DIGITAL BUSINESS

2 MASTER DEGREES IN 3-YEARS

2020 - 2021 by HEC Liège - Management School & The Faculty of Applied Sciences
Digital Business

Master in Business Engineering and Master in Computer Science or in Computer Science & Engineering

Effectively developing digital literacy and skills to adapt to the ever evolving world of technology.

STRENGTHS OF THIS UNIQUE PROGRAM

▶ offering full-fledged education in business and computer science
▶ leading to two Master’s degrees at the end of 3 years of exciting and intensive learning experience
▶ optimizing the chances of stimulating employment after graduation
▶ praised as a breakthrough by all our corporate partners

HARNESSING THE DIGITAL WORLD

Information technology has long been an essential support for business management. Nowadays, IT has become no less than central to the task as many activities are highly dependent on efficient information systems. These must be able to manage relations with customers or suppliers, support internal processes, deal with production planning, inventory, distribution and more.

Beyond offering support systems, digital technologies afford new economic opportunities and managerial challenges: designing new products, offering new services, building new revenue models, addressing new ethical questions, etc.

Not forgetting that many of the fastest growing new businesses are purely digital, i.e. offering exclusively dematerialized products and/or online services, such as matchmaking platforms, mobile apps, cloud facilities, storage and processing power, etc.

PROGRAM

It is a unique offering providing full fledged training in both Business and Computer science engineering in a 3 year intensive exciting program. The market will acknowledge you as an expert in each of these fields, and even more importantly, will prize this rare dual competency in digital business.

It is to be noted that transdisciplinary activities, included in the curriculum from the first year of the Master’s program, ensure students’ immersion in their bi-disciplinary environment.

TRANSDISCIPLINARITY

Far beyond juxtaposing skills, the transdisciplinary Master’s degree means to foster new profiles bathed in a dual culture from the first year of the Master’s degree.

Students are trained in cutting-edge subjects in a transversal way, which enables them to apprehend problems from an innovative angle.

APPLICATION

The transdisciplinary Master’s program is available to students:

▶ holding a Bachelor’s degree in Computer Science, Engineering or Business Engineering
▶ whose application have been approved by the admission jury

An online application form will be available on both faculties’ websites by mid-March.
**STUDENT’S CAREER PATH**

The Digital Business program is aimed at students holding a Bachelor’s degree in Business Engineering or in IT Civil Engineering or Computer Science. They pursue their study program with the 120-credit Master’s degree in their initial discipline, supplemented by 30 credits for the other discipline. Thanks to the valorization of the credits already acquired, these students obtain a second 120-credit Master’s degree in the other discipline after just one year of study.

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**MASTER IN BUSINESS ENGINEERING**

*Focus Digital Business*

**MASTER 1** 60 CRÉDITS

- **Tronc commun** 45
  - Business Analytics 5
  - Information Technology Management 5
  - Other Management or IT elective courses 35

- **Finalité** 15
  - Advanced Topics in Digital Business 5
  - Base de données 5
  - Object-oriented programming 5

**MASTER 2** 60 CRÉDITS

- **Tronc commun** 45
  - Internship and master thesis related to digital business 30
  - Other Management or IT elective courses 15

- **Finalité** 15
  - Computation structures 5
  - Programmation avancée 5
  - Introduction to computer networking 5

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**MASTER IN COMPUTER SCIENCE OR MASTER IN COMPUTER SCIENCE AND ENGINEERING**

*Focus Management*

**MASTER 1** 60 CRÉDITS

- **Tronc commun** 45
  - Analyse des états financiers et financement de l’entreprise 5
  - Comptabilité 5
  - Supply Chain Management 5

**MASTER 2** 60 CRÉDITS

- **Tronc commun** 43
  - Computer science courses 20
  - Master thesis 25

- **Finalité** 17
  - Business simulation 2
  - Gestion stratégique des ressources humaines 5
  - Droit de l’entreprise 5
  - Dutch, German or Spanish 3

**MASTER 3** 70 CRÉDITS

- **Tronc commun** 45
  - Analyse mathématique 1 4
  - Mécanique rationnelle 4
  - Introduction aux signaux et systèmes 5

- **Software Project Engineering and Management** 10
- **Corporate finance** 5
- **Foreign language** 5
- **Information Technology Management** 5
- **Skills workshops (SAP, SAS, …)** 3
- **International marketing** 5
- **Transdisciplinary project** 10

To get access to the master in Computer Science & Engineering, the business engineers must add to their cursus:

- **Analyse mathématique 1** 4
- **Mécanique rationnelle** 4
- **Introduction aux signaux et systèmes** 5