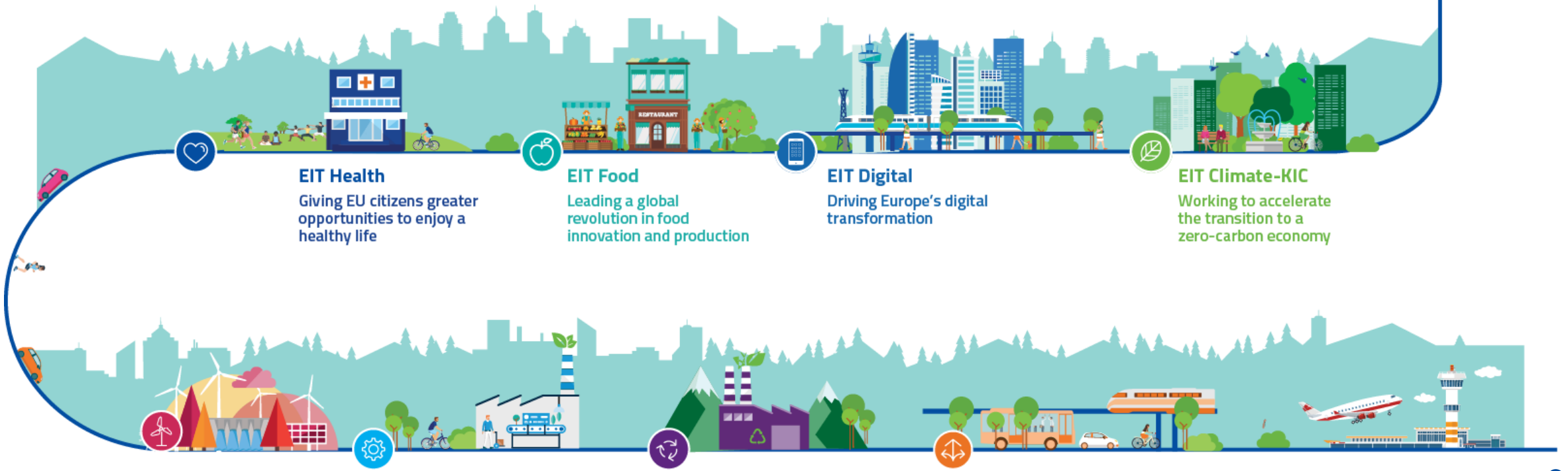
The EIT, Digital Innovation and Skills

EUA webinar: The European Union's digital policies: what is the role of universities?

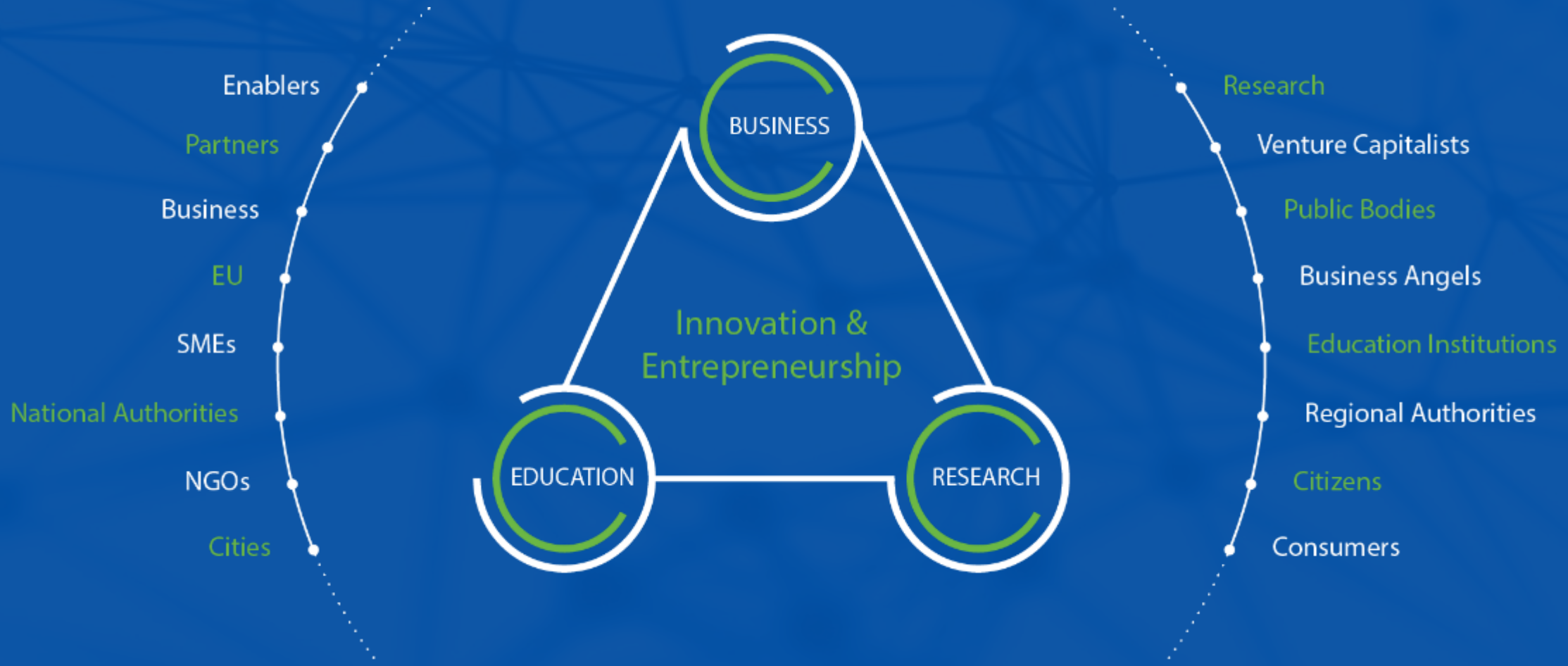
Dr David Oliva Uribe

Head of Industrial Doctoral School

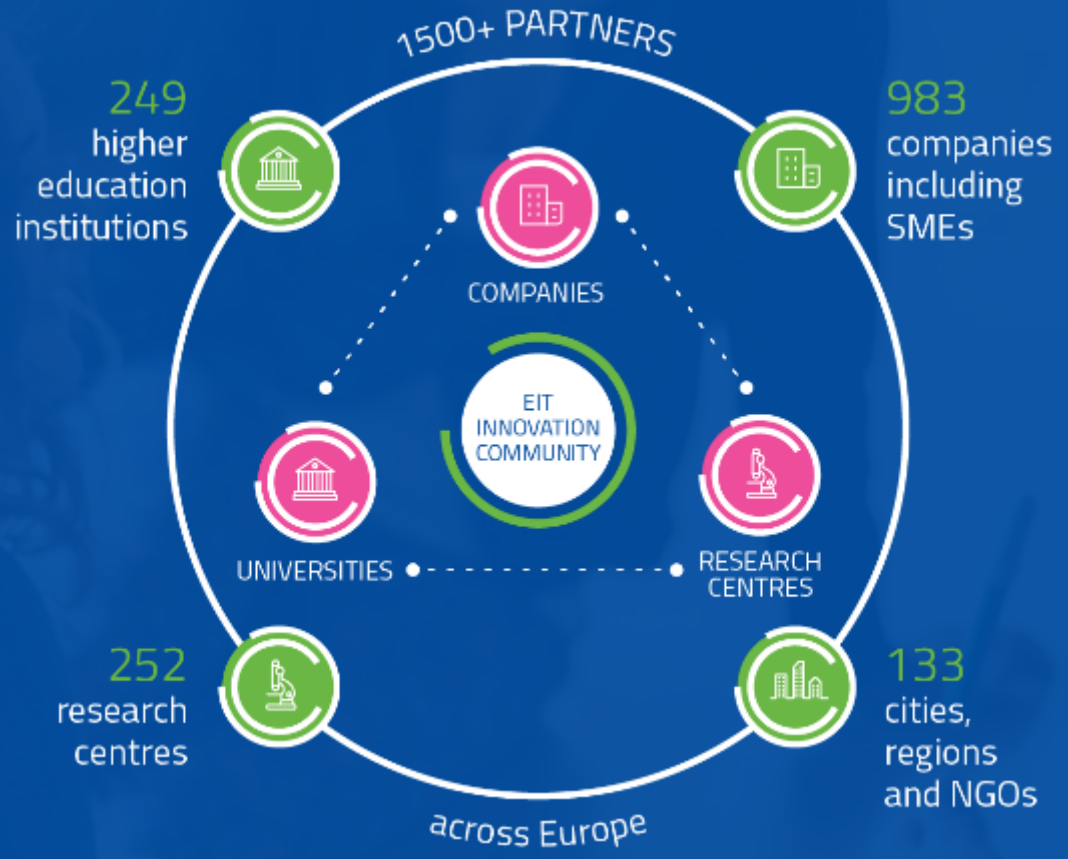
EIT INNOVATION COMMUNITIES



EIT INNOVATION MODEL



EUROPE'S LARGEST INNOVATION COMMUNITY



EIT EDUCATION

- **1. Master and doctoral programmes**
  - In 2019-2020 appx. 2.406 MSc students and 315 PhD candidates enrolled in more than 60 programmes
  - International cooperation, industry involvement
  - Training on specific skills and competences
  - Mobility, internships and scholarships/ fellowships
- **3. Continuous, post-doctoral, lifelong learning courses**
- **4. Executive and Professional development education elements**
- **5. MOOCs and online learning (Coursera, FutureLearn, Learnify)**
- **6. Wide society education, Alumni and outreach activities**

Educating the next generation of entrepreneurs, innovators & change-makers

EIT LABEL – FLAGSHIP EDUCATION INITIATIVE

- The EIT Label is a **quality seal** awarded to excellent master and doctoral programmes with strong focus on innovation and entrepreneurial education.
- EIT educational programmes are **carried out by universities & their faculties** aligned with the EIT specific learning outcomes and other quality criteria required for the EIT Label.
- A student graduating within the validity period of an EIT-labelled programme is awarded an **EIT Label certificate**.

EIT MASTER AND DOCTORAL PROGRAMMES DISTINCTIVE FEATURES

- Specific **innovation and entrepreneurship activities**
- **Robust entrepreneurship education**
- Highly integrated **learning-by-doing** curricula
- Strong focus on **industry and business** involvement at all stages
- Focus on **international and trans-organisational mobility**, European dimension and openness to the world
- Direct access to **other EIT activities**
- Graduates become members of **EIT Alumni community**

UNIVERSITIES INVOLVED IN THE EIT COMMUNITY

There are 249 education organisations involved in the EIT Community, including those displayed above

The EIT Digital Entrepreneurial Academy

Education for Innovation & Digital Transformation Leadership

eit Digital

Innovation & Entrepreneurship in the Digital Transformation

- **Digital technologies** open a new door to **boost innovation** and **entrepreneurship** (I&E)

- **Business development** faces an **evolution** due to **digitalisation**:
  - **Digital business** are more **dynamic**, **faster, global**
  - New technological **innovations** are needed to be **introduced** faster, every year in many sectors.
  - **Research-based** solutions are **leading the market**
  - **Market** will **change** to **deep-tech** solutions with a stronger scientific approach

Innovation & Entrepreneurship in the Digital Transformation

- **The market is changing**
- **The business rules are changing**
- **The jobs are changing**

- **What is urgent to change?**

EIT Digital Entrepreneurial Academy

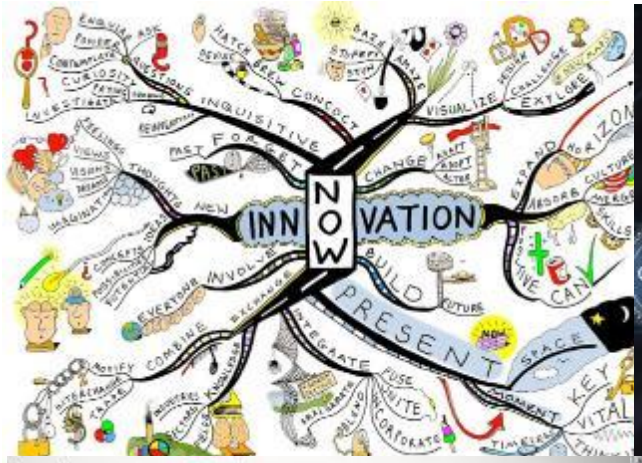
EIT Digital MASTER SCHOOL

EIT Digital DOCTORAL SCHOOL

EIT Digital PROFESSIONAL SCHOOL

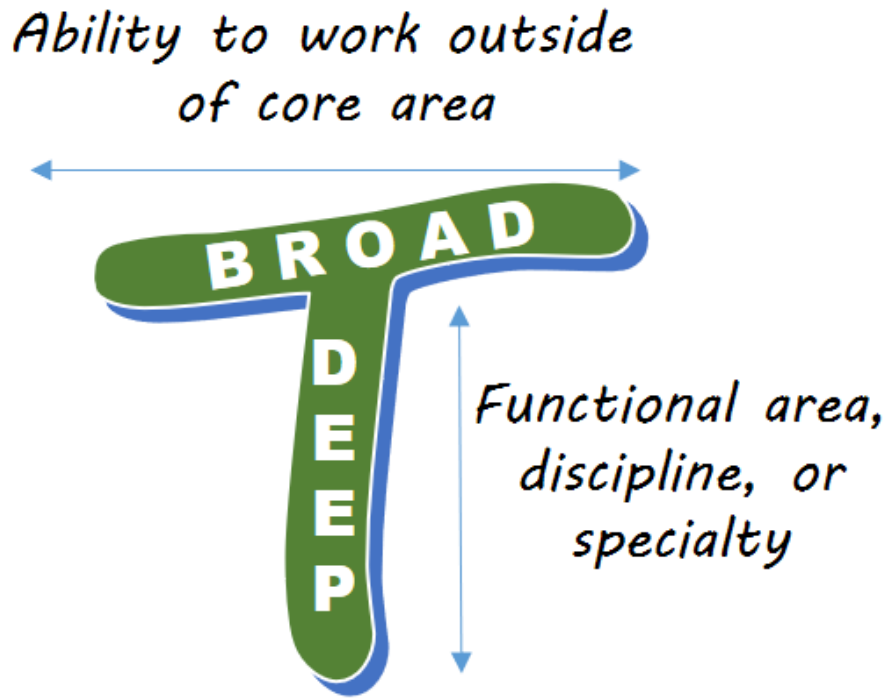
EIT Digital SUMMER SCHOOL

EIT Digital



The new era of Talent in the digital transformation:

Leadership, Disruptive, Business-oriented, Digital Technical Expertise, Transformative



Our Schools and Programmes

eit Digital DOCTORAL SCHOOL

AT A GLANCE:

- Industrial research-based Innovation
- 12 European locations
- Access to the best talent with strong research, and business skills
- Access to state of the art research and expertise through our European university network

Innovation Focus Areas:
Smart Cities, Digital Finance, Digital Tech, Digital Industry, Wellbeing.

eit Digital MASTER SCHOOL

AT A GLANCE:

- 20 partner universities
- 9 programmes in Digital Tech
- Harmonised I&E Education
- Mobility: double degree
- Industrial engagement + internships
- 700+ students
- Blended learning

Tech-focused programmes:
Cyber Security + Data Science + Embedded Systems + Cloud and Network Infrastructures + Autonomous Systems

eit Digital PROFESSIONAL SCHOOL

AT A GLANCE:

- Professional Schools keeps European professionals at the forefront of fast-paced digital technologies
- Partnerships with leading institutions
- Blended learning courses

Focus on digital transformation and digital business models

eit Digital SUMMER SCHOOL

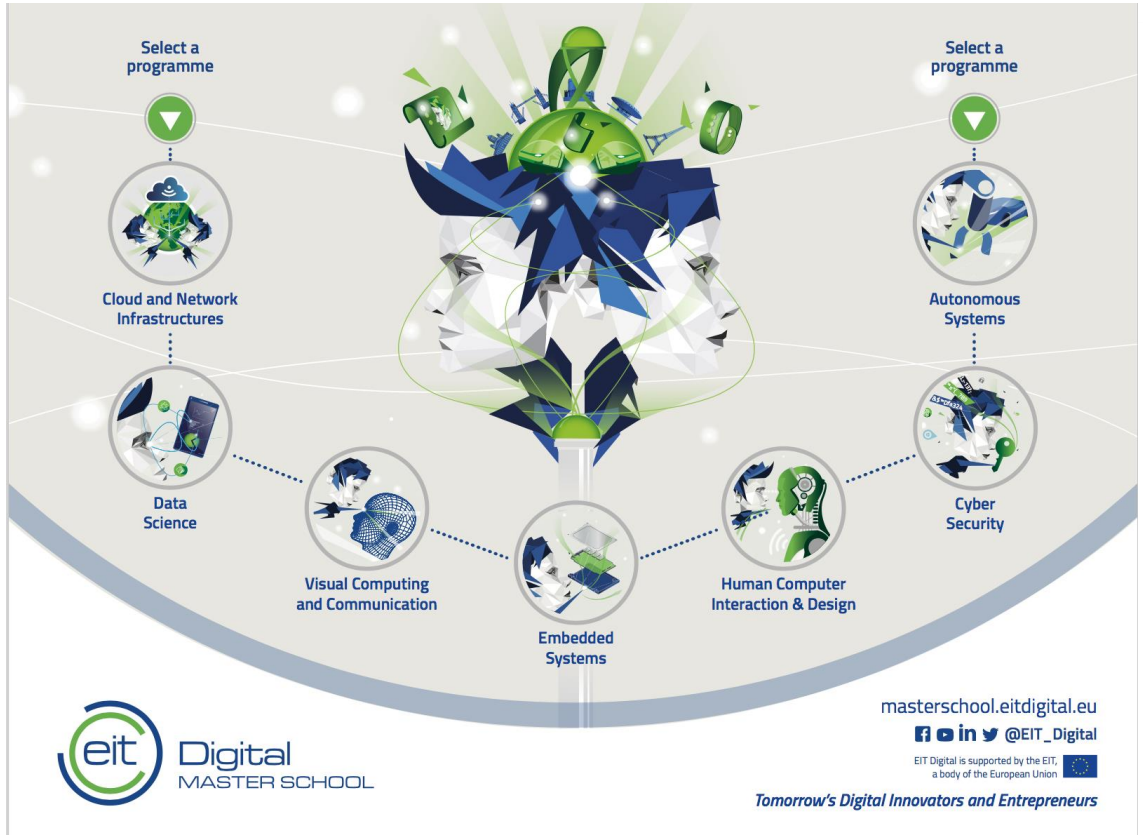
AT A GLANCE:

- 2 week workshops
- 15 programmes in digital innovation & entrepreneurship
- 12 amazing locations in 11 European countries
- Gain hands-on experience through company cases, project work and field trips
- Earn 4 ECTS credits

Innovation Focus Areas:
Cities, Finance, Tech, Industry, Wellbeing.

7* MASTERS AT THE FOREFRONT OF DIGITAL TRANSFORMATION

AUTONOMOUS SYSTEMS
CLOUD AND NETWORK INFRASTRUCTURES
CYBER SECURITY
DATA SCIENCE
EMBEDDED SYSTEMS
HUMAN COMPUTER INTERACTION AND DESIGN
VISUAL COMPUTING AND COMMUNICATION



*Two new programmes in Fintech and Digital Manufacturing in 2020

A UNIQUE EUROPEAN EDUCATION SCHEME

- Classic university track

Year 1

Year 2

One university
One country
One diploma

- EIT Digital Master School

Year 1
Country 1

Business challenge kick-off

2-week Summer School

Year 2
Country 2

Thesis + Industrial Internship

Graduation Ceremony

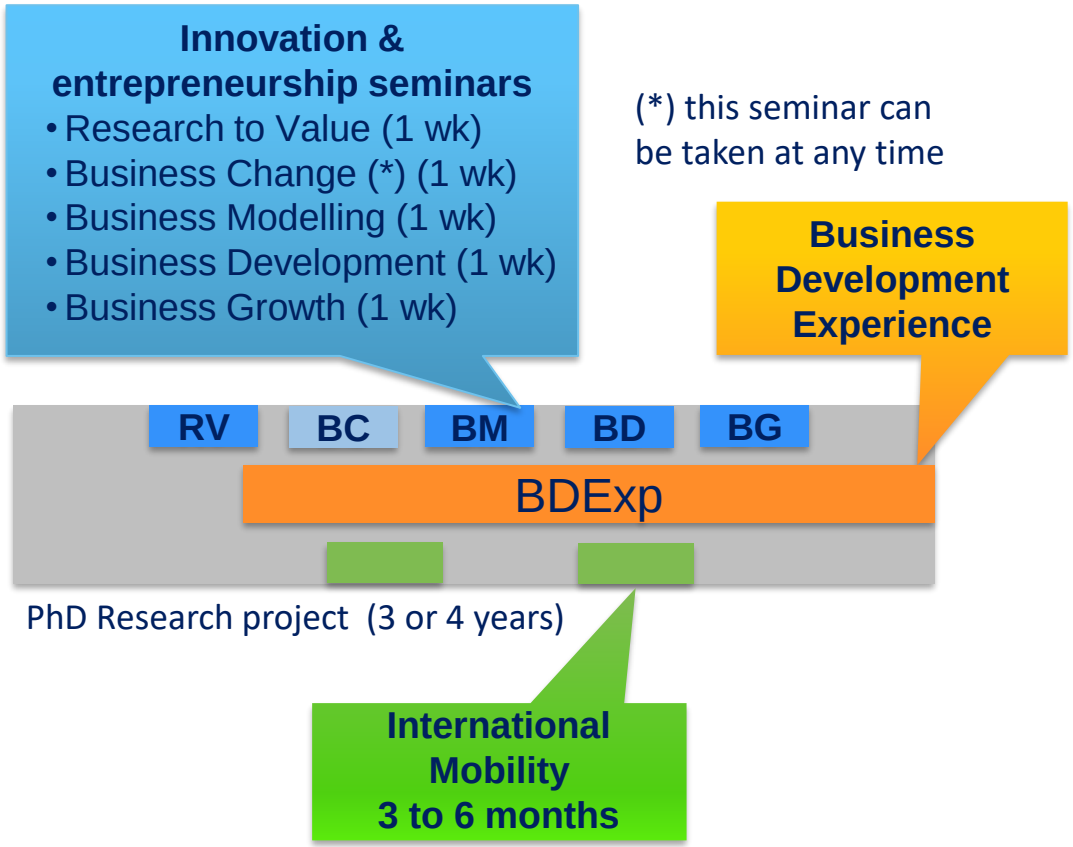
Two universities
Three diplomas
Up to six countries

The Industrial Doctorate: fostering deep-tech innovation

Elements:

- Doctoral Programme:
  - PhD research project conducted for 3 or 4 years depending on the academic partner´s regulation.

- EIT Digital PhD Label:
  - International Geo-mobility
  - Innovation and & Entrepreneurship seminars (I&E)
  - Business Development Experience BDExp



EIT Digital Label: Education for Innovation & Digital Transformation Leadership – Learning objectives

General I&E skills

1. **Create products**, services, businesses, … with a customer/user-centric perspective
2. **Model**, plan and develop strategically & financially **new businesses**
   - Dealing with fast evolving scenarios and uncertainty (agility, lean)
   - Dealing with specificities of various entre- / intra-preneurial contexts with different stakeholders
3. Organize and **manage digital innovation**
4. **Integrate values** to stakeholders, to societal and ecological systems, **into business decisions**

Soft skills

1. **Communicate**, interact with business experts on a common language, educate
2. **Collaborate** in multidisciplinary / distributed teams
3. Exercise personal **leadership and decision making**

General I&E skills

Soft skills

Deep-tech I&E skills

Digital Transformation skills

Deep-tech I&E skills

1. Assess **value of research for innovation** and apply research and technologies to create new/improved products, services, businesses, …
2. ***Exploit technology*** *on the market* (IP, tech watch, tech maturity, tech commercialization strategies, standards)
3. **Leverage** EU / KICs research and **innovation support instruments**

Digital Transformation skills

1. **Develop a vision** of the impact of digital technologies on industries and society and opportunities created
2. **Deal with new success factors** in developing a business in the Digital era (hybrid BMs, lean organizations, digital customer experience, …)
3. **Contribute to organizations' change management**

Education for Innovation & Digital Transformation Leadership – Objectives

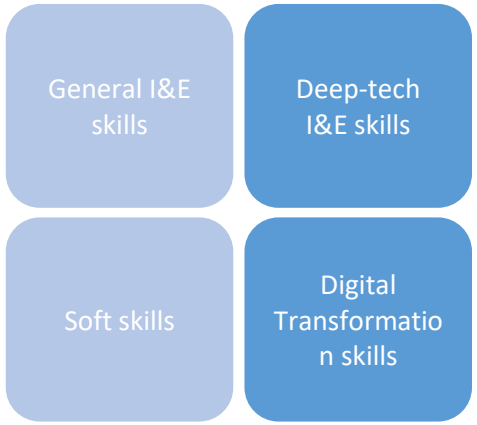
Bringing to Europe…
Entrepreneurial Researcher-Innovator

- Able to **explore innovation** and business opportunities in relation with his/a research and technological domain
- Able to address **valorisation of research** and technology commercialization, either extra- or intra-preneurial
- Able to go through the key stages of exploring, selecting, designing innovation, **business modelling** and development

… in relation with host-organization's context, **strategic challenge**

… **leveraging** his/her **entrepreneurial attitude and skills**

…being at the same time…



Digital Transformation Leader

- **Mastering a technological area,** in depth
- **Able to build a vision** of the impact of digitalization on social/societal & ecological systems, industries and organizations
- **Able to communicate** his vision and ideas, inspire different stakeholders, educate, evangelize, network
- **Able to orient, influence, get resources, lead people** in different collaboration contexts (multidisciplinary, pan-European project or new venture, …)

Current University-Industry Collaborations for Industrial Doctorates

Digital Finance

E-GROUP SOFTWARE & BEYOND

otpbank

Digital Wellbeing

imec

IBM

Reply

exprivia

FONDAZIONE BRUNO KESSLER

Digital Tech

Peltarion

NOKIA

Digital Industry

BOSCH

TIM

WIPSEA

SAP

Digital Cities

Interactive Coventry

YIT

eit Digital

Budapest University of Technology and Economics
Department of Electron Devices

POLITECNICO MILANO 1863

POLITÉCNICA

SORBONNE UNIVERSITÉ

UNIVERSITÉ DE RENNES 1

TU/e Technische Universiteit Eindhoven University of Technology

University of Twente
The Netherlands

KTH VETENSKAP OCH KONST

Aalto University