

## >>> CONDITIONS OF ADMISSION

The transdisciplinary Master's is reserved for students who have:

- Obtained a Bachelor's degree in computer science, civil engineering or business engineering
- Applied for admission and were selected by the jury

An online application form will be available by mid-March on both faculties' websites

## >>> FIVE REASONS WHY TO APPLY

- A unique offering providing full-fledged education in both business and computer science
- Obtaining two Master's degrees after 3 years of an intensive and exciting learning experience
- Higher chances of getting a great job after graduation
- A real opportunity to develop digital literacy and skills to adapt to the ever evolving world of technology
- All our corporate partners are enthusiastic about this breakthrough innovative program



## >>> CONTACTS

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With the support of  **pwc**



# DIGITAL BUSINESS

**2 MASTER DEGREES IN 3 YEARS**

by HEC Liège – Management School  
and Faculty of Applied Science





>>> **This program is jointly organized by HEC Liège Management School (EQUIS accredited) and the School of Engineering and Computer Science (Faculty of Applied Science) of the University of Liège.**

The program is open to anyone holding a Bachelor's degree in Computer Science, Civil Engineering or Business Engineering (3 years, 180 credits). The organization of the program is quite simple: you first get a Master's degree (2 years, 120 credits) in the area of your Bachelor, yet with a strong component of the other area. You are then ready to obtain the second Master's degree in just one year!

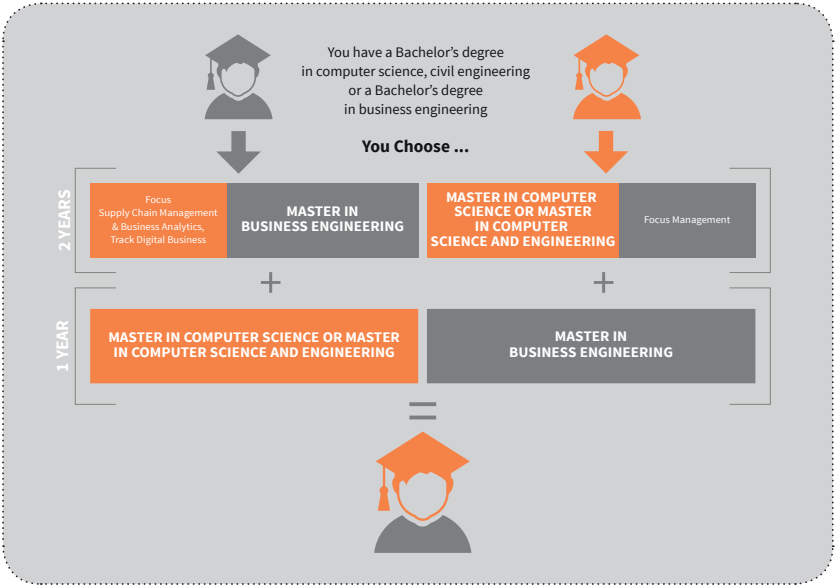
Furthermore, from the start of the first year, transdisciplinary activities are included in the curriculum in order to immerse you in a bi-cultural environment.

>>> **HARNESSING THE DIGITAL WORLD**

**Information technology has long been an essential support of managing a business.** But the role of IT has moved from support to central, many activities now depending heavily on efficient information systems that can manage relations with customers or suppliers, support internal processes, deal with production planning, inventory, and distribution... Not restricted to support systems, digital technologies also lead to new economic opportunities and managerial challenges: **new products** to design, **new services** to offer, new revenue models to build, **new ethical questions** to address... Furthermore, 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 app's, cloud facilities, storage and processing power, etc.

What training do you ideally need to work in such an environment? Computer science and business management are **both** obvious choices. However, thinking in a business oriented way about what to offer, without any knowledge on feasibility and technology environment can be futile daydreaming. Conversely, focusing only on the how by playing with technology for the sake of it, might be fun but probably not the road to a relevant value proposition supported by a strong business case. The truth is that it is **crucial** to be knowledgeable in both the what and the how. This is precisely what the new transdisciplinary program in digital business provides!

>>> **STUDENT'S COURSE**



>>> **PROGRAM'S STRUCTURE**

MASTER IN BUSINESS ENGINEERING (Focus Supply Chain Management & Business Analytics, Track Digital Business)	
	Credits
<b>Courses delivered by HEC Liège:</b>	<b>90</b>
Business Analytics	5
Information Technology Management	5
Internship related to digital business	10
Other Management courses, including à Master thesis (see standard programme)	70
<b>Delivered by the Faculty of Applied Sciences:</b>	<b>30</b>
Bases de données (French)	5
Computation structures	5
Introduction à la programmation (French)	5
Introduction to artificial intelligence or Introduction to computer networking	5
Object-oriented programming	5
Programmation avancée (French)	5
<b>TOTAL</b>	<b>120</b>
MASTER IN COMPUTER SCIENCE OR MASTER IN COMPUTER SCIENCE AND ENGINEERING, (Focus Management)	
Introduction to artificial intelligence or Introduction to computer networking	5
Introduction to machine learning	5
Introduction to the theory of computation	5
Operating systems	5
Software project engineering and management	10
The 6 courses of the focus "Computer systems and networks" or of the focus "Intelligent Systems"	30
Transdisciplinary project	10
<b>TOTAL</b>	<b>70</b>
<b>To get access to the master in "computer science and engineering", the business engineers must add to their cursus:</b>	
Analyse mathématique 1 (French)	4
Mécanique rationnelle (French)	4
Modélisation et analyse des systèmes (French)	4

MASTER IN COMPUTER SCIENCE OR MASTER IN COMPUTER SCIENCE AND ENGINEERING (Focus Management)	
	Credits
<b>Delivered by the Faculty of Applied Sciences:</b>	<b>90</b>
Software project engineering and management	10
Other Computer science courses, including a master thesis (see standard program)	80
<b>Courses delivered by HEC Liège:</b>	<b>30</b>
Analyse des états financiers et financement de l'entreprise (French)	5
Business Simulation	2
Droit commercial (French)	5
Dutch, German or Spanish (French)	3
Gestion stratégique des ressources humaines (French)	5
Microéconomie et économie industrielle (French)	5
Supply Chain Management	5
<b>TOTAL</b>	<b>120</b>
MASTER IN BUSINESS ENGINEERING (Focus Supply Chain Management & Business Analytics, Track Digital Business)	
Business Analytics	5
Change Management	5
Corporate Finance	5
Foreign language	5
Information Technology Management	5
Portfolio of skills (SAS,SAP...)	3
Strategic Marketing	5
The 6 courses of the focus "Supply Chain Management and Business Analytics, main track"	30
Transdisciplinary project	10
<b>TOTAL</b>	<b>73</b>