

EXECUTIVE MASTER IN DIGITAL AND IT ESSENTIALS

January to June 2026

UNIVERSITÉ LIBRE DEBRUXELLES

THE ASSETS

- Facilitate your access to positions in IT environment
- Immersion training: students learn from each other as much as from the lecturers.
- At the end of the training, an evaluation takes place for all courses and, if all successful, a ULB certificates is granted listing your ECTS
- The student receives support from the instructor to succeed in case of unsuccessful evaluation.

TARGET AUDIENCE

- This program is dedicated to reskill or upskill people who want to start or continue their career in the IT field.
- No prior STEM background required.
- Adapted for people with professional activity wanting to reorient their carrer of for young graduates wanting to acquire IT skills on top of their education.

LEARNING OUTCOMES

IT TECHNICAL SKILLS:

- IT literacy
- Digital fluency
- Digital transformation essentials
- Application of basic coding

TRANSVERSAL SKILLS:

- Translate and bridge business to technology
- Manage and communicate on your projects in the digital era
- Feel comfortable in IT environments

PRACTICAL INFORMATION

The training will take place on the Brussels campus of the Université libre de Bruxelles (Campus de la Plaine and Campus du Solbosch) and campus of de Vrije universiteit Brussel.

Fee for employed: 3.300 €

Fee for students/unemployed: 1.800 €

Admissions are based on applications. Candidates must present a certificate of successful completion of an undergraduate degree or apply for a VAE.

This training does not confer Belgian student status. You are responsible for completing the necessary administrative procedures.

*A2 level of English required

Registrations:



Typical Roles Held by Our Graduates:

Application consultant, Account manager, Data protection officer, Data manager, Data scientist, Digital project manager, Digital business analyst, IT enterprise architect, IT recruiter, IT manager, IT project manager, IT consultant, IT helpdesk worker, IT teacher, Scrum master, Internet marketer, Content marketer, System administrator

A program in collaboration with:







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PROGRAM

ACADEMIC COORDINATION: AN BRAEKEN (VUB) & Charles CUVELLIEZ (ULB)

MODULE 1 - Foundations (coord. Svitlana LUKITCHEVA)

- · Computational thinking/philosophy
- Programming
- · Problem-solving

MODULE 2 – Technology (coord. Yifan YANG)

- Intelligent hardware
- Developing a starter-level sensor system with Arduino platform (The technology stack incl. infrastructure (vert.)
- · Cloud, XaaS, encryption & PKI, tooling

MODULE 3 – Artificial Intelligence & data (coord. Johan LOECKX)

- · Al & data mindset
- Responsible innovation with Al
- · Assessing readiness
- Impact
- Opportunities & Limitations Trends & applications
- Case study project

MODULE 4 – Cybersecurity (coord. An BRAEKEN)

- · Data protection and data security
- · Cybersecurity basics
- · Network security
- SW security
- · Risk management

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PROGRAM

ACADEMIC COORDINATION: AN BRAEKEN (VUB) & Charles CUVELLIEZ (ULB)

MODULE 5 – IT Sector / organisation (coord. Jean-Pierre CUVELLIEZ)

- Prototypal Business Software Development:
- Getting familiar with all the usual project phases in building a software product supporting the business operations of a company
- Interaction with all the involved parties in a software project.
- Hands-on training via prototyping a project from the ground up performing practical businessand (lightly, Al supported) technical related tasks.
- · Solving potential project pitfalls and problems

MODULE 6 – Methodologies (coord. Ingvar Van Droogenbroeck)

- · Working in IT; Team diversity and group dynamics
- Innovation, product management and design thinking
- · Project & program management, benefit realization
- · Software development methodologies
- IT organisation and governance, processes and controls

MODULE 7 – Solving real-world issues using digital (coord. Marie-Mo VAEYENS)

- · Real-world applications in STEM fields
- · Real-world applications in non-STEM fields
- Professional IT role models f/m/X

INTERNSHIP - Optional internship of several months (possible at your employer) (Additional ECTS are granted in your certificate)

MENTORING - Mentorship by female role models (through Inspiring 50 and sponsors)

