

TOWARDS TRUE INTEGRATION OF EUROPEAN EDUCATION, RESEARCH AND INNOVATION

A VIEW FROM OF THE EUROTECH UNIVERSITIES ALLIANCE

OUTLINE

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THE EUROTECH UNIVERSITIES ALLIANCE VISION:

EUROPEAN NETWORKS OF EXCELLENCE FOR THE BENEFIT OF SOCIETY

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THE EUROTECH UNIVERSITIES ALLIANCE – A SUCCESSFUL MODEL FOR DRIVING MODERNIZATION

What is at stake?

Europe's society is facing complex challenges which are not limited to individual nation states. Solutions require fast-paced out-of-the box thinking across borders, disciplines and sectors. The globalisation of research and innovation has intensified in the last decade, particularly in terms of collaborative research, technology development and mobility of researchers and innovative entrepreneurs. However, Europe's economy generally remains characterised by traditional industries and fragmented markets.

Universities have a key role to play to address Europe's challenges. Modern universities are active drivers of more open innovation models, not only as producers of excellent science, but also as co-creators and generators of skilled human capital, including the next generation of European entrepreneurs. Embedded in their local and regional networks, universities as servants of society can facilitate policy discussions and drive change.

Networks of European universities play a role in combining complementary strengths of their members to achieve critical mass and impact for society. By joining forces and leveraging their individual ecosystem players, they can achieve the scale and synergies needed to create **globally attractive and competitive programmes and projects.**

The EuroTech Universities Alliance vision:

Networks of European Universities driving the modernization agenda

European university networks can drive the modernization agenda of benefit to society. Therefore, it is important to provide impetus for setting up European university networks and to further sustain the impact of existing networks. The EuroTech Universities Alliance therefore calls for:

1. A more holistic policy framework and funding programme for education, research and innovation

An overarching policy framework and funding programme for education, research and innovation is more likely to achieve significant change in quality and impact, putting Europe in a better position globally to maximise its attractiveness for talent and its industrial competitiveness. Successful universities pioneer new models of collaboration that break down the silos between education, research and innovation. **For reasons of scale, synergy and complementarity, these models need to be European by definition.** Networks such as the the EuroTech Universities Alliance form “European coalition of the doers”, piloting initiatives which leverage the potential of strong high tech ecosystems.

2. Networks of European universities as central building blocks of the European Area of Education, Research and Innovation

European Universities are in a better position to raise their profile and compete internationally when working together. Cross-European programmes combining the excellence of individual universities’ offers in education, research and innovation have **more weight internationally**. These programmes have two additional side benefits: They are self-reinforcing as they create a new generation of students, researchers and entrepreneurs with a more European mindset. Their high visibility can also better facilitate the dialogue with society on the relevance of Science and Technology – a dialogue in which universities have an important role to play.

- ➔ **It is highly beneficial to address obstacles to seamless cross-border collaboration of European universities and to support the joint delivery of programmes and joint ventures across the entire university value chain: education, research and innovation.**
- ➔ **Networks or Alliances of universities and their partners from the public and private sectors provide the appropriate institutional framework conditions to operate as vectors for change, as opposed to fully integrated (new) institutions.**
- ➔ **Financial support is required to increase the impact of existing networks by sustaining and enlarging the scale and scope of their initiatives. The development of emerging networks should also be supported. Funding is needed for both, framework-building as well as joint programmes and projects.**

The EuroTech Universities Alliance welcomes further brainstorming on the building blocks towards a true integration of European education, research and innovation, and the role of university networks therein. The Alliance is in an excellent position to facilitate a pan-European discussion on its above calls for action, building on its joint experience and expertise as well as the individual members’ national perspectives.

Background

The EuroTech Universities Alliance – a successful model for integrating education, research and innovation

The EuroTech Universities Alliance is a **dynamic strategic partnership of leading European universities** of science and technology, committed to excellence in research and jointly developing solutions to the grand challenges of society. The members are: Technical University of Denmark (DTU), Ecole Polytechnique Fédérale de Lausanne (EPFL), Eindhoven University of Technology (TU/e) and Technical University of Munich (TUM).

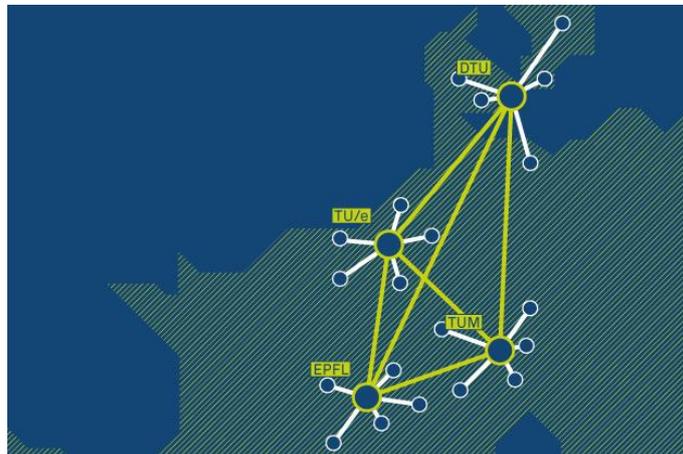


Figure 1 Connecting European university ecosystems

Leading universities of science and technology provide the key institutional settings to **translate excellent scientific knowledge and technological progress into innovative solutions for society**. By promoting in-depth collaboration across research and education, as well as nurturing innovation and entrepreneurship, the EuroTech Universities Alliance combines the excellence and complementary strengths of its member universities to achieve critical mass and high impact for society (see figure 2). By joining forces through the Alliance, the EuroTech Universities can **create synergies to achieve globally attractive and competitive programmes and projects**.

The EuroTech Universities have close ties with industrial partners and operate in strong innovation ecosystems of start-ups, SMEs and large multinational companies. By connecting the complementary strengths of its member universities and their innovation eco-systems across borders, the EuroTech Universities Alliance **drives European leadership in science and technology**.

The EuroTech Universities Alliance has been piloting **ambitious models of cross-European collaboration** for more than five years. Based on this experience, the Alliance has been actively contributing to EU policy discussions on the modernization of universities and the EU's innovation challenge.

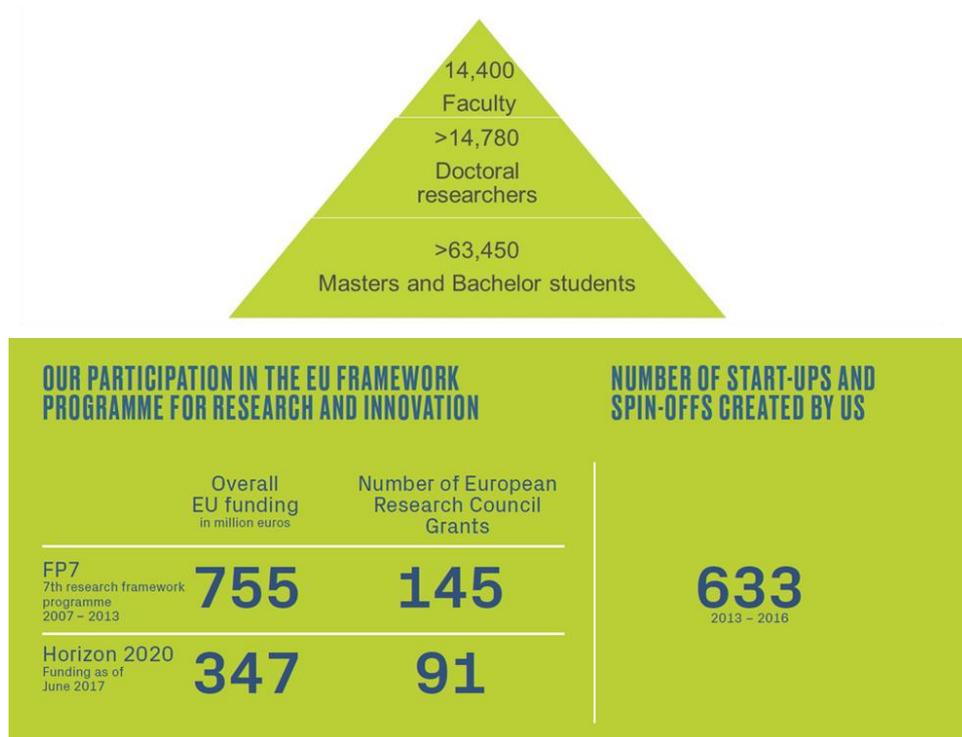


Figure 2 Teaming up excellence for critical mass and high impact

Our holistic expertise and experience across education, research and innovation

Joint activities of the EuroTech Universities Alliance span the **entire university value chain from education and research to entrepreneurship and innovation**. The Alliance endeavours to develop, attract and retain excellent talent to support Europe's leadership in technology. Collaboration within the Alliance addresses all levels of the education and research cycle, including:

- Bachelors and Masters level - student exchanges, research stays and 1:1 programmes
- Doctoral level - joint doctoral courses, joint supervision of doctoral candidates and doctoral summer schools
- Postdoctoral level - EuroTechPostdoc fellowship programme
- Young professors - Tenure Track systems and faculty recruitment.

Given the importance of non-academic career paths, collaboration with industry and entrepreneurship modules are integral part of the Alliance activity at all levels (see figure 3).

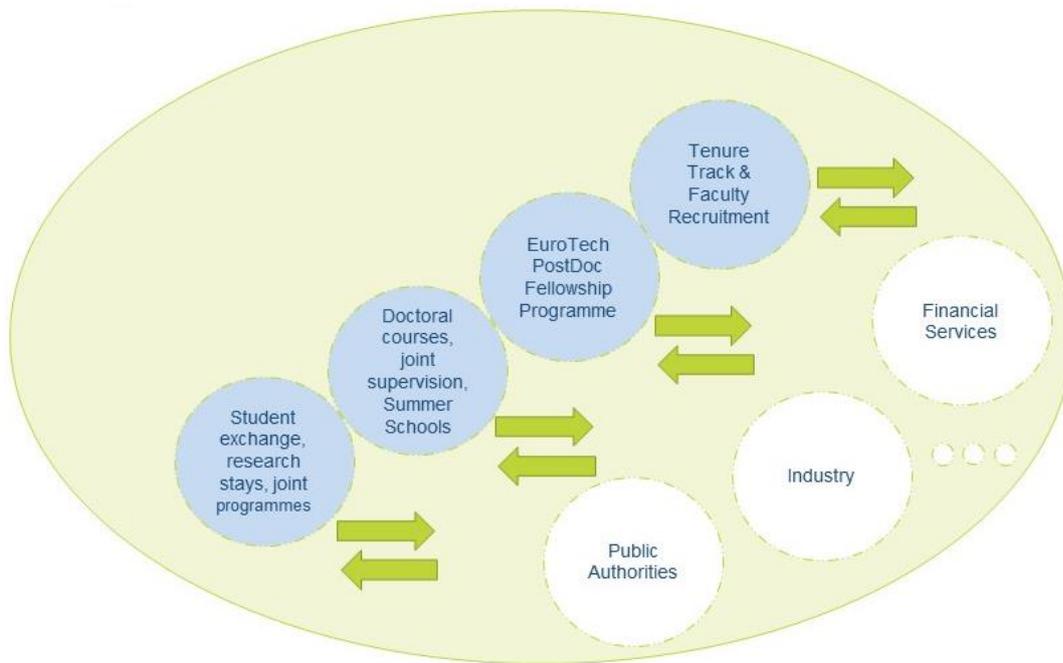


Figure 3 Developing talent for excellence in the wider university ecosystem

Our success stories

The European Venture Programme

The [European Venture Programme](#) is an example for a joint Alliance initiative at the nexus of education, research and innovation, addressing aspiring entrepreneurs from master’s degree level up to postdoc level. The Programme is a tangible contribution of the Alliance to address Europe’s challenge linked to scalable high-tech start-ups. Offering young startups exclusive access to the entrepreneurship expertise and networking resources available at the four EuroTech Universities, the intensive 12-day programme takes entrepreneurs on a journey to four different ecosystems, with the aim to enable the startups to grow their business beyond borders. Originally funded by Erasmus+, the programme has subsequently been institutionalised with Alliance EuroTech Universities’ funding.

Collaboration of Doctoral Schools

Since its early days, the EuroTech Universities Alliance has served as [an active platform for collaboration for its member graduate schools](#). Two joint initiatives address the European challenges linked to mobility and recognition of diplomas: The joint [EuroTech PhD Course Database](#) aims to increase visibility of and cooperation on PhD courses across the four universities. The mobility among doctoral researchers has resulted in a more rational utilization of resources and in more research cooperation. The [Joint Supervision agreement](#) between EuroTech’s Graduate Schools supports this aim, ensures a better doctoral experience and more formal recognition of the co-supervision in the thesis and the award diploma.

The EuroTechPostDoc Programme

The [EuroTechPostDoc Programme](#) will provide international research and career development opportunities for 80 high potential doctoral graduates. As one of the first cross-country fellowship programmes co-funded by the European Union's Horizon 2020 programme, it is unique in offering young researchers simultaneous access to four high-tech eco-systems, including their research expertise and infrastructures.

Research collaboration in strategic Focus Areas

Senior researchers from across the EuroTech Universities have joined their complementary research expertise and connected key players from their respective regional ecosystems to jointly work on solutions in five strategic Focus Areas:

- Entrepreneurship & Innovation
- Health & Bio Engineering
- Smart & Urban Mobility
- Data Science & Engineering
- High Performance Computing

More information

www.eurotech-universities.eu

[Alliance Profile Video](#)

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