



MA-INGE | 2024-2025

Master in Business engineering

Programme mnemonic

MA-INGE > Focus *Professional* : M-INGEF

Studies level Master 120 credits

Learning language english and french

Schedule office hours

Studies category / subcategory

Economics and business management / Business management

Campus Solbosch

SOIDOSCII

Programme objectives

This very intensive and demanding programme, prepares future executives, leaders, and entrepreneurs who can work in any type of industry and organisation-for-profit, non-profit, or public. Students in this programme develop the ability to understand and engage in all areas of business administration. A business engineer is able to integrate all main functions and departments of an organisation and to arbitrate between them. Students develop their knowledge and know-how in all fields of management (strategy, finance, marketing, human resources and leadership, operations and supply-chain, innovation, information systems, and digital business), while also learning key skills involved in defining a strategy, enacting changes, or creating a business: information analysis, problem solving, project leadership, personnel management, communication, ethics in business, critical thinking, entrepreneurial drive, team work, and self-management.

Programme's added value

What the Solvay Brussels School has to offer

> A location at the **heart of Europe**, within a comprehensive research university: the Université libre de Bruxelles.

- > An **international faculty** with a staff of high-level researchers and accomplished practitioners, who work together to ensure that the training they provide is both relevant for business and policy practice and corresponds to the state of art.
- > A **tradition of rigorous** and demanding curricula based on solid multidisciplinary and analytical training, promoting critical thinking and problem-solving skills.
- > A **diversity of teaching methods** that are constantly revised to ensure teaching effectiveness.
- > A **diverse and international** student body (up to 80% in some Master programmes).
- > A offering covering economics and business from the bachelor to in-company training.
- Accreditation from EQUIS (European Foundation for Management Development) and AMBA (Association of Masters of Business Administration). AACSB (Association to Advance Collegiate Schools of Business) accreditation is underway.

Career services

SBS-EM offers its students a number of resources for career development:

- Credited work placements [http://www.solvay.edu/creditedinternship-programme] (full-time, 3-month minimum – 6month maximum) allow participating students to gain work experience, apply their academic training, and develop their professional network before graduation.
- > Career services [http://www.solvay.edu/career-services] provide practical guidance and preparation for the job market (workshops, writing a CV and a cover letter, simulated interviews, LinkedIn profile management, etc.) and organise events (lectures and seminars) with prominent business figures, presenting companies and their employment opportunities. Over the years, the SBS-EM has developed a wide network of recruiters and alumni and has established contacts with companies throughout Belgium and around the world.
- From their graduation onwards, students benefit from a strong and active alumni network [http://www.solvay.edu/ alumni] with 23,000 members in 100 countries.

Study-abroad programmes

The Master in Business Engineering offers several opportunities to study abroad:

- > The international exchange programme [http:// www.solvay.edu/outgoing-students], with more than 130 partner universities in 40 countries
- > The double degree [http://www.solvay.edu/creditedinternship-programme] specialised in Operations Management, with the Politecnico di Milano
- > The Master with the QTEM network [https://www.qtem.org/]

Teaching methods

SBS-EM programmes emphasise the acquisition of both analytical and problem-solving skills. They combine conceptual courses—where students learn techniques and their theoretical underpinnings—with practical workshops and individual and team-based projects—where students can test their understanding of the theory and develop their ability to apply it creatively to real problems. Critical, creative, and independent thinking is required.

SBS-EM leverages its wide-ranging international exchange programmes to offer students training opportunities abroad during their studies. This Master also gives students the possibility to include a credited work placement in their curriculum.

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/studiesinfo-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

SBS-EM prepares its graduates for careers in multicultural and international environments. The curriculum includes language courses, which enable students to work in multilingual environments. Most courses cover the international dimensions of policy and management decision-making. Lastly, students can avail themselves of a rich offering of study-abroad and joint degree programmes. These international experiences offer them an opportunity to enrich their curriculum and broaden their horizons, and are an essential element of professional life in a globalised world.

International Exchange Programme

Students may spend one semester abroad in one of our 130 partner universities. For more information, visit www.solvay.edu/ outgoing-students.

Double Degree with the Politecnico di Milano, specialised in Operations Management

The Master in Business Engineering offers a double degree (1st year at ULB, 2nd year at the partner institution) with the Politecnico di Milano [https://www.polimi.it/en/], Italy. This programme includes a credited work placement. For more information, visit www.solvay.edu/double-degrees.

The QTEM networked master

Qualified students in the Master in Business Engineering can enrol in the Quantitative Techniques for Economics and Management (QTEM) Master programme. The QTEM master gives participants enhanced training in quantitative and analytical skills and two international experiences (two exchange periods or one exchange period and one long-term work placement). The QTEM network currently includes 23 partners. For more information, visit **www.qtem.org.**

Job opportunities

The comprehensive and multivalent nature of our programme lets graduates access a wide range of careers, from consulting and auditing to executive positions. Essentially, ULB's business engineers are ready to carry out any mission fostering collaborative work and innovation, which means jobs that require management and decision making skills:

- > Executive positions in any type of organisation (public, private, or NGO) and industry
- > Management, strategy, and IT consulting
- > Entrepreneurship
- > Auditing or management control
- > Financial analysis and mergers and acquisitions (M&A)
- > Brand management

Notable alumni include:

- > Hadi Kamouh , Group Chief Marketing Officer, Banque Degroof Petercam
- > Dominique Leroy, Chief Executive Officer, Proximus
- > Jean-Michel Paul, Founder & CEO, Acheron capital Ltd.
- > Nicolas Steisel, Co-founder, Exki
- > Jean Van Wetter, Chief Executive Officer, Handicap International Belgique

Contacts

- 🔀 masters.solvay@ulb.be
- 🕓 +32 2 650 41 74
- http://www.solvay.edu/bachelors-masters

Jury President Hugues PIROTTE

Jury Secretary Olivier WITMEUR







Master in Business engineering Focus Professional

The programme integrates key differentiating courses reinforcing the links between the two disciplines of business development and engineering, to shape the business engineers of tomorrow.

The programme consists in :

- ¹ A strong core of compulsory courses in the main disciplines of management (45 ECTS).
- ² An international experience through either (i) an international exchange in the very rich list of other universities, or (i) and international traineeship (25 ECTS).
- ³ Two applied seminars, representing practical experience : a field project and a strategy seminar (10 ECTS).
- ⁴ Two elective course pairs to be freely chosen among a rich catalog of course pairs, each one focusing on a particular metier (20 ECTS).
- ⁵ A final master's thesis, integrating a development course (20 ECTS).

Bloc 1 | M-INGEF | MA-INGE

Mandatory Courses

GEST-S403	Advanced Marketing (Chaire InBev-Baillet Latour) Sandra ROTHENBERGER (Coordinator) ^① 5 credits [lecture: 36h] [△] first term [○] English
GEST-S406	Advanced Strategy Timo Ehrig (Coordinator) and François FAELLI © 5 credits [lecture: 36h] 🛗 second term 🔎 English
GEST-S407	Operations management Evelyne VANPOUCKE (Coordinator) ③ 5 credits [lecture: 24h, practical work: 12h, project: 12h] 简 first term
GEST-S408	O 5 credits [lecture: 36h, tutorial classes: 24h]
GEST-S409	Advanced accounting Pierre-Hugues BONNEFOY-CUDRAZ (Coordinator) and Jean-Paul LOOZEN ② 5 credits [lecture: 36h, tutorial classes: 24h] 🛗 first term 🔎 English
GEST-S414	Banking and asset management Griselda DEELSTRA (Coordinator) and Mathias SCHMIT Image: State of the state o
GEST-S482	The digital firm Nicolas VAN ZEEBROECK (Coordinator) and Vincent LION ③ 5 credits [lecture: 24h, tutorial classes: 24h]
GEST-S566	Advanced entrepreneurship Olivier WITMEUR (Coordinator), Judith BEHRENS and Rodolphe MORAINE

Competences

Take 20 credits by choosing freely 20 ECTS among the following competences, within maximum 2 different modules

¹ Finance, Accounting and Control (FAC)

- ² Entrepreneurship, Strategy and Governance (ESG)
- ³ Technology and Operations Management (TOM)
- ⁴ Marketing (MKTG)

A total of 20 credits chosen from the following

FAC - Module 1

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GEST-S400 (optional)	O 5 credits [lecture: 36h]
GEST-S446	Analyse et gestion des coûts Olivier CHRISTOPHE (Coordinator) and Katty IMBERECHTS
(optional)	② 5 credits [lecture: 24h, tutorial classes: 24h] 📋 second term 🔎 French
GEST-S466	La criminalité financière dans le monde de l'entreprise Pierre-Hugues BONNEFOY-CUDRAZ (Coordinator)
(optional)	② 5 credits [lecture: 24h] 🛗 second term 🔎 French
GEST-S485	Advanced management control Fouad ELOUCH (Coordinator)
(optional)	② 5 credits [lecture: 24h] 🛗 second term 🔎 English
GEST-S486	Enterprise-wide & sustainability-wise risk management Pierre Poncelet (Coordinator)
(optional)	② 5 credits [lecture: 24h] 🗂 second term 🔎 English
GEST-S501 (optional)	Audit Romuald BILEM (Coordinator) ③ 5 credits [lecture: 24h]
	FAC - Module 2
GEST-S4007	Impact Investing Céline VAESSEN (Coordinator) and Bruno Farber
(optional)	② 5 credits [lecture: 24h] 🗂 second term 🔎 English
GEST-S428	Corporate governance and Stewardship (Chaire Léo Goldschmidt) Marco BECHT (Coordinator)
(optional)	⊙ 5 credits [lecture: 24h] 🛗 second term 🔎 English
GEST-S499	Promotion & Investissement Immobiliers: Principes fondamentaux Gaëtan PIRET (Coordinator)
(optional)	② 5 credits [lecture: 36h] 🛗 second term 🔎 French
GEST-S506	Capital markets & investment banking Christian de HAAIJ (Coordinator)
(optional)	② 5 credits [lecture: 48h] 🛗 second term 🔎 English
	FAC - Module 3
GEST-S497	Modélisation mathématique en finance Carolina LAURETI (Coordinator)
(optional)	② 5 credits [lecture: 24h] 🛗 second term 🔎 English
GEST-S503 (optional)	Image: Second system Image: Second system <td< td=""></td<>
GEST-S531 (optional)	Image: Second term Image: Second term Image: Second
GEST-S569 (optional)	Derivatives, Financial risk management & Governance Hugues PIROTTE (Coordinator) and Frederic Van Der Schueren ③ 10 credits [lecture: 54h, tutorial classes: 24h]
	ESG - Module 1
GEST-S423 (optional)	IP Management and Technology Transfer (Chaire Solvay) Elise Petit (Coordinator) Image: Stredits [lecture: 24h, tutorial classes: 12h] Image: Stredits Coordinator) Image: Stredits Stredits Stredits Stredits Image: Stredits Stredits Stredits
GEST-S471	Management and sustainable development : constraints and opportunities Eric Monami (Coordinator)
(optional)	② 5 credits [lecture: 36h, seminars: 36h] 🛗 second term 🔎 English
GEST-S484 (optional)	Innovation strategy Manuel HENSMANS (Coordinator) ② 5 credits [lecture: 36h] ^m second term
GEST-S492	Energy policy, sustainability & management Adel El Gammal (Coordinator), Julien BLONDEAU and Michel HUART
(optional)	② 5 credits [lecture: 36h, seminars: 24h] 🛗 first term 🜻 English
GEST-S516	Seminar of emerging technologies Marc BECQUET (Coordinator)
(optional)	① 5 credits [seminars: 24h] 📋 second term 📿 English
	ESG - Module 2
GEST-S440 (optional)	Applied marketing analytics Sandra ROTHENBERGER (Coordinator) and Philippe MAUCHARD ④ 5 credits [lecture: 48h]

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GEST-S493 (optional)	The CEO Perspective Pierre GURDJIAN (Coordinator) ③ 5 credits [lecture: 48h] ⁽¹⁾ second term C English	
GEST-S494 (optional)	Managing errors in organisations (Chaire InBev Baillet Latour) Paul VERDII ② 5 credits [lecture: 48h]	N (Coordinator)
GEST-S496 (optional)	Research Seminar in Business History (Chaire Kurgan-van Hentenryk) Ker Marmol 3 credits [lecture: 24h] 🛗 second term 📿 English	nneth BERTRAMS (Coordinator) and Julien del
GEST-S498 (optional)	Negotiation Skills Claudia TOMA (Coordinator) ② 5 credits [lecture: 24h, seminars: 12h]	
	TOM - Module 1	
GEST-S420 (optional)	Advanced Data Science and Machine Learning Pierre DEVILLE (Coordinato	br)
GEST-S423 (optional)	IP Management and Technology Transfer (Chaire Solvay) Elise Petit (Coord ⊙ 5 credits [lecture: 24h, tutorial classes: 12h] 🛗 second term 📿 English	inator)
GEST-S450 (optional)	Project management Frederic HOFFMANN (Coordinator) ③ 5 credits [lecture: 24h] ☐ second term	
MECA-H409 (optional)	Design methodology Alain DELCHAMBRE (Coordinator) ③ 5 credits [lecture: 24h, tutorial classes: 24h, personal assignments: 12h]	English
STAT-S401 (optional)	Analyse statistique multivariée Catherine Dehon (Coordinator) ⊙ 5 credits [lecture: 24h, tutorial classes: 12h] 🛗 second term 📿 French	
	MKTG - Module 1	
GEST-S440 (optional)	Applied marketing analytics Sandra ROTHENBERGER (Coordinator) and Ph ② 5 credits [lecture: 48h] 🛗 second term 📿 English	nilippe MAUCHARD
GEST-S441 (optional)	Global marketing Virginie BRUNEAU (Coordinator) ⊙ 5 credits [lecture: 24h]	
GEST-S442 (optional)	Value-based pricing Sandra ROTHENBERGER (Coordinator) ③ 5 credits [lecture: 24h]	
GEST-S491 (optional)	Omnichannel & customer relationship strategies Virginie BRUNEAU (Coor O 5 credits [lecture: 24h]	dinator)
GEST-S508 (optional)	Integrated communication - Communication intégrée : concepts et travaux Hugues REY	pratiques Philippe Biltiau (Coordinator) and

② 5 credits [lecture: 24h] 🗎 second term 🖇 ⊂ English

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Master in Business engineering Focus Professional

Bloc 2 | M-INGEF | MA-INGE

Mandatory courses

 MEMO-S505
 Master-Thesis/Mémoire
 Olivier WITMEUR (Coordinator)

 ② 20 credits [mfe/tfe: 360h]

 ^m first and second terms

 _p English/French

International Internship or Exchange programme

HULB-S500 : Coordinatrice Tamara Schuller STAG-S500 : Coordinatrice Pascaline Flon.

One course chosen from the following

 HULB-S500 (optional)
 Exchange programme © 25 credits in first and second terms in English

 STAG-S500 (optional)
 Credited internship with a critical mindset | Jean-Nicolas Lambert (Coordinator), Xavier Clabots, Brigitte Marchand and Claudio TRUZZI © 25 credits [work placement: 600h] in first term in English/French

Courses depending on the timing of your Exchange/Internship

One course chosen from the following	
GEST-S4005 (optional)	Comportement organisationnel, leadership et éthique des affaires Michel VERSTRAETEN (Coordinator) and Marek HUDON ② 5 credits [lecture: 24h, tutorial classes: 24h] 🛗 first term 🔎 French
GEST-S488 (optional)	Comportement organisationnel, leadership et éthique des affaires Michel VERSTRAETEN (Coordinator), Laurence BOOGAERTS and Marek HUDON © 5 credits [lecture: 24h, tutorial classes: 24h] 🗂 second term 🔎 French

Seminar and Field project

Seminar

You will be assigned to one of the following seminars

One course chosen from the following

GEST-S500	Seminar of Business Strategy Stefan DAB (Coordinator)
(optional)	② 5 credits [seminars: 12h]
GEST-S524	Seminar of Business Strategy Karim Chouikri (Coordinator)
(optional)	② 5 credits [seminars: 12h] 🛗 second term 🔎 French
GEST-S525	Seminar of Business Strategy Stéfan Descheemaeker (Coordinator)
(optional)	② 5 credits [seminars: 12h]

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GEST-S548 (optional)	Seminar of Business Strategy ② 5 credits [seminars: 12h] ☐ second term ○ English
GEST-S549	Seminar of Business Strategy Fabian SEUNIER (Coordinator)
(optional)	② 5 credits [seminars: 12h] — first term — English
GEST-S577	Seminar of Business Strategy Christophe EVERS (Coordinator) and Hugues PIROTTE
(optional)	© 5 credits [seminars: 12h] 📋 second term 🔉 French

GEST-S578 Seminar of Business Strategy Olivier Gillerot (Coordinator) and Nicolas Bloch

🕑 5 credits [seminars: 12h] 🛛 🛗 second term 📿 English

Field Project

One course chosen from the following

GEST-S522 (optional)	Field project: Finance Stefan DAB (Coordinator) ① 5 credits [seminars: 12h] ⁽¹⁾ academic year ⁽²⁾ English
GEST-S523 (optional)	Field project: Marketing ③ 5 credits [seminars: 12h] 1 academic year ○ English/French
GEST-S527 (optional)	Field project: Organisation Denis HERBAUX (Coordinator) ③ 5 credits [seminars: 12h] ⁽¹⁾ academic year ⁽²⁾ English/French
GEST-S528 (optional)	Field project: Healthcare Arnaud Bruyneel (Coordinator) ③ 5 credits [seminars: 12h] ⁽¹⁾ academic year ⁽²⁾ English/French
GEST-S529 (optional)	Field project: Human Resources Lucy VAN HOVE (Coordinator) ③ 5 credits [seminars: 12h] ⁽¹⁾ academic year ⁽²⁾ English
GEST-S530 (optional)	Field project: IT governance Georges ATAYA (Coordinator) ① 5 credits [seminars: 12h] ^m academic year ^m English/French
GEST-S538 (optional)	Field project Hugues PIROTTE (Coordinator) and Olivier WITMEUR ③ 5 credits [seminars: 12h] ⁽¹⁾ first and second terms
GEST-S562 (optional)	Image: Field project: Finance Image: O 5 credits [seminars: 12h] Image: D 5 credits [seminars: 12h]
GEST-S563 (optional)	Field project: Non profit Nicolas JANSSEN (Coordinator) ③ 5 credits [seminars: 12h] ⁽¹⁾ academic year ⁽²⁾ English/French

QTEM student specific course

GEST-S510 - Global Business analytics Challenge - 8 crédits - M. Michele Cincera et M. Antonio Pacifico