Doctorate in Industrial Innovation

Partners
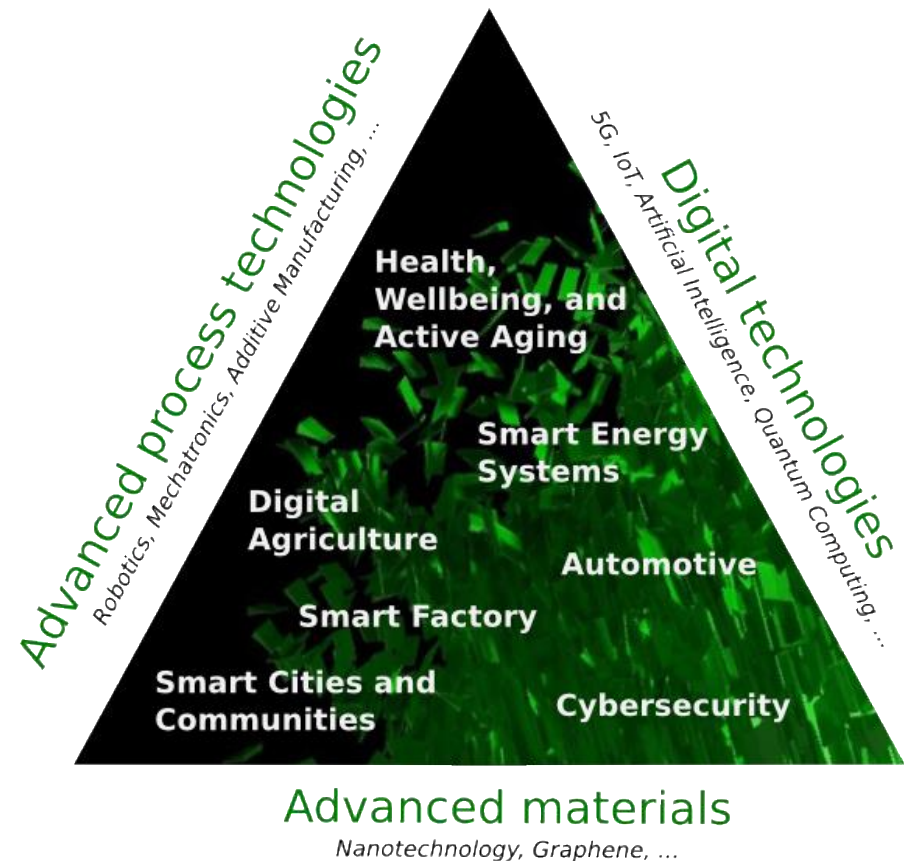
Toward Industry 4.0

The Doctorate Program in Industrial Innovation consists of a structure where a series of enabling technologies are applied to industrial domains to create innovation in accordance with the strategic approach, Industry 4.0.

Advanced process technologies
Robotics, Mechatronics, Additive Manufacturing, ...

Digital technologies
5G, IoT, Artificial Intelligence, Quantum Computing, ...

Health, Wellbeing, and Active Aging

Smart Energy Systems

Digital Agriculture

Automotive

Smart Factory

Smart Cities and Communities

Cybersecurity

Advanced materials
Nanotechnology, Graphene, ...

Advantages

Companies

Talent access:

Professionals able to respond to companies' innovation needs through research and precompetitive development
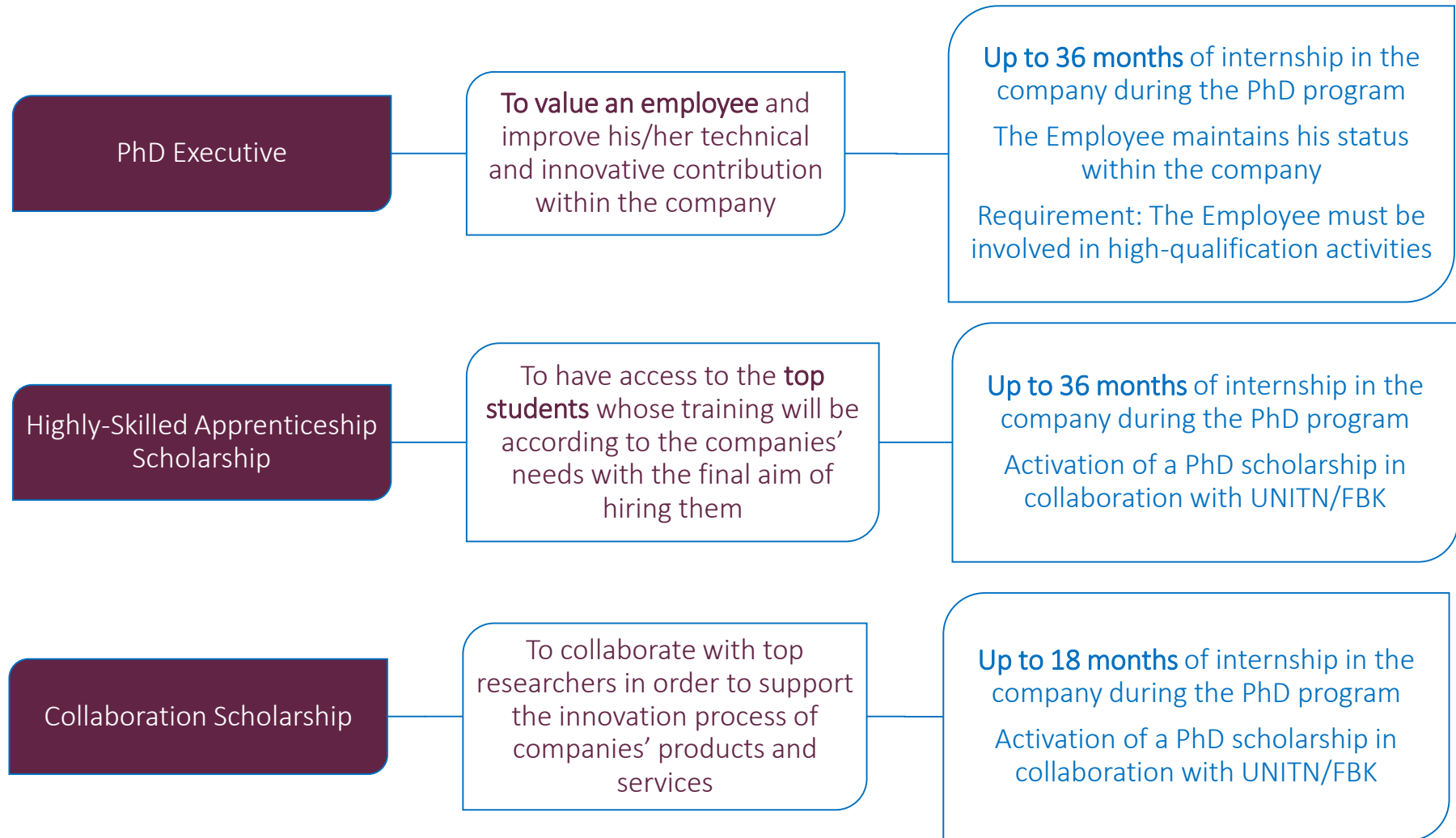
Knowledge access:

Opportunity to collaborate with first-class research groups at the international level exploiting advanced research outcomes

Research Centers

Opportunity to work in **research topics with high innovation potential**

Opportunity to **experiment the impact and applicability** of research in real-world contexts
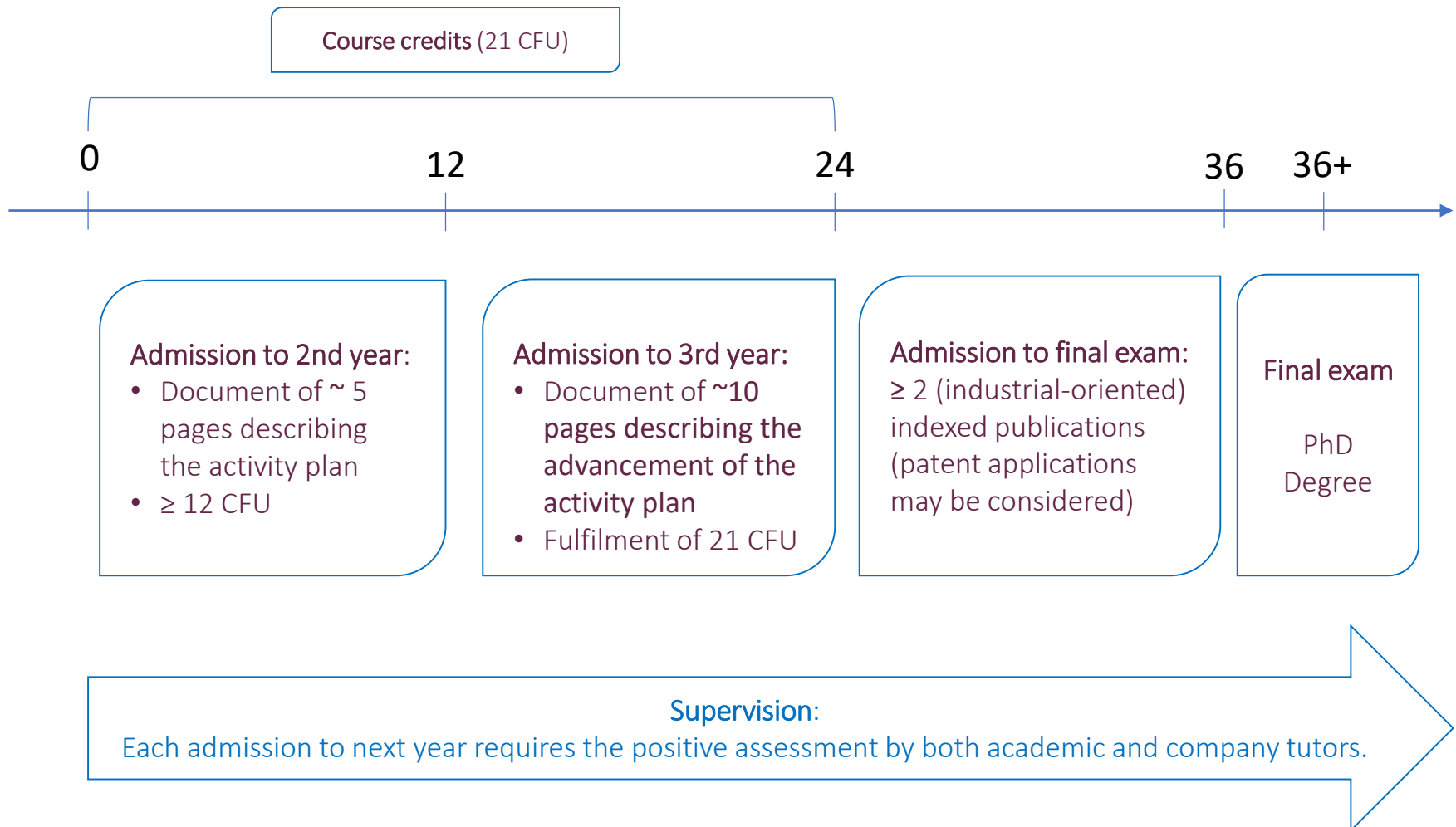
Collaboration Modalities

PhD Executive

To value an employee and improve his/her technical and innovative contribution within the company

Up to 36 months of internship in the company during the PhD program

The Employee maintains his status within the company

Requirement: The Employee must be involved in high-qualification activities

Highly-Skilled Apprenticeship Scholarship

To have access to the **top students** whose training will be according to the companies' needs with the final aim of hiring them

Up to 36 months of internship in the company during the PhD program

Activation of a PhD scholarship in collaboration with UNITN/FBK

Collaboration Scholarship

To collaborate with top researchers in order to support the innovation process of companies' products and services

Up to 18 months of internship in the company during the PhD program

Activation of a PhD scholarship in collaboration with UNITN/FBK

Kicking off the Collaboration

Definition of the research project	→	Call for PhD candidates	→	Candidate selection

| Project is built on the problem(s) the company wishes to solve | | | | Involvement of the company in the selection process |

Timeline of the PhD Program

Course credits (21 CFU)

0   12   24   36   36+

Admission to 2nd year:
- Document of ~ 5 pages describing the activity plan
- ≥ 12 CFU

Admission to 3rd year:
- Document of ~**10 pages describing the advancement of the activity plan**
- Fulfilment of 21 CFU

Admission to final exam:
≥ 2 (industrial-oriented) indexed publications (patent applications may be considered)

Final exam

PhD Degree

Supervision:
Each admission to next year requires the positive assessment by both academic and company tutors.

Collaboration between academic and company tutors

Definition of training **goals**

Multidisciplinary and **customizable** learning process according to the **company's priority**

Project management

Flexible plan established by both parties

Multidisciplinary Training Courses

2 training packages

Technological/scientific courses

Innovation/soft skills courses

Acquisition of scientific and technological competences in order to develop innovative solutions

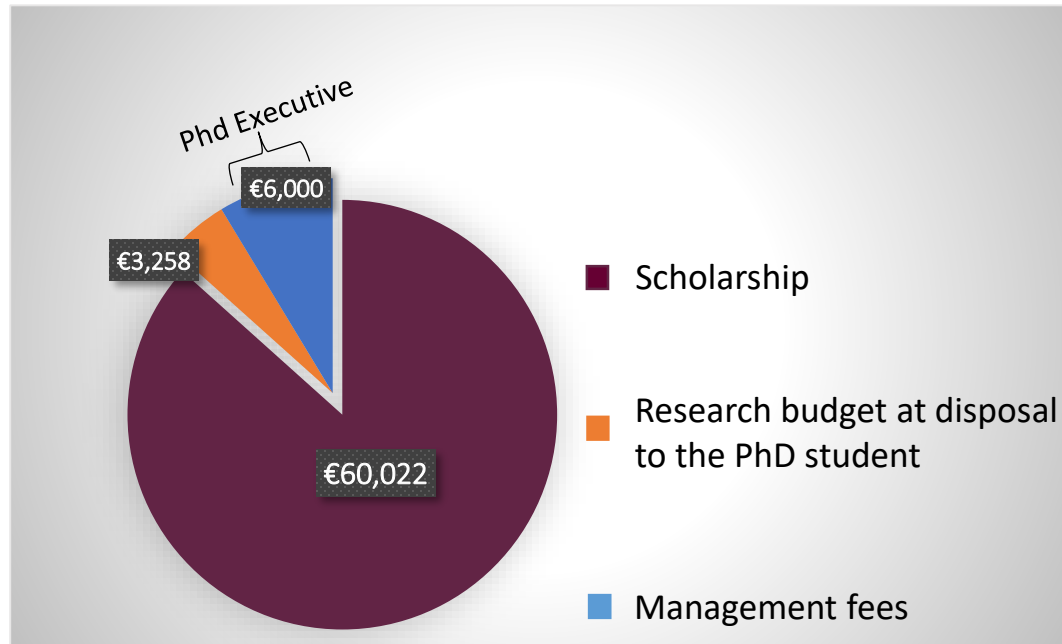Acquisition of entrepreneurial, managerial and innovation process management skills
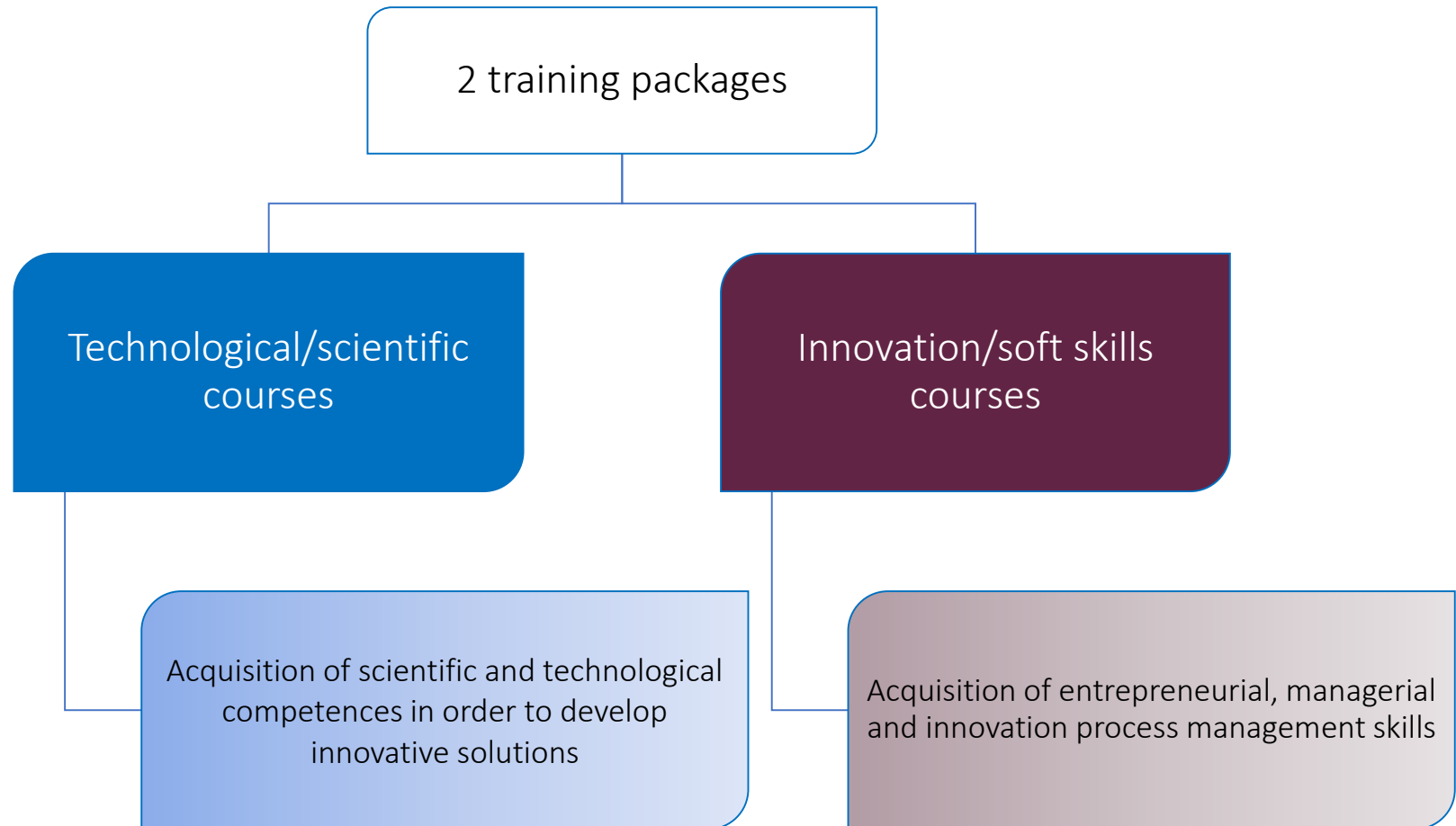
Technological/Scientific Package
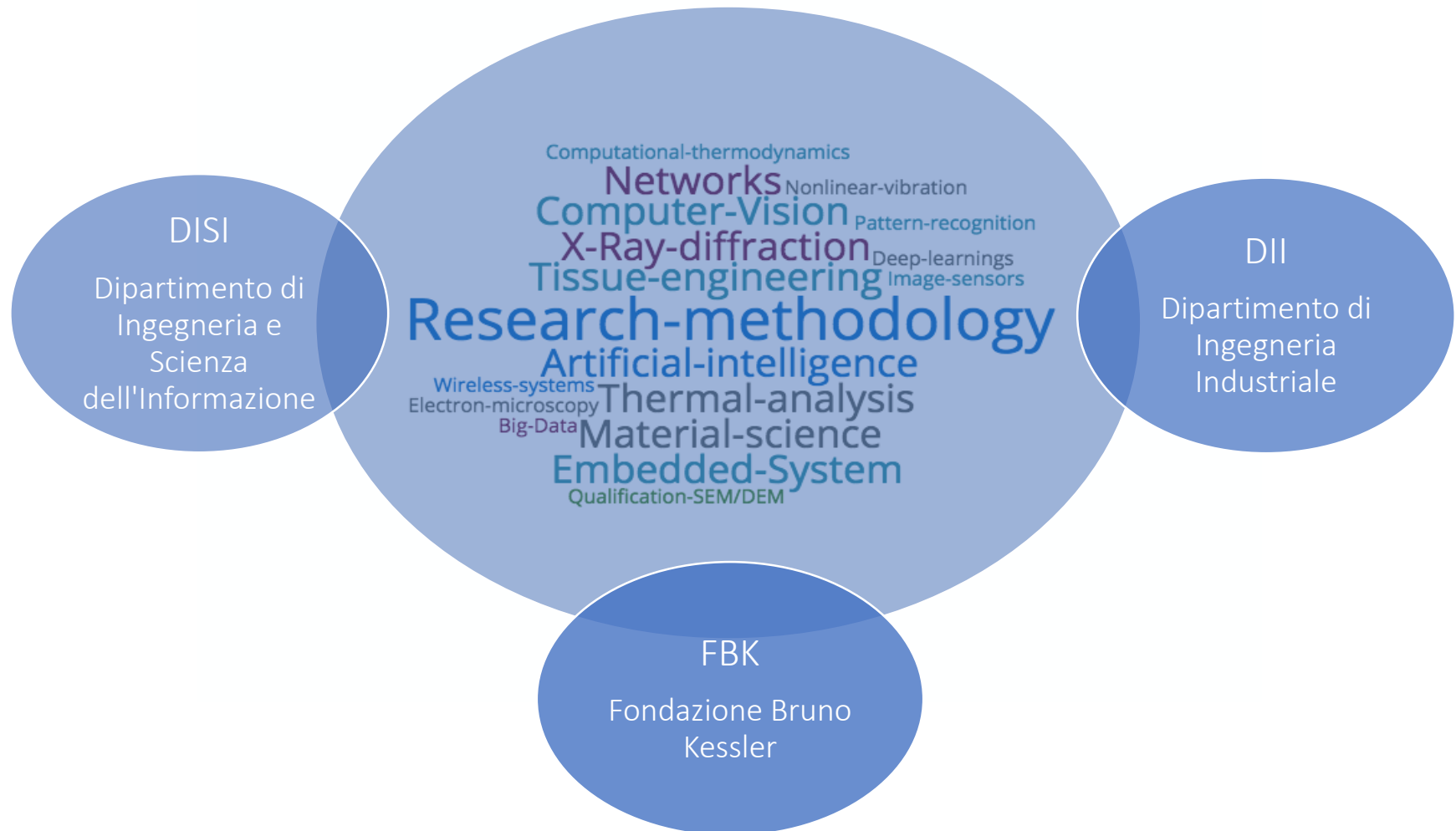
Innovation/Soft Skills – Synergy with Key Players
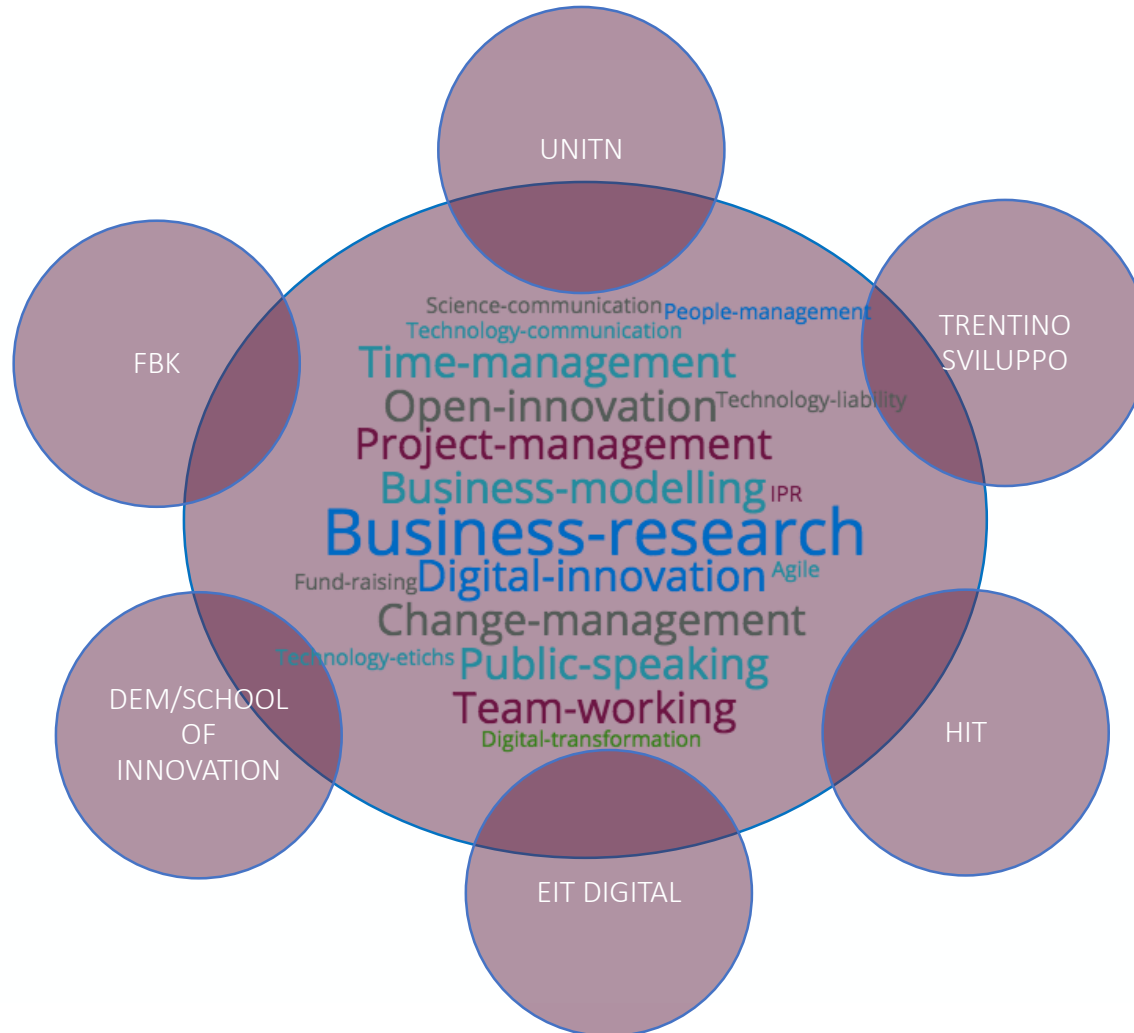
Total Scholarship Cost for 3 Years

Collaboration with Companies

CORE modality

Other modality

Possibility to participate to the **Industrial Board** of the Doctorate for proposing and triggering research topics of industrial interest and industrial seminars

Commitment to finance at least one PhD scholarship or activate a PhD Executive in three years over specific topics

Possibility to subscribe an agreement with the departments in order to ease the access to Master (and Bachelor) students for implementing internships and research projects related to specific courses

Financing of scholarships in specific topics of interest

Co-funding Opportunities

Possibility to get 50% of co-funding from Trentino Sviluppo

for the next PhD cycle (November 2020)

EIT Digital Industrial Doctorate School
(co-funding up to 50% for partner companies)
https://doctoralschool.eitdigital.eu/

Innovation areas: Digital Industry, Digital Cities, Digital Wellbeing, Digital Tech and Digital Finance

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