

## Block view of the study programme

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### Block 1

#### Pre-requisite

*Notice* : Students admitted on the basis of an application for the *Science and Technology* focus may be requested, depending on their prior academic studies, to attend the following complementary courses:

GEST5001-1 *Integration activities in science and technology - part 1* - Pierre DENEYE - [8d Proj.] TA - - [+] 2

GEST5002-1 *Integration activities in science and technology - part 2* - Pierre DENEYE - [8d Proj.] TA - - [+] 2

*Notice* : Students admitted on the basis of an application at the end of the *Digital Business* track of the *Supply Chain Management and Business Analytics* focus may be requested, depending on their prior academic studies, to attend the following complementary courses:

GEST5003-1 *Integration activities in digital business - part 1* - Michael SCHYNS - [8d Proj.] TA - - [+] 2

GEST5004-1 *Integration activities in digital business - part 2* - Michael SCHYNS - [8d Proj.] TA - - [+] 2

#### Compulsory courses

INFO2048-1 *Business Analytics* (english language) - Michael SCHYNS Q2 30 - - 5

INFO0934-8 *Information Technology Management* (english language) - Samedi HENG, Ashwin ITTOO Q2 30 - - 5

GEST6001-1 *Preparation for Master Thesis and Internship* (english language) - Stéphanie AERTS, Sophie LERUTH Q2 10 - - 1

#### Optional courses

Choose one of the following modules :

##### Module 1 (aimed at internationally mobile students)

ERAS0017-1 *Erasmus HEC (MIG)* - N... - - - 28

##### Module 2

GEST3752-1 *Change Management* (english language) - Olivier LISEIN Q1 30 10 - 5

FINA0050-1 *Corporate Finance - Lectures and Seminars* (english language) - Marie LAMBERT Q1 30 - - 5

GEST3754-1 *Entrepreneurship and Innovation* (english language) - Frédéric OOMS Q1 18 - - 3

GEST6003-1 *International Business Engineering Seminar* (english language) - Yasemin ARDA, Alper SEN Q1 30 - - 5

MARK9302-1 *International Marketing Seminar* (english language) - Claire GRUSLIN, Benjamin ÖSTERLE Q1 30 - - 5

STAT0800-1 *Models and Methods in Applied Statistics* (english language) - Cédric HEUCHENNE Q1 30 - - 5

Select 1 language course out of the following :

*Notice* : access to basic-level language courses is subject to a number of requirements - see the HEC regulations

[...] One level 4 course or basic level 1

LANG1925-1 *German 4* (german language) - Marie MAWHIN Q2 30 - - 3

LANG1926-1 *Advanced German 4* (german language) - Laurent GIANOTTI Q2 30 - - 3

LANG1933-1 *Elementary German 1* - Marie MAWHIN Q2 30 - - 3

# Study programmes 2021-2022

## HEC Management School - University of Liege

### Master in business engineering (120 ECTS)

LANG9913-1	<i>Chinese 4</i> - Fang DONG	Q2	30	-	-	3
LANG6009-1	<i>Elementary Chinese 1</i> - Fang DONG	Q2	30	-	-	3
LANG1927-1	<i>Spanish 4</i> (spanish language) - Alba CARVAJAL LAGAREJO	Q2	30	-	-	3
LANG1928-1	<i>Advanced Spanish 4</i> (spanish language) - Alexis ALVAREZ BARBOSA	Q2	30	-	-	3
LANG1934-1	<i>Elementary Spanish 1</i> - Alexis ALVAREZ BARBOSA	TA	30	-	-	3
LANG1929-1	<i>(Advanced) Italian 4</i> (italian language) - Alex BARDASCINO	Q2	30	-	-	3
LANG6010-1	<i>Elementary Italian 1</i> - Alex BARDASCINO	Q2	30	-	-	3
LANG1932-1	<i>Advanced Dutch 4</i> (dutch language) - Nicole ENGELEN, Elies SMEYERS	Q2	30	-	-	3
LANG1936-1	<i>Elementary Dutch 1</i> - Fanny NSITA	TA	30	-	-	3
LANG1954-1	<i>French beginner level 1</i> - ISLV, Marielle MARÉCHAL	Q2	30	-	-	3

Notice : the course LANG1954-1 is only open to non-French speaking foreign students

Choose one of the following courses :

Notice : students can only have one elementary level 1 language class in their master's programme

LANG1933-1	<i>Elementary German 1</i> - Marie MAWHIN	Q2	30	-	-	3
LANG6009-1	<i>Elementary Chinese 1</i> - Fang DONG	Q2	30	-	-	3
LANG1934-1	<i>Elementary Spanish 1</i> - Alexis ALVAREZ BARBOSA	TA	30	-	-	3
LANG6010-1	<i>Elementary Italian 1</i> - Alex BARDASCINO	Q2	30	-	-	3
LANG1936-1	<i>Elementary Dutch 1</i> - Fanny NSITA	TA	30	-	-	3
GEST3047-1	<i>Environmental Management</i> (english language) - Michaël TANS	Q1	18	-	-	3
GEST3029-1	<i>International Strategy</i> (english language) - Nathalie CRUTZEN, Anthony SANTINO	Q2	18	-	-	3
TECH0003-4	<i>Innovative technology projects</i> - Pierre DENEYE	Q2	24	-	-	4
INFO9002-1	<i>Software Development and Project Management</i> (english language) - Samedi HENG	Q2	24	-	-	4
ECON2306-1	<i>Data Management</i> (english language) - Malka GUILLOT	Q2	30	15	-	5

Choose one focus from the following :

#### Professional focus in Supply Chain Management and Business Analytics

MQGE0002-3	<i>Computational Optimization</i> (english language) - Yves CRAMA	Q2	30	-	-	5
LOGI0012-1	<i>Logistics and Transportation</i> (english language) - Sabine LIMBOURG	Q2	30	-	-	5
LOGI0013-1	<i>Operation Planning</i> (english language) - Yasemin ARDA	Q2	30	-	-	5

#### Professional focus in digital business

Notice : Registration only with a file (see admission conditions)

INFO9003-1	<i>Advanced Topics in Digital Business</i> (english language) - Ashwin ITTOO	Q2	30	-	-	5
INFO0902-1	<i>Data structures and algorithms</i> - Pierre GEURTS - [40h Proj.]	Q2	26	20	[+]	5
INFO0062-1	<i>Object-oriented programming</i> (english language) - Bernard BOIGELOT - [20h Proj.]	Q2	25	20	[+]	5

#### Professional focus in Financial Engineering

FINA0052-1	<i>Financial Derivatives</i> (english language) - Julien HAMBUECKERS	Q2	30	-	-	5
MQGE0007-1	<i>Financial Mathematics and Stochastic Calculus</i> (english language) - Célia PAQUAY	Q2	30	-	-	5

# Study programmes 2021-2022

## HEC Management School - University of Liege

### Master in business engineering (120 ECTS)

FINA0053-1 *Investments and Portfolio Management* (english language) - Georges HÜBNER Q2 30 - - 5

#### Professional focus in Sustainable Performance Management

FINA0011-2 *Audit* (english language) - Yves FRANCIS Q2 30 - - 5

FINA0061-1 *Business Modeling, Control and Planning* (english language) - Didier VAN CAILLIE Q2 30 - - 5

Choose one of the following courses :

FINA0030-1 *Consolidation and IFRS* (english language) - Patrice SCHUMESCH Q2 30 - - 5

FINA9001-1 *Sustainable Management Control* (english language) - Nathalie CRUTZEN Q2 30 - - 5

#### Professional focus in Intrapreneurship and Management of Innovation Projects

*Notice* : Registration only with a file (see admission conditions)

ECON2275-1 *Economics of Innovation* (english language) - Lionel ARTIGE Q2 30 - - 5

GEST3755-1 *Innovation Project Definition and Development (partim I)* (english language) - Olivier LISEIN - [100h AUTR] Q2 18 - [+] 5

GEST3757-1 *Strategy and Business Model Generation* (english language) - Frédéric OOMS - [100h AUTR] Q2 18 - [+] 5

#### Professional focus in Sciences and technologies

*Notice* : Accessible on application file (see admission conditions)

HULG9280-1 *Industrial chemistry* - Sophie PIRARD Q2 35 - - 3

HULG9282-1 *Logical systems* - Nathalie VETCOUR Q2 50 - - 4

HULG9281-1 *Graphic techniques* - Pierre ERNST, Etienne LEGRAND Q2 55 - - 5

HULG9283-1 *Technology and machining* - Bernard RAUSIN Q2 45 - - 3

#### Professional focus in management and technologies

*Notice* : Accessible on application file (see admission conditions)

FINA0092-1 *Financial Analysis and Corporate Financing* (english language) - Wouter TORSIN Q2 45 - - 5

FINA0091-1 *Market Finance in EU* (english language) - Caterina SANTI Q2 40 15 - 5

LOGI0010-1 *Supply Chain Management* (english language) - Yasemin ARDA Q2 45 - - 5

### Block 2

#### Compulsory courses

GPRO0002-1 *Skills workshops* - David HOMBURG TA - - - 5

GEST3753-1 *Business Ethics and Corporate Social Responsibility* (english language) - Virginie XHAUFLAIR - Suppl : Romain DAVID Q1 24 - - 4

#### Optional courses

Choose courses for a total of 28 credits among:

GTFE8003-1 *Project-Thesis* TA - - - 28

##### Prerequisite :

GEST6001-1 - Preparation for Master Thesis and Internship

GTFE0014-1 *Research-Thesis* TA - - - 18

##### Prerequisite :

GEST6001-1 - Preparation for Master Thesis and Internship

GSTG0016-1 *Internship* Q2 - - - 10

GEST1114-1 *Transdisciplinary project* - AnneChristine CADIAT, Anne CHANTEUX, Magali HERMAN, Thierry PIRONET TA - - - **10**

*Notice* : The multi-disciplinary project is compulsory and only accessible to students in the specialised focus in Sciences and Technologies & management option instead of the internship (GSTG0016-1)

GTFE9005-1 *Intrapreneurial Thesis* (english language) TA - - - **18**

**Prerequisite :**

GEST6001-1 - Preparation for Master Thesis and Internship

GEST3759-1 *Strategic, Organizational and Information System Audits* (english language) - Olivier LISEIN - [200h AUTR] TA 24 - [+]  
**10**

**Corequisite :**

GEST3767-1 - Consultant Roles and Responsibilities

GEST3766-1 - Project and Change Management

GEST3764-1 - Innovation Project Definition and Development (partim II)

GEST3050-1 - Creativity and Design

*Notice* : Courses GTFE9005-1 and GEST3759-1 are compulsory and only available to students enrolled in the focus Intrapreneurship and Management of Innovation Projects.

Choose one of the following courses :

GEST7004-1 *Master Thesis Methodology* (english language) - Frédéric DUFAYS Q1 12 - - **2**

**Prerequisite :**

GEST6001-1 - Preparation for Master Thesis and Internship

GEST7002-1 *Methodology of the final thesis* - Annie CORNET Q1 12 - - **2**

**Prerequisite :**

GEST6001-1 - Preparation for Master Thesis and Internship

Choisir 1 cours de langue parmi (poursuite du choix de langue de bloc 1) :

[...] One level 5 course or basic level 2

LANG1938-1 *German 5* (german language) - Marie MAWHIN Q1 30 - - **3**

**Prerequisite :**

LANG1925-1 - Allemand 4

LANG1939-1 *Advanced German 5* (german language) - Laurent GIANOTTI Q1 30 - - **3**

**Prerequisite :**

LANG1926-1 - Allemand avancé 4

LANG1945-1 *Elementary German 2* - Laurent GIANOTTI Q1 30 - - **3**

**Prerequisite :**

LANG1933-1 - Allemand élémentaire 1

LANG7002-1 *Elementary Chinese 2* (english language) - Fang DONG Q1 30 - - **3**

**Prerequisite :**

LANG6009-1 - Chinois élémentaire 1

LANG1940-1 *Spanish 5* (spanish language) - Cristina ALONSO MARTIN Q1 30 - - **3**

**Prerequisite :**

LANG1927-1 - Espagnol 4

LANG1941-1 *Advanced Spanish 5* (spanish language) - Cristina ALONSO MARTIN Q1 30 - - **3**

**Prerequisite :**

LANG1928-1 - Espagnol avancé 4

LANG1946-1 *Elementary Spanish 2* - Alba CARVAJAL LAGAREJO, Véronique PEIFFER Q1 30 - - **3**

**Prerequisite :**

LANG1934-1 - Espagnol élémentaire 1

LANG1942-1 *(Advanced) Italian 5* (italian language) - Alex BARDASCINO Q1 30 - - **3**

**Prerequisite :**

LANG1929-1 - Italien (avancé) 4

LANG7003-1 *Elementary Italian 2* - Alex BARDASCINO Q1 30 - - **3**

**Prerequisite :**

# Study programmes 2021-2022

## HEC Management School - University of Liege

### Master in business engineering (120 ECTS)

	LANG6010-1 - Italien élémentaire 1				
LANG1950-1	<i>Advanced Dutch 5</i> (dutch language) - Nicole ENGELN, Elies SMEYERS <b>Prerequisite :</b> LANG1932-1 - Néerlandais avancé 4	Q1	30	-	- 3
LANG1948-1	<i>Elementary Dutch 2</i> (dutch language) - Fanny NSITA <b>Prerequisite :</b> LANG1936-1 - Néerlandais élémentaire 1	Q1	30	-	- 3
LANG1955-1	<i>French beginner level 2</i> - ISLV, Marielle MARÉCHAL <b>Prerequisite :</b> LANG1954-1 - French beginner level 1	Q1	30	-	- 3

Choose one of the following courses :

GEST5008-1	(pas organisé en 2021-2022) <i>Project Management</i> (english language) <i>Notice :</i> a student who has chosen an Elementary language 1 course in Block 1 of the master's programme must necessarily continue in the chosen language and take the corresponding Elementary language 2 course.	Q1	18	-	- 3
LANG1945-1	<i>Elementary German 2</i> - Laurent GIANOTTI <b>Prerequisite :</b> LANG1933-1 - Allemand élémentaire 1	Q1	30	-	- 3
LANG7002-1	<i>Elementary Chinese 2</i> (english language) - Fang DONG <b>Prerequisite :</b> LANG6009-1 - Chinois élémentaire 1	Q1	30	-	- 3
LANG1946-1	<i>Elementary Spanish 2</i> - Alba CARVAJAL LAGAREJO, Véronique PEIFFER <b>Prerequisite :</b> LANG1934-1 - Espagnol élémentaire 1	Q1	30	-	- 3
LANG7003-1	<i>Elementary Italian 2</i> - Alex BARDASCINO <b>Prerequisite :</b> LANG6010-1 - Italien élémentaire 1	Q1	30	-	- 3
LANG1948-1	<i>Elementary Dutch 2</i> (dutch language) - Fanny NSITA <b>Prerequisite :</b> LANG1936-1 - Néerlandais élémentaire 1	Q1	30	-	- 3
GEST3032-1	<i>eBusiness and eCommerce</i> (english language) - Ashwin ITTOO <b>Prerequisite :</b> INFO0934-8 - Information Technology Management	Q1	30	-	- 5
FINA0083-1	<i>International Performance Management</i> (english language) - Didier VAN CAILLIE	Q1	18	-	- 3
GEST3782-1	<i>Introduction to family business entrepreneurship</i> - Nathalie CRUTZEN, Laurent WEERTS	Q1	18	-	- 3
GEST1076-1	<i>Seminar on Sustainability and Smart Territories</i> (english language) - Nathalie CRUTZEN	Q1	18	-	- 3
GEST3050-1	<i>Creativity and Design</i> - Deniz BOGA <b>Corequisite :</b> GEST3767-1 - Consultant Roles and Responsibilities GEST3766-1 - Project and Change Management GEST3764-1 - Innovation Project Definition and Development (partim II) GEST3759-1 - Strategic, Organizational and Information System Audits <i>Notice :</i> this course is compulsory and only open to students of the professional focus in Intrapreneurship and Management of Innovation Projects	Q2	18	50	- 3

[...] Optional course among those in the Master in Engineering Management degree

#### Poursuivre le choix de finalité

##### Professional focus in Supply Chain Management and Business Analytics

# Study programmes 2021-2022

## HEC Management School - University of Liege

### Master in business engineering (120 ECTS)

LOGI0016-1 *Quality, Ethics and Sustainability in Supply Chain Management* (english language) - Yves CRAMA, Célia PAQUAY, Virginie XHAUFLAIR Q1 30 - - 5

Choose two courses out of the following :

LOGI0017-1 *Distribution Management* (english language) - Sabine LIMBOURG Q1 30 - - 5

LOGI0015-1 *ERP Solutions for Supply Chains* (english language) - Yasemin ARDA, Véronique FRANÇOIS, Samedi HENG Q1 30 - - 5

INFO2049-1 *Web and Text Analytics* (english language) - Ashwin ITTOO Q1 30 - - 5  
**Prerequisite :**  
 INFO2048-1 - Business Analytics

#### Professional focus in digital business

INFO9017-1 *Database for management* (english language) - Michael SCHYNS Q1 30 - - 5

INFO8006-1 *Introduction to artificial intelligence* (english language) - Gilles LOUPPE - [45h Proj.] Q1 25 20 [+] 5

Choose one of the following courses :

INFO0012-2 *Computation structures* (english language) - Pascal FONTAINE, Laurent MATHY - [40h Proj.] Q1 26 26 [+] 5

GEST7064-1 *Digital Business Capstone Project* - Samedi HENG, Ashwin ITTOO, Michael SCHYNS TA 15 15 - 5

#### Professional focus in Financial Engineering

FINA0060-1 *Empirical Methods in Financial Markets - Theory and Applications* (english language) - Cédric HEUCHENNE Q1 30 - - 5

Choose two courses out of the following :

FINA0065-1 *Advanced Corporate Finance and Modeling* (english language) - Marie LAMBERT Q1 30 - - 5  
**Prerequisite :**  
 FINA0053-1 - Investments and Portfolio Management  
 FINA0052-1 - Financial Derivatives  
 FINA0050-1 - Corporate Finance - Lectures and Seminars

FINA0085-1 *Ethics, Regulation and Compliance in Finance* (english language) - Yves FRANCIS Q1 30 - - 5

FINA0063-1 *Advanced Statistical Methods in Finance* (english language) - Julien HAMBUCKERS Q1 30 - - 5  
**Prerequisite :**  
 FINA0053-1 - Investments and Portfolio Management  
 FINA0052-1 - Financial Derivatives

FINA0064-1 (pas organisé en 2021-2022) *Financial Risk Modeling* (english language) Q1 30 - - 5  
**Prerequisite :**  
 FINA0053-1 - Investments and Portfolio Management  
 FINA0052-1 - Financial Derivatives  
 MQGE0007-1 - Financial Mathematics and Stochastic Calculus

FINA9013-1 *Strategic Financial Analysis* (english language) - Marie LAMBERT - [30h AUTR] Q1 - - [+] 5

Notice : access on file

#### Professional focus in Sustainable Performance Management

Choose three of the following courses :

FINA0057-1 *Advanced taxation* - Isabelle RICHELLE Q1 30 - - 5  
**Prerequisite :**

# Study programmes 2021-2022

## HEC Management School - University of Liege

### Master in business engineering (120 ECTS)

	FINA0011-2 - Audit						
FINA0028-5	<i>International Finance</i> (english language) - Caterina SANTI	Q1	30	-	-		5
GEST3758-1	<i>Organizational Performance Assessment</i> (english language) - Didier VAN CAILLIE <b>Prerequisite :</b> FINA0061-1 - Business Modeling, Control and Planning	Q1	30	-	-		5
FINA0008-2	<i>Resilience Engineering</i> (english language) - Didier VAN CAILLIE <b>Prerequisite :</b> FINA0061-1 - Business Modeling, Control and Planning	Q1	30	-	-		5
<b>Professional focus in Intrapreneurship and Management of Innovation Projects</b>							
<i>Notice :</i> Registration only with a file (see admission conditions)							
GEST3767-1	<i>Consultant Roles and Responsibilities</i> (english language) - François PICHAULT, Giseline RONDEAUX - [80h AUTR] <b>Corequisite :</b> GEST3766-1 - Project and Change Management GEST3764-1 - Innovation Project Definition and Development (partim II) GEST3050-1 - Creativity and Design GEST3759-1 - Strategic, Organizational and Information System Audits	Q2	18	-	[+]		4
GEST3764-1	<i>Innovation Project Definition and Development (partim II)</i> (english language) - Olivier LISEIN - [100h AUTR] <b>Prerequisite :</b> GEST3755-1 - Innovation Project Definition and Development (partim I) <b>Corequisite :</b> GEST3767-1 - Consultant Roles and Responsibilities GEST3766-1 - Project and Change Management GEST3050-1 - Creativity and Design GEST3759-1 - Strategic, Organizational and Information System Audits	Q1	18	-	[+]		5
GEST3766-1	<i>Project and Change Management</i> (english language) - Olivier LISEIN - [100h AUTR] <b>Corequisite :</b> GEST3767-1 - Consultant Roles and Responsibilities GEST3764-1 - Innovation Project Definition and Development (partim II) GEST3050-1 - Creativity and Design GEST3759-1 - Strategic, Organizational and Information System Audits	Q2	18	-	[+]		6
<b>Professional focus in Sciences and technologies</b>							
HULG9277-1	<i>Structures analysis</i> - Clara HUVELLE	Q1	55	-	-		5
HULG9276-1	<i>Electrical engineering</i> - Pierre GABRIEL	Q1	35	-	-		3
HULG9279-1	<i>Telecommunications</i> - Frédéric SENNY	Q1	45	-	-		3
HULG9278-1	<i>Applied thermodynamics</i> - Vincent KELNER	Q1	40	-	-		4
<b>Professional focus in management and technologies</b>							
TECH2001-1	<i>Elements of biotechnology</i> - Birgit QUINTING	Q1	30	15	-		5
DROI2003-2	<i>Legal management of a company and its employees</i> - <i>Droit des sociétés</i> - Frédéric DAERDEN, Laurent STAS DE RICHELLE - <i>Droit fiscal</i> - Isabelle RICHELLE - [5h Conf.]	Q2					5
			25	-	-		
			25	-	[+]		
GRHO0001-4	<i>Strategic Human Resources Management</i> - François PICHAULT	Q1	45	-	-		5