (Chaire Marie et Alain Philippson)</b>   Yvan Guichaoua (Coordinator), Dirk JACOBS and Philip VERWIMP ⌚ 5 credits [lecture: 48h] 📅 first term 🗨 English
GEST-S303	<b>Marketing management</b>   Virginie BRUNEAU (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 12h] 📅 second term 🗨 English
GEST-S307	<b>Theory of innovation, entrepreneurship and strategy (Solvay Chair of Innovation)</b>   Bruno VAN POTTELSBERGHE (Coordinator), François FAELLI and Olivier WITMEUR ⌚ 5 credits [lecture: 36h, practical work: 24h] 📅 second term 🗨 English
GEST-S3701	<b>Management of human ressources</b> ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first and second terms 🗨 English
GEST-S3702	<b>Applied science and technology seminar</b> ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first and second terms 🗨 English
GEST-S371	<b>Theoretical finance</b> ⌚ 5 credits [lecture: 24h, tutorial classes: 12h] 📅 first term 🗨 English
GEST-S375	<b>Financial audit</b> ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first term 🗨 English
STAT-S301	<b>Introduction to econometrics</b>   Germain VAN BEVER (Coordinator) ⌚ 5 credits [lecture: 24h, tutorial classes: 24h] 📅 first term 🗨 English

## First language

*One course chosen from the following*

LANG-S3003 (optional)	<b>French III</b> ⌚ 5 credits [language practice: 60h] 📅 first and second terms 🗨 English
LANG-S302 (optional)	📅 unknown term

## Second language

*One course chosen from the following*

LANG-S312 (optional)	<b>Néerlandais des affaires III</b>   Evie TOPS (Coordinator), Katrijne MERRIGAN and Sofie VAN GEIJN ⌚ 5 credits [language practice: 60h] 📅 first and second terms 🗨 Dutch
LANG-S320 (optional)	<b>Allemand III</b>   Barbara OBST (Coordinator) ⌚ 5 credits [language practice: 36h] 📅 academic year 🗨 German

