Description of the LSM Majors

MAJORS OFFERED TO FUTURE STUDENTS OF THE MASTER [120] IN BUSINESS ENGINEERING

Major in Supply Chain Management ........................................................................................................ 2
Major in Innovation Management .............................................................................................................. 2
Major in International Finance ................................................................................................................ 3
Major in Financial Engineering ................................................................................................................ 3
Major in Marketing Strategy for Connected Brands .............................................................................. 4
Philippe de Woot in Corporate Sustainable Management ................................................................. 5
Major in CPME ......................................................................................................................................... 6
Major in International Business ‘IB’ ........................................................................................................ 8
Major in Business Analytics ..................................................................................................................... 8
Major in Financial Management ............................................................................................................. 9
Major in Décisions marketing tactiques et digitales ........................................................................... 10
Major in Business Analytics and Digital Marketing ....................................................................... 11
Major in Supply Chain and Transportation Management ............................................................. 11
Major in Supply Chain Management

Content
6 mandatory courses:
- Supply Chain Management (Q1)
- Tools for Supply Chain Management Decisions (Q1)
- Supply Chain Coordination and Sourcing (Q1)
- Advanced Operations Management : Models and Applications (Q2)
- International Supply Chain Management (Q2)
- Supply Chain Planning (Q2)

Language
English

Prerequisites
Bachelor in business engineering or a course in operations management and a course in operations research

Teaching methods
Ex-catedra, case studies, company visits, group and individual projects

Evaluation methods
Written exams (mostly open book), oral exams, case presentations, project presentation, case reports

Aims
Develop both methodological and practical knowledge in the area of supply chain management.

Acquired skills
Analytical skills, presentation skills, mathematical skills.

Career opportunities
Various supply chain management functions (planning, customer support, operations management, transport, sourcing) for multinational companies, consultant, logistic companies, distribution companies. In general the supply chain management function involves a lot of coordination between different departments or companies. Your role will be that of facilitating exchanges of goods, information and payments.

Major in Innovation Management

Content
The management and economics of innovations, in particular from a knowledge-intensive, ecosystem and digital economy viewpoints.

6 mandatory courses:
- Innovation Management (Q1)
- Economics of Innovation (Q1)
- Developing Innovative Ventures (Q1)
- Knowledge Management (Q2)
- Innovation Policy and Ecosystems (Q2)
- Economics of the internet (Q2)

« Bonus » course (it is possible to take this extra course in addition to the 6 courses of the innovation major):
- International Entrepreneurship (Q2)

Language
English

Prerequisites
Bachelor en Ingénieur de gestion

Teaching methods
Lectures, pre-reading, case studies, testimonials, group works

Evaluation methods
Written and oral exams, group reports and presentations

Aims
At the end of the major, students will be able to better master how to manage organizations and regions in innovation-intensive environments, where constant disruptions is the “new normal” and where new partners and new knowledge are key assets

Acquired skills
Understand the characteristics and key success factors of innovation-based business models and firms
Understand how to adapt classic economics, marketing, finance, project...
management and strategy approaches in innovation-intensive environments

**Career opportunities**
- Executive positions in innovative firms
- Corporate entrepreneurship, new business development and corporate venturing roles
- Innovation policy responsibilities

## Major in International Finance

**Content**
The international environment of a firm is in continuous evolution. Understanding what the consequences of these changes are and how a firm can adapt or exploit them is crucial. In this major, several specialists from the private sector (CEO/senior experts of banks), financial institutions (Directors/ senior experts of Central Banks), and internationally recognized professors will teach to students (i) some of the state of the art techniques used in international finance, (ii) the most important changes in the international environment of the firm and (iii) how to deal with these changes. The major is a balanced mix between theory and application (with more focus on applications). Students will have the possibility to participate to innovative initiatives (at a Belgian level) such as short visits to international institutions and trainings given by international experts. The students also will be able to master the most important data provider and tool used in finance, i.e. Bloomberg.

6 mandatory courses:
- Principles of banking and finance (Q1)
- International Finance (Q1)
- Financial innovation (Q1)
- Central banking, financial regulation, supervision (Q2)
- International corporate finance (Q2)
- International financial management (Q2)

**Language**
English

**Prerequisites**
Bachelor in business engineering or in management

**Teaching methods**
Ex-catedra, case studies, company visits, group and individual projects

**Evaluation methods**
Written exams, oral exams, case presentations, project presentation, case reports

**Aims**
Develop both methodological and practical knowledge in the area of international finance.

**Acquired skills**
Analytical skills, presentation skills, problem solving, helicopter view, decision making, Bloomberg Market Concepts®

**Career opportunities**
Various positions in national and international financial institutions such as insurance, banks, hedge funds, and central banks. Your role could be that of a risk manager, consultant, supervisor, financial analyst, etc. Given the background acquired, your position, possibly after an initial training, your position can be at an senior (executive) level.

## Major in Financial Engineering

**Content**
This major aims at delivering top-quality courses offering both a sound theoretical basis as well as applied methods and tools to address topical questions of finance in a scientific way. The theory will be illustrated on realistic examples and practiced on realistic cases via projects that will be handled in groups using professional softwares. This major also aims at bridging the gap between the university and the professional sector. Several specialists from the private sector (CEO/senior experts of banks/asset management firms), financial institutions (senior experts of European Commission), and internationally recognized
professors will teach in this major. In addition, the students can take part to innovative initiative (at the Belgian level) such as the Bloomberg market concept® certificate and trainings in London at Bloomberg headquarters and in several financial institutions such as asset management firms and hedge funds.

6 mandatory courses:
- Forecasting (Q1)
- Investments (Q1)
- Derivative Pricing (Q1)
- Macro Finance (Q2)
- Credit and interest rate risk (Q2)
- Big data in finance (Q2)

Language

Prerequisites
Bachelor in business engineering. In particular, basic Courses in: Mathematics, Probability and Statistics, Econometrics, Finance

Teaching methods
Ex-catedra, case studies, company visits, group and individual projects

Evaluation methods
Written exams, oral exams, case presentations, project presentation, case reports

Aims
Finance is becoming increasingly complex and relies more and more on advanced quantitative methods. Managers cannot afford to overlook this complexity any longer, neither can they naively rely on technical experts: they have to understand how to tackle this reality. The courses selected in this major precisely aim at preparing the students to face this challenge. The track is structured along three objectives: (i) equip the student with the necessary background allowing for a rigorous treatment of financial problems; (ii) propose to students an overview of the current applied finance-related issue; (iii) teach softwares as well as powerful techniques and numerical methods to solve real-world investment, pricing or risk-management problems.

Acquired skills
Critical approach, team working, programming, Bloomberg Market Concepts®, scientific approach to problem solving

Career opportunities
National and international financial institutions such as insurance, banks, hedge funds, and central banks. In these institutions, the type of work could be related to quantitative aspect and in particular to Risk Management, Asset Management, Consultancy, Insurance, Banking, FinTech

**Major in Marketing Strategy for Connected Brands**

**LLN**

**Content**
The objective of this new marketing major is to understand how to strategically manage brands in the new and changing digital landscape. The new digital environment had a major impact on consumers’ habits and needs. As a result, the way to understand, communicate and reach consumers has changed dramatically. The different courses organized in this major will tackle all these changes with state of the art concepts and models given by specialists in the different fields.

6 mandatory courses:
- Marketing Research (Q1)
- International Marketing (Q1)
- New Business Models and E-commerce (Q1)
- Brand Management (Q2)
- Big Data/Data Mining Applied to Marketing (Q2)
- On-line and Off-line Communication Strategies (Q2)

Language

Prerequisites
One basic marketing course is needed

Teaching methods
Lectures, case studies, conferences from marketing managers, discussion of
articles and videos and development of group projects will be used depending on the course. Participation to company games will also be organized.

**Evaluation methods**
Individual exams and group projects

**Aims**
The objective is to master all the new concepts and techniques that are needed to manage brands in the current digital landscape. At the end of the course, the student will be able to develop on his own a marketing strategy and effective marketing program for a brand, using all the traditional and digital tools that are available in the market today. He will also understand how the multiple digital data can be used to predict consumer behavior and achieve a good ROI.

**Acquired skills**
The students will develop their
- knowledge and reasoning using multiple digital data
- scientific and systematic approach
- Project management skills
- Communication and interpersonal skills.

**Career opportunities**
The students will be prepared for careers in marketing or general management or consulting. In marketing, he could become a Brand manager in an international company, in a medium size company or in start-ups in multiple industries from Consumer Goods to services or BTB, he could become marketing analyst or consultant or work in advertising or digital agencies.

---

**Philippe de Woot in Corporate Sustainable Management**

**Content**
The current economic system has been very effective in supporting private interests, but this wealth creation now faces two major challenges that jeopardize future prosperity: (i) wealth creation is very unequally shared among individuals and countries, (ii) natural resources management and environmental issues now turn out to able to limit our growth perspectives. The new challenge is to manage global commons, which requires to adopt a creative and transversal perspective in business management.

In this context, this multidisciplinary major aims to develop competent and responsible leaders with a transversal view of the different management fields (leadership, strategy, entrepreneurship, human resource, finance, marketing, accounting, audit, supply chain). This major will offer a solid understanding of the complex dilemmas and the tools to develop agile and responsible organizational cultures and to implement effective compliance, business ethics and corporate sustainable management programs.

6 mandatory courses
- Business Ethics and Compliance Management (Q1)
- Sustainable Management and Value Chains (Q1)
- Finance and Responsible Investment Practices (Q1)
- Sustainable Human Resource Management and Leadership (Q2)
- Corporate Sustainability Reporting and Marketing Strategy (Q2)
- Social and Sustainable Entrepreneurship (Q2)

**Language**
English

**Prerequisites**
The CSR class (compulsory course in the part 1 of the first semester).

**Teaching methods**
The format is based on active learning and includes lectures, conferences with practitioners, multisector case studies, videos, readings, incidents and class discussion, and project work (individual projects and projects by group).

**Evaluation methods**
Discussion and active participation will be very important in this major. It’s only through sharing and confronting opinions and ideas that you can forge your own values and convictions and develop your knowledge on this topic. Moreover, students’ acquisition of knowledge and know-how will be assessed using written exam, written reports based on group or individual projects, and oral
Aims  The objectives of this multidisciplinary major are:

- to analyze how business organizations can learn how to use their resources not only efficiently but also in a sustainable and regenerative way and thus to integrate sustainability and responsibility thinking in corporate policies, strategies and practices;
- to identify how this fundamental paradigmatic change in thinking about management can contribute to addressing effectively economic, environmental, societal and human sustainability challenges (such as climate change, human rights);
- to provide appropriate understanding of the management tools needed to develop policies, strategies and practices which contribute not only to corporate sustainability but also to societal sustainable welfare and how these tools can be implemented and dealt with on a daily basis;
- to stimulate students' critical thinking about their role in a society confronted with sustainability challenges and paradoxical choice situations as individuals, consumers, future employees and corporate leaders.

Acquired skills  Priority in this major is given to

1. **Corporate citizenship** to enhance ability to act consciously, aware of your responsibilities, placing human and ethical considerations at the very heart of thinking and actions;
2. **Innovation and entrepreneurship** or the ability to innovate, develop entrepreneurial skills and lead change;
3. **Knowledge and reasoning** to master a multidisciplinary body of knowledge (in terms of contents, methods, models and conceptual frameworks);
4. **Personal development** to prepare students to act effectively as an emerging leader or as a professional in the field of compliance management, business ethics and sustainable development of companies;
5. **Work effectively in an international and multicultural environment**: The capacity to serve as an interface between stakeholders with different ways of thinking, belief systems, backgrounds, nationalities, cultures, etc.

Career opportunities  We live in a "risk society" that is struggling to maintain its values; the job opportunities related to corporate sustainable management, ethics and compliance are thus growing. These opportunities are transversal functions that require both a thorough knowledge of the company and the ability to work closely with all the functions of the company.

Among other career opportunities, we can quote ethics and compliance officers, CSR managers, sustainability manager, management consultants, risk managers, auditors, CEOs, board members, directors, regulators, public officers and international directors.

**Philippe de Woot** was a Doctor in the Law and in Economic Sciences. He taught at Université catholique de Louvain (1965-1995) and was an invited professor at INSEAD Avira Program (1987-2000). His works aimed to promote the ethical and political dimensions of the economic activity. His research focused on long term business success factors and their consequences for society at large. He analyzed the ways corporate strategic power was exercised and the recent evolution towards new societal responsibilities. On a global level he was among the founding fathers of the Globally Responsible Leadership Initiative (GRLI). He has written many books among others about innovation, Corporate Social Responsibility and the globalization.

**Major in CPME**

**Content**

- 4 cours obligatoires en français (tronc commun suivi ensemble avec tous les étudiants CPME issus de 9 facultés différentes):
  - Théorie de l’entrepreneuriat (Q1)
  - Aspects juridiques, économiques et managériaux de la création d’entreprise (Q1)
  - Plan d'affaires et étapes-clés de la création d’entreprise (Q1+Q2) (suivi méthodologique du mémoire CPME)
- Séminaire d’approfondissement en entrepreneuriat (Q2)
- 2 cours obligatoires en anglais (excepté IngénieuxSud en français), pour les étudiants LSM, à choisir parmi :
  - Regenerative Economy (Q1)
  - Entrepreneurial Finance (Q1)
  - International Entrepreneurship (Q2)
  - Strategic Management of Start-ups (Q2)
  - Social and Sustainable Entrepreneurship (Q2)
  - IngénieuxSud (Q2)

- Le mémoire CPME de fin d’études doit obligatoirement être réalisé dans le cadre de cette majeure. Ce mémoire CPME remplace le mémoire classique LSM et doit être réalisé en équipe interfacultaire de 3 à 4 étudiants issus de 3 à 4 facultés différentes et porter sur un projet entrepreneurial.

Languages
- Français pour les cours obligatoires
- Anglais pour 5 des 6 cours au choix (IngénieuxSud en français)

Prerequisites
- Avoir posé sa candidature pour la formation CPME (www.uclouvain.be/cpme) (avant la rentrée du bloc annuel 1 de master 120) et avoir été sélectionné (fin septembre du bloc annuel 1 de master120)

Teaching methods
- Pédagogies actives, participatives, reliées au terrain, en équipes interdisciplinaires.
  - Etudes de cas
  - Analyses de terrain
  - Lectures - Conférences – débats
  - Projet entrepreneurial interdisciplinaires (voire international)
  - Participation à des concours & Mentorat
  - Mémoire projeto de création d’entreprise

Evaluation methods
- Evaluation continue hors session pour la majorité des cours.
  - Présence et participation aux cours obligatoire et notée.
  - Nombreux travaux écrits et présentations orales en équipes.

Aims
- Outiller et renforcer les compétences entrepreneuriales des étudiants de manière à ce qu’ils soient capables de concevoir un business plan (spinoff, startup ou autre projet intrapreneurial) et se sentent en confiance pour se lancer dans l’aventure entrepreneurial/intrapreneuriale.

Acquired skills
- Au terme des deux années de cours et travaux dans le cadre de la majeure CPME, l’étudiant-e
  - Aura acquis les connaissances et les compétences nécessaires à la réalisation d’un plan d’affaires ;
  - Sera capable d’agir en acteur socialement responsable ;
  - Sera capable de gérer un projet en équipe ;
  - Sera capable de présenter un projet entrepreneurial et de convaincre des partenaires potentiels ;
  - Se sera construit un réseau professionnel et entrepreneurial ;
  - Sera capable de détecter de nouvelles opportunités ;
  - Sera capable de planifier la stratégie d’une nouvelle entreprise ;
  - Sera capable de prendre en compte l’environnement dans lequel évolue une entreprise et modifier la stratégie de celle-ci au besoin ;
  - Sera capable de....

Career opportunities
- Entrepreneuriat & Intrapreneuriat
  - Création ou reprise d’entreprise
  - Développement de projets entrepreneuriaux au sein d’une entreprise existante
  - Internationalisation d’une PME
Major in International Business ‘IB’

Content
The IB track offers 25 selected students the opportunity to act as intrapreneurs, undertaking concrete initiatives in an international context and transforming ideas into business success. It offers ONE year abroad during master 2: four to five months of academic exchange in a partner university and a 6-month internship outside Europe within an international SME, multi-national or NGO.

6 mandatory courses:
- Entrepreneurial Finance (Q1)
- International Financial Management (Q1)
- International Marketing (Q1)
- Industrial Relations in Europe (Q2)
- Cross Cultural Competences and Management (Q2)
- International Business (Q2)

Language
English

Prerequisites
Bachelor in management

Teaching methods
-

Evaluation methods
-

Aims
Develop a broad knowledge base about international management and business

Acquired skills
• Work effectively in an international and multicultural environment
• Personal and professional development (self-motivation, self-awareness, self-control, ability to manage one’s work independently)

Career opportunities
Former IB students now work in companies such as Accenture, AB-Inbev, L’Oréal, Deloitte, Unilever, Total, but also in many SMEs or NGOs in Asia, Europe or Latin America

Major in Business Analytics

Contenu
Les technologies de l’information et de la communication jouent un rôle de plus en plus crucial dans l’évolution des organisations et affectent significativement leurs pratiques et modes de vie. Plus particulièrement, l’utilisation de l'outil informatique comme aide à la prise de décision est désormais considéré comme un élément stratégique dans de nombreuses politiques d’entreprises. La majeure en Business Analytics fournira, dans chacun de ses cours, des outils aux étudiants pour traiter des données, données caractérisées par leur volume, leur variété, leur valeur, leur vélocité ou encore leur véracité.

6 cours obligatoires:
- Nouvelles technologies et pratiques émergentes (Q1)
- Data Mining (Q1)
- Web Mining (Q1)
- Machine Learning (Q2)
- Quantitative Decision Making (Q2)
- Systèmes de recommandation (Q2)

Langues
Français (principalement) et anglais

Prérequis
Bachelier en ingénieur de gestion
Approche pédagogique  
(A déterminer par chaque enseignant)  
Principalement : Exposés magistraux, exercices intégrés au cours, développement de projets

Méthodes d’évaluation  
(A déterminer par chaque enseignant)  
Principalement : Examens écrits et défenses de projets

Objectifs  
La majeure en Business Analytics a pour objectif d’apprendre à maîtriser les principales techniques de recherche, de récolte, de nettoyage et d’analyse de données business (données qui peuvent être de différents types et provenir de différentes sources), ainsi que les principales techniques d’interprétation et d’exploitation des résultats obtenus.

Compétences acquises  
Appliquer une démarche scientifique d’analyse de données  
Appliquer les méthodes adéquates face à un problème donné  
Gérer des projets  
Résoudre des problèmes complexes  
Porter un jugement critique sur les apports et limites du traitement de données dans une organisation

Débouchés  
Le traitement des données (dans tous les volets évoqués ci-dessus) étant désormais un élément clef de toute stratégie d’entreprise, tout étudiant ayant suivi la majeure en Business Analytics pourra s’orienter vers tout métier touchant à des données, et donc également, dans de nombreux domaines d’activité.

Major in Financial Management  
MONS

Content  
Le contenu de la majeure est défini pour permettre aux étudiants d’aborder les sujets de finance faisant l’objet des examens du CFA Institute.  
La première partie de la majeure (Q1) est consacrée aux instruments financiers : actions, obligations, produits dérivés. Dans la deuxième partie de la majeure (Q2), ces produits sont intégrés dans une gestion de portefeuille. La majeure propose aussi une introduction à la gestion des risques et au nouvel environnement réglementaire des institutions financières. On offre également aux étudiants la possibilité de s’interroger sur l’hypothèse de l’investisseur rationnel, en tenant compte des biais comportementaux.  
Les étudiants intéressés pourront compléter la majeure par une option en Q3 qui couvre les sujets non abordés dans les examens du CFA : les questions éthiques et le code de conduite des CFA Charterholders, les référentiels IFRS de publications de l’information financière et les investissements alternatifs.

6 cours obligatoires :
- Derivative Securities (Q1)
- Equity Valuation (Q1)
- Fixed Income Analysis (Q1)
- Portfolio Management (Q2)
- Risk Management and Financial Institutions (Q2)
- Behavioural Finance (Q2)

Language  
Anglais/Français

Prerequisites  
Cours de finance de base, mathématiques, probabilités et statistiques, économétrie (niveau bachelier)

Teaching methods  
Méthodes variées : exposés, classe inversée, exercices en salle informatique, études de cas, expérimentations, gestion d’un portefeuille virtuel

Evaluation methods  
Méthodes variées : examen final, quiz hebdomadaires, travaux de groupes, travaux individuels

Aims  
L’objectif de la majeure est de préparer les étudiants pour qu’ils soient capables de présenter les examens du CFA, niveau 1 et niveau 2.
Acquired skills

Career opportunities
Gestionnaire de portefeuille, analyste, consultant, conseiller financier, trading, direction financière, private banking. De manière générale, dans les métiers de la banque et de l’investissement, à un certain niveau, la certification CFA est souvent exigée.

Major in Décisions marketing tactiques et digitales

Content
Built on the core fundamentals of any marketing plan and taking into account the evolution of marketing in the digital environment, the Decisions and Digital Marketing major focuses on the strategic and operational dimensions of key marketing decisions: product innovation, pricing and distribution as well as the marketing decisions making and management in the digital world.

The courses track is designed so that students dig into the conceptual as well as the methodological foundations of each marketing decision: product innovation, price and retailing, taking the perspectives of two main actors: the company and the consumer, and alternating examples from the B2C and B2B sectors. The second part of the major focuses more specifically on digital marketing shedding the light on the understanding of the e-consumer behavior and the digital marketing trends. The objective is to offer a 360-degree in-depth perspective of issues the marketing manager has to deal with.

Students will also study and practice advanced qualitative and quantitative methods as well as tools that help managers making optimal marketing decisions in the digital world.

Several course of this major are built on the basis of partnerships
• with an international company active in the B2B chemical sector and
• with companies involved in the IPM-Digital Marketing chair.

6 mandatory courses:
- Distribution (Q1)
- Price Management (Q1)
- Product and Innovation (Q1)
- E-comportement du consommateur (Q2)
- Tendances en Digital Marketing (Q2)
- Méthodes et modèles en marketing (Q2)

Languages
French is used most of the time, but sessions conducted in partnership with international speakers will be taught in English.

Prerequisites
Introductory course of marketing.

Teaching methods
Lectures, conferences by professionals, case studies, practical exercises on computer, discussion on scientific and managerial articles, group assignments with methodological supervision provided by the professors.

Evaluation methods
Oral exams, Written exams, group assignments evaluation.
Individual work on articles and e-learning are also assessed.

Aims
In this major, students will learn to master the strategic as well as the operational nature of all aspects of marketing decisions. Hence, they will develop specific competencies that are key when managing marketing decisions in the digital world.

Participants will be equipped with the most significant conceptual frameworks and latest thinking on identifying, formulating and assessing companies’ pricing, retailing, product innovation strategies and tactics, also in a digital marketing context.

A special emphasis is set on advanced and innovative approaches used in the
practice, as well as on the interdependencies of decisions taken in relationship with these marketing mix variables.

**Acquired skills**
In this track the students will develop the following skills:
- Knowledge and reasoning
- Scientific and systematic approach
- Capacity to work effectively in an international and multicultural environment
- Project management skills
Communication and interpersonal skills

**Career opportunities**
This major prepares students who want to pursue careers in marketing (marketing management, product management, price management, retail management, marketing analyst, digital marketing), in general management and in business consulting, in large as well as small companies, mainly focused on the national market or opened internationally.

---

**Major in Business Analytics and Digital Marketing**

**Contenu**
Les technologies de l’information et de la communication jouent un rôle de plus en plus crucial dans l’évolution des organisations et affectent significativement leurs pratiques et modes de vie. Plus particulièrement, l’utilisation de l’outil informatique comme aide à la prise de décision est désormais considéré comme un élément stratégique dans de nombreuses politiques d’entreprises. La majeure en Business Analytics and Digital Marketing fournira, dans chacun de ses cours, des outils aux étudiants pour traiter des données, données caractérisées par leur volume, leur variété, leur valeur, leur vélocité ou encore leur vérité. The second part of the major focuses more specifically on digital marketing shedding the light on the understanding of the e-consumer behavior and the digital marketing trends. The objective is to offer a 360-degree in-depth perspective of issues the marketing manager has to deal with.

6 cours obligatoires :
- Nouvelles technologies et pratiques émergentes (Q1)
- Data Mining (Q1)
- Web Mining (Q1)
- E-comportement du consommateur (Q2)
- Tendances en Digital Marketing (Q2)
- Méthodes et modèles en marketing (Q2)

**Langues**
Français

**Prérequis**
Bachelier en ingénieur de gestion

**Approche pédagogique**
Lectures, conferences by professionals, case studies, practical exercises on computer, discussion on scientific and managerial articles, group assignments with methodological supervision provided by the professors.

**Méthodes d’évaluation**
Oral exams, Written exams, group assignments evaluation. Individual work on articles and e-learning are also assessed.

**Objectifs**
La majeure en Business Analytics and Digital Marketing a pour objectif d’apprendre à maîtriser les principales techniques de recherche, de récolte, de nettoyage et d’analyse de données business (données qui peuvent être de différents types et provenir de différentes sources), ainsi que les principales techniques d’interprétation et d’exploitation des résultats obtenus.

Students will learn to master the strategic as well as the operational nature of all aspects of marketing decisions. Hence they will develop specific competencies that are key when managing marketing decisions in the digital world.

Participants will be equipped with the most significant conceptual frameworks and latest thinking on identifying, formulating and assessing companies’ pricing, retailing, product innovation strategies and tactics, also in a digital marketing
Compétences acquises

- Applier une démarche scientifique d’analyse de données
- Applier les méthodes adéquates face à un problème donné
- Gérer des projets
- Résoudre des problèmes complexes
- Porter un jugement critique sur les apports et limites du traitement de données dans une organisation
- Knowledge and reasoning
- Capacity to work effectively in an international and multicultural environment
- Communication and interpersonal skills

Débouchés

Le traitement des données (dans tous les volets évoqués ci-dessus) étant désormais un élément clef de toute stratégie d’entreprise, tout étudiant ayant suivi la majeure en Business Analytics and Digital Marketing pourra s’orienter vers tout métier touchant à des données, et donc également, dans de nombreux domaines d’activité. This major prepares students who want to pursue careers in marketing (marketing management, product management, price management, retail management, marketing analyst, digital marketing), in general management and in business consulting, in large as well as small companies, mainly focused on the national market or opened internationally.

Major in Supply Chain and Transportation Management

Content

- Supply Chain Management @ Mons (Q1)
  The course introduces the main concepts and decisions in supply chain management, related to the strategic design of the supply chain, the drivers of performance, the inventory management, sourcing decisions and new trends.
- Transport et mobilité* @ Mons (Q1)
  This course presents the main notions related to transportation, i.e. the supply and demand of transport services, their pricing, the location of activities, the external costs and the environmental impacts.

6 mandatory courses:

- Modélisation des systèmes de transport (Q1 – Mons)*
  This course focuses on transportation networks and their modeling. The classical modeling technique is presented in four stages: demand generation, demand distribution, transport mode selection and demand assignment. Alternative techniques are then discussed.
- Supply Chain Management (Q1 – Mons)
- Transport et mobilité (Q1 – Mons)*
- Advanced Operations Management: Models and Applications (Q2 – LLN)
- International Supply Chain Management (Q2 – LLN)
- Supply Chain Planning (Q2 – LLN)

Languages

English (mainly) / * French

Prerequisites

None

Teaching methods

Lectures, case studies, individual and group projects, student presentations, class discussions, serious game and company visits

Evaluation methods

Written exam (mostly open book), oral exams, case presentations, case reports, project presentation, individual and group assignments.

Aims

At the end of the three Mons courses, the student should become familiar with the main concepts in logistics, and have a more in-depth knowledge of the main theories and models in transportation. When followed with the three courses in SCM II (LLN), the student gets a broader expertise in supply chain management (operations, planning and international SCM).

The aim of the three LLN courses is to develop both methodological and practical
knowledge in the area of supply chain management.

Acquired skills
Supply chain management, transportation, operations management, inventory management, transportation networks modeling and analytical skills, presentation skills, mathematical skills.

Career opportunities
Supply chain management (as well as logistics and transportation) is a flourishing sector, generating many interesting jobs, particularly in our region of Europe. Jobs are to be found in distribution centers, transportation companies, factories, purchasing or planning departments, international export companies, etc.

- Various supply chain management functions (planning, customer support, operations management, transport, sourcing) for multinational companies, consultant, logistic companies, distribution companies. In general the supply chain management function involves a lot of coordination between different departments or companies. Your role will be that of facilitating exchanges of goods, information and payments.