Doctorate in Industrial Innovation
Partners

HUB Innovazione Trentino

Università degli Studi di Trento
Dipartimento di Ingegneria e Scienza dell’Informazione

Università degli Studi di Trento
Dipartimento di Ingegneria Industriale

Fondazione Bruno Kessler

Università degli Studi di Trento
Dipartimento di Economia e Management

Confindustria Trento
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.
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

1. **Definition of the research project**
   - Project is built on the problem(s) the company wishes to solve

2. **Call for PhD candidates**

3. **Candidate selection**
   - 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

Project management

Multidisciplinary and customizable learning process according to the company’s priority

Flexible plan established by both parties
Multidisciplinary Training Courses

2 training packages

Technological/scientific courses

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

Innovation/soft skills courses

- Acquisition of entrepreneurial, managerial and innovation process management skills
Technological/Scientific Package

DISI
Dipartimento di Ingegneria e Scienza dell'Informazione

DII
Dipartimento di Ingegneria Industriale

FBK
Fondazione Bruno Kessler

Research-methodology
Computational-thermodynamics
Networks
Computer-Vision
X-Ray-diffraction
Tissue-engineering
Artificial-intelligence
Thermal-analysis
Material-science
Embedded-System
Qualification-SEM/DEM

Nonlinear-vibration
Pattern-recognition
Deep-learnings
Image-sensors

Wireless-systems
Electron-microscopy
Big-Data
Innovation/Soft Skills – Synergy with Key Players
Total Scholarship Cost for 3 Years

- Scholarship: €60,022
- Research budget at disposal to the PhD student: €3,258
- Management fees: €6,000

Phd Executive
Contacts

UNITN
industrial-innovation@unitn.it
Tel. +39 0461-285328

FBK
Paolo Bresciani
bresciani@fbk.eu
Ph. +39 0461-314027

See for more information:
https://iid.unitn.it