



Key Action 2: Cooperation for innovation and the exchange of good practices Capacity Building in the field of Higher Education

University Business Engagement – A SMART Path for Development in Indonesia

Third Intensive Training Workshop and Study Visit 5-6-7 October 2022

UNIVERSITY-BUSINESS COLLABORATION INVOLVING STUDENTS @Unibo

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OUTLINE

- 1. ALMA MATER and the Innovation Ecosystem
- 2. University Organization: Focus on Third Mission
- 3. Universtiy-Business Collaboration Unit @Unibo
- 4. University-business Collaboration involving students



























UBC Unit: Mission and Objectives

University Governance Objective:

To foster relations with the industrial ecosystem. How?

- ✓ Facilitating the creation of structured and continuous relationships
- ✓ Increasing quantity and quality of collaborations with companies
- ✓ Strengthening university-business **bi-directional exchanges**
- ✓ **Expanding and diversifying opportunities** for collaboration (research, technology transfer, education/training, etc.)
- ✓ Promoting a multidisciplinary approach

Mission of the University-Business Collaboration Unit:

Remove the main **barriers** to university-business collaboration, **smooth the interaction** and facilitate the creation of **institutional and fiduciary relations** by:

- ✓ Providing an **entry point** for companies
- ✓ Guiding companies in **identifying** the most suitable **tools and skills** to achieve their goals
- ✓ **Taking care of the relationship** (collecting feedback, facilitate communication, help in solving collaboration issues, etc.)



Successful academia–industry partnerships require:

Common interests , trust and good communication

























UBC Unit: main activities



- Promotion and implementation of collaboration strategies with the industrial sector (local companies and associations, large national and international companies)
- ✓ Promotion, coordination and management of University Framework Agreements for collaboration with enterprises and Joint Research
 Labs (support for negotiation and conclusion, monitoring, animation)
- ✓ Promotion and development of training initiatives aimed at and co-designed with companies
- ✓ Entry point for companies interested in collaborating with the University
- ✓ Supporting research teams in interfacing with business
- ✓ **Supporting structures** (e.g. Departments) in the preparation and revision of collaboration agreements with companies (outside the University's standard contractual schemes).
- ✓ Organisation of horizontal information events on university-enterprise collaboration tools, and of vertical events for knowledge and networking with companies and other stakeholders
- ✓ Monitoring of national and international networking initiatives relevant to university-business relations (e.g. University Industry Innovation Network), including participation as a sector in projects funded by the European Commission aimed at exchanging best practices and defining innovative models and tools.



























National and International Networks (es. UIIN)
European/International Projects (es. SMART, SME Cluster Growth, UNA.Resin)















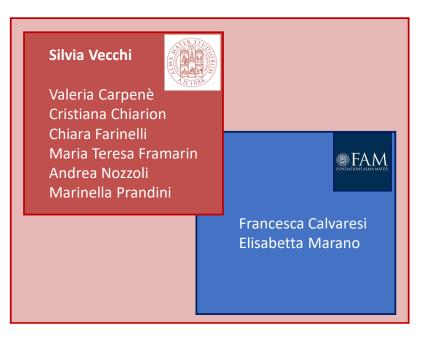














Multidisciplinary background:

Engineering, mathematics, political science, business science, law





















Diversified experiences:

Research, European projects, business contexts, communication, Contracts, innovation projects,







RERSEARCH AND INNOVATION Commissioned research and consultancy

- Competitive **Calls**
- PhD
- Fellowships
- Joint Labs
- Publications



Joint patenting

- Licensing
- Brand management



NEW ENTERPRENEURSHIP Spin-off / start-up share capital participation

Open innovation initiatives



EDUCATION

- Co-planning of degree and master courses
- Stakeholder consultation
- Company **lectures**
- Thesis
- Curricular internships



PROFESSIONAL TRAINING

- Training courses for company employees Master for
- company employees
- Summer / winter schools



PLACEMENT

internships Career Day

Training

- and Recruiting Day
- Dedicated job events

CORPORATE SOCIAL RESPONSIBILITY

(Sustainability, Social Innovation, International Cooperation, Sport, Art & Culture)





TECHNOLOGY TRANSFER





















Overview of UCB Opportunities: Time Perspective

	Short term	Mid term	Long term
RESEARCH	✓ Industrial consultancy✓ Thesis in the company	 ✓ Sponsored research ✓ Research fellowships ✓ Donation / Sponsorship 	 ✓ Doctorate ✓ Temporary research positions ✓ Joint Research Labs ✓ Joint participation to competitive funding programmes
TRAINING COURSES FOR COMPANY EMPLOYEES	✓ Seminar✓ Short training course	✓ Summer/Winter School	 ✓ Corporate Academy ✓ Post graduate executive Master ✓ Executive doctorate
EDUCATION AND RECRUITING	 ✓ Corporate testimonial ✓ Internship/stage ✓ Contest and business games ✓ Recruiting event 	✓ Summer/Winter School ✓ Corporate teaching ✓ Job fair	 ✓ Post graduate master ✓ Donation / Sponsorship ✓ Stakeholder consultations
OPEN INNOVATION AND ETERPRENEURSHIP	✓ Hackathon	 ✓ Open Innovation programmes ✓ Donation / Sponsorship 	✓ Scaling-up of spin off and start up companies
TECHNOLOGY TRANSFER		✓ Licences	✓ Patent/results co-ownership✓ Co-branding
CORPORATE SOCIAL RESPONSIBILITY	✓ Events	✓ Donation / Sponsorship	✓ Co-design of common initiatives

























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ENTREPRENEURSHIP AND INNOVATION INITIATIVES

e.g. #Action Week for Covid2019; Hackaton Designing the future in a world of uncertainty



Projects of company interest, collection of ideas innovative ideas, launching challenges to design and realise the innovation of the future through collaboration between company, professionals, students.

FOCUS ON DAY2

THESES AND INTERNSHIPS

e.g. Automatic Machines Training Course



Orientation and training for students and graduates within of a host company aimed at facilitating entry into the world of work. The traineeships can be linked to the preparation of the

INITIATIVES FOR BUSINESS

e.g. UNIBO@Lamborghini; ToroRosso@UNIBO; UNIBO Motorsport



Initiatives organized jointly with companies in the field of job placement or CSR activities

CO-DESIGNED INITIATIVES IN EDUCATION

e.g. School of Advanced Training Ferroviario; MUNER; Biomedical Master



Co-design of joint initiatives in higher education, summer schools, master's degrees etc.

CONSULTATION OF THE SOCIAL PARTNERS

e.g. es. Master's degree in Artificial Intelligence; International degree in Automation Engineering



reated by Adrien Co

Comments and suggestions on the educational offer from stakeholders in the productive world to improve the courses of Study.

COMPANY TESTIMONIALS

e.g. es. Master's degree in Offshore Engineering; Master's degree in Advanced Automotive Engineering



Business experiences conveyed to students during initiatives such as seminars, case studies, company visits-





















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Orientation and training for students and graduates within of a host company aimed at facilitating entry into the world of work. The traineeships can be linked to the preparation of the thesis.

Thesis:

 Possibility for companies to host a student in the company for a short period during which they can work on a thesis project on topics of interest to the company

Internship:

A curricular internship is an experience intended to complete the University education of students, by enabling them carrying out practical work in structures outside of the University. A company can host a student for a short period where he can focus on specific tasks or researches.

Main advantages:

For University:

- Enhance future job prospects/employability of graduates and their ability to become an entrepreneur.
- ✓ Improve relevance of study and job competencies.
- ✓ Provides a better understanding of societal challenges and needs.
- Ensure up-to-date education on the main needs of companies and the global context.

For Company:

- ✓ Access to university expertise with the possibility of deepening topics of interest to the company
- ✓ Very easy to activate
- \checkmark A good starting point to start collaborating with the Unviversity



























Who: University of Bologna - School of Engineering (Master's Degrees in Mechanical Engineering and Automation Engineering)

Aim:

- enhancing training activities oriented towards the design of Automatic Machines
- develop organizational autonomy and rationality
- apply the rigour of the methods learnt during university studies, deal with technical problems and clearly communicate their results.

How:

✓ Internships and Industry tutoring on topics related to the design and construction of automatic machines

Workshop to present projects and results, aimed at operators in the sector and manufacturers of Automatic Machines, companies related to the sector, students and teachers, and Trade **Associations**





AREA CENTRO

Workshop

sulle attività di formazione orientate alla Progettazione e Costruzione di

Macchine Automatiche

XII Edizione

Venerdì 28 Gennaio 2022 - ore 14.00

Modalità online su TEAMS

Università di Bologna - Scuola di Ingegneria



motivi W little





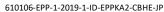
























Initiatives organized jointly with companies in the field of job placement or CSR activities.

Examples of initiatives:

Job Placement events co-designed with industries:

- ✓ JobIncontra
- ✓ Career days or Recruiting Days (broad or sectoral)
- ✓ One to one events with industry

Participation in CSR initiatives:

- ✓ Industries participate/support University CSR initiatives
- University collaborates with companies in the implementation of internal CSR initiatives

Main advantages:

For University:

- Provides a better understanding of societal challenges and needs.
- ✓ Ensure up-to-date education on the main needs of companies and the global context.

For Company:

- ✓ Identify, recruit and integrate graduates with an upto-date level of education
- Raises brand profile (employer branding, cobranding, etc.)





















smart

University-Business Collaboration involving Students







JOINT EVENT TORO ROSSO @UNIBO

- ✓ Location: School of Engineering and Architecture - Unibo
- ✓ Participation: nearly 200 students
- ✓ Co-design and co-delivery of Toro Rosso Recruitment Day@Unibo
- ✓ Program: company presentation, jobs available and technical workshops on 2 major fields of interest for the company
- ✓ Extra: PIT STOP simulation and free tour to Toro Rosso HQ for top students

UNIBO MOTORSPORT

The Racing Team of the Alma Mater Studiorum, University of Bologna is made up of three main projects

- ✓ One combustion car, named Tenace GN.
- ✓ One electric car, named Elettra GN.
- ✓ One electric motorbike, named Minerva GN.



JOINT EVENT UNIBO@LAMBORGHINI













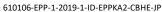


















Co-design of joint initiatives in higher education, summer schools, master's degrees etc.

Initiatives in the field of education which are codesigned in collaboration with companies; they can be:

- Degree programmes
- ✓ Masters
- ✓ Summer/Winter Schools
- ✓ Joint initiatives in advanced training

Main advantages:

For University:

- Improve relevance of study and job competencies.
- Provides a better understanding of societal challenges and needs

For Company:

- ✓ Identify, recruit and integrate graduates with an up-to-date level of education in relation to real business needs as well as entrepreneurial students
- Access to academic activities (e.g. workshops, networking, partnerships)

























UNIBO-ALSTOM-FSI ADVANCED TRAINING SCHOOL



- ✓ Area: Integrated mobility engineering systems
- ✓ Aim: fill the gap in rail industry recruiting needs;
- ✓ **Target:** train highly qualified students to be employed by partner companies
- ✓ **Design:** input on content, structure and teaching staff from both university and partner companies
- ✓ How: 1- month training course + several on-site visits
- ✓ Teaching staff: Unibo and companies staff (50%-50%)
- Students: out of over 200 applicants, 35 students with engineering background





2017 - 2019 - 2020 - 2021

Of the 15 companies involved in the co-design of the interteaching degree courses in 'Advanced Automotive Engineering' and 'Advanced Automotive Electronic Engineering', 6 have a Framework Agreement with the University of Bologna





























Created by Adrian Coque

Comments and suggestions on the educational offer from stakeholders in the productive world to improve the courses of Study.

General Information:

For the design of a new course of study or for the revision/update of the training project it is mandatory to organize a moment of **Consultation Of The Social Partners**.

- ✓ Who: Unibo and other business/stakeholders in the area
 of competence
- Focus of the meeting: new trends and relevant training offer
- Aim: to receive needs and input from companies for an improvement or enhancement of Unibo teaching in the sector

Main advantages:

For University:

- ✓ Improve relevance of study and job competencies.
- ✓ Provides a better understanding of societal challenges and needs

For Company:

 Companies have the opportunity to express their needs and ensure that these aspects are addressed in the curriculum

























Workshop "L'evoluzione del settore Biomedicale: la sfida occupazionale e il ruolo della formazione universitaria"

Location: Bologna Business School

Agenda:



■ 14:00 – 14:30: Institutional greetings

Prof. Enrico Sangiorgi (Vice-rector for Education), Prof. Rosa Grimaldi (Rector's Delegate for Relations with Businesses and Industrial Research), Prof. Massimo Bergami (BBS Dean)

- 14:30 15:10: Mega trend of the biomedical sector
- 15:10 15:40: Presentation of Unibo's biomedical education offerings

Prof. Enrico Sangiorgi (Vice-rector for Education)

- 15:40 17:00: Working tables
- 17:00 17:30: Closing of the work of the tables and closure Prof. Enrico Sangiorgi (Vice-rector for Education)



Presentation of the International Degree in «Mechanical Engineering for Sustainability»

Location: Forlì Campus

Participants: 22 participants from 15 companies

Agenda:

- 1. Reasons for consulting the social partners and results of the previous consultation
- 2. Reasons for revising the current Course of Studies
- 3. Key points of the new course of studies
- 4. Content: educational objectives, curriculum
- 5. Involvement of companies in Course activities
- 6. Discussion, input from company contact persons



























Business experiences conveyed to students during initiatives such as seminars, case studies, company visits-

General Information:

Companies **present their reality** to students through the organization of specific moments, with the aim of **increasing their visibility** and **attracting new graduates**:

Some different ways:

- Participation in specific sessions within a degree course and tells its reality generally accompanied by testimonies of former students;
- the company invites students in their own spaces showing them how they work and present career opportunities;
- Other co-designed testimonials

Main advantages:

For University:

- ✓ Improve relevance of study and job competencies.
- ✓ Improve relevance of teaching.

For Company:

- Raises brand profile (employer branding, cobranding, etc.)
- ✓ Access to university expertise with the possibility of deepening topics of interest to the company



























DT ENTREPRENEURSHIP LAB







Università di Bologna - School of engineering - Laurea Magistrale Ing. Gestionale - Technology Entrepreneurship [12 team of 6 people]





- To develop an entrepreneurial mindset.
- From company briefs to a startup idea through the Design Thinking process.
- Raise awareness on Design Thinking





- Meet the company and get the challenge
- Design Thinking project
- · Pitch your startup idea

COMPANY INVOLVMENT: Challenge for a business case; Lectures, case discussions, speeches; Test of the pretotypes solutions; Feedback to students' results; Company (virtual) tour; Students' interviews with the company

























Main advantages in activating collaborations with companies by involving the students as entry points



UNIVERSITY



COMPANY

Activating collaborations with companies by involving **students as entry points** can guarantee an **initial point of contact** that can open up further and diversified opportunities (direct contact with company realities, joint research projects, joint participation in competitive calls, funds for research and education etc.).

At the same time, collaborative activities involving students as entry points can be very important also for company as it can establish an initial point of contact with the university and then develop more complex collaborations.

Here are some specific advantages:

- 1. Enhance future **job prospects/employability** of graduates and their ability to become an entrepreneur.
- 2. Improve relevance of study and job competencies.
- 3. Provides a better understanding of **societal challenges and needs**.
- 4. Ensure **up-to-date education** on the main needs of companies and the global context.
- 5. Improves relevance of teaching.
- 6. Increases relevance of research and its impact into society.
- 7. Realizing the concept of the third mission

Here are some specific advantages:

- 1. Access to **university expertise** with the possibility of deepening topics of interest to the company
- Identify, recruit and integrate graduates with an up-to-date level of education in relation to real business needs as well as entrepreneurial students
- Upskilling competencies and knowledge accessing to the latest discoveries and innovation / knowledge to improve current processes, products, services and other business activities
- 4. Raises brand profile (employer branding, co-branding, etc.)
- 5. Access to **academic activities** (e.g. workshops, networking, partnerships)

























Industrial Strategic Partnerships Industrial Relations, Third Mission and Communication Division

Thank you!

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