



Aalto University

Aalto University as test bed and pioneer for crossing all kinds of borders

34th Conference of
Rectors and Presidents of
European Universities of Technology

September 18, 2015
Tuula Teeri, President, Aalto University

Aalto University

Where Science and Art meet Technology and Business

- First class research, art and education
- Multidisciplinary collaboration
- Entrepreneurship
- Tangible societal impact – industrial renewal

Founded in 2010, Aalto University is spearheading the Finnish University reform

Helsinki School
of Economics

University of Art
and Design,
Helsinki

Helsinki University
of Technology

Aalto University Schools

- Arts, Design and Architecture
- Business
- Chemical Technology
- Electrical Engineering
- Engineering
- Science

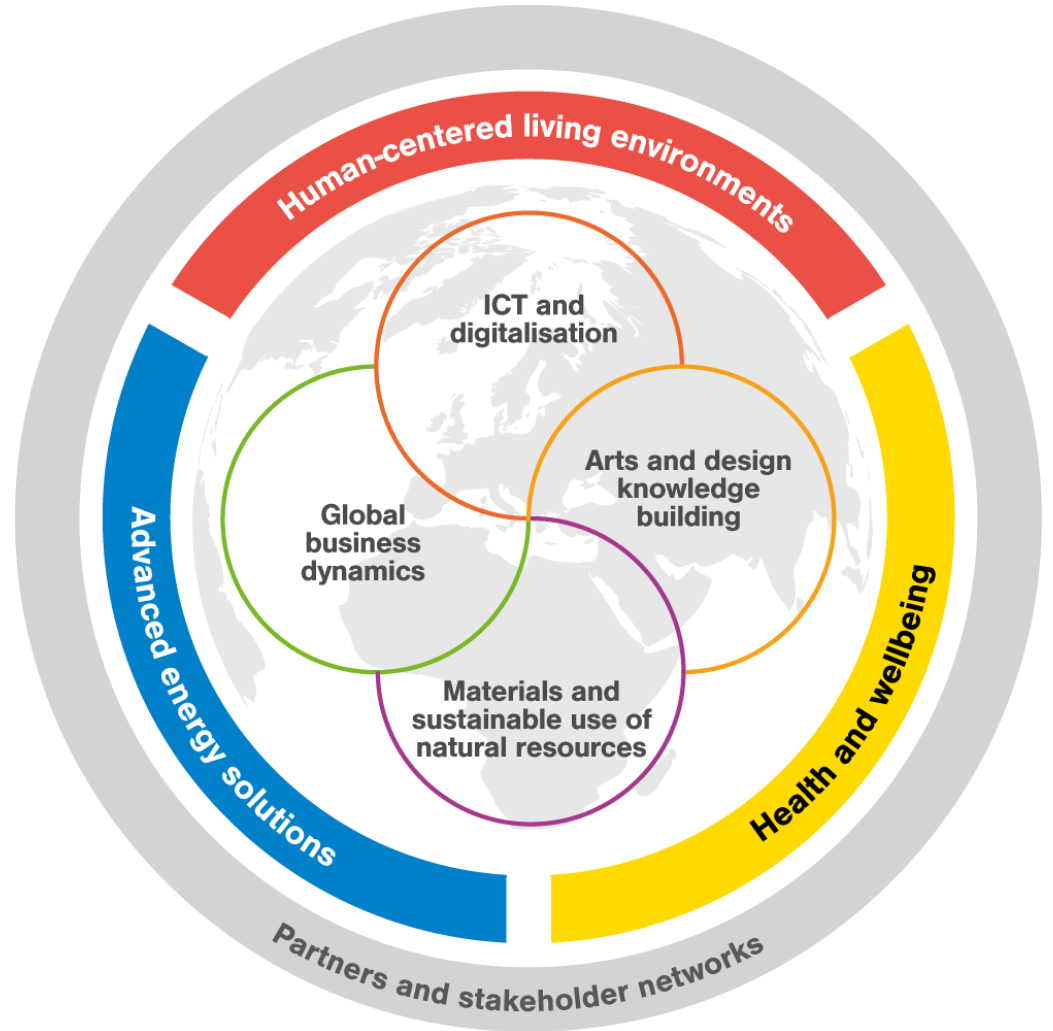
University reform – more autonomy to develop and implement own strategy

A foundation-based university – governed by an external Board

Significant increase in resources

- Direct temporary government funding up to **100 mill. EUR p.a. 2010-2020**
- Endowment 700 mill. EUR
- Estates and other assets 300 mill. EUR
- Annual budget 420 mill. EUR / 2014

Focusing on strengths, building on co-creation



Our Innovation Ecosystem in Otaniemi



... where Science and
Art meet Technology
and Business

Open innovation and
co-location with
strategic partners

Promoting
entrepreneurship and
business renewal

Solving challenges
for stronger
Finland

From plans to action 2010-2015

Tenure track; Aalto is becoming more international: a third of our new professors come from outside Finland.

Global research spearheads in e.g. materials research and technology, health technology incl. brain imaging, design / fashion, bioeconomy and solar energy

Theory combines with practice, Aalto researchers and students solve real-world problems.

We support and nurture student-led entrepreneurship and high growth enterprise

Close collaboration with industry and business help turn research results quickly into practice.



Co-creative education for future business and industry

Aaltonaut

"Aaltonaut" is a multidisciplinary minor, which concentrates on product development.

Design Factory

An educational concept to combine technology, business and design with societal needs in a global context. Design Factory Global Network.

Stanford University

Stanford University is our partner for entrepreneurship education.

Aalto Ventures Program

Entrepreneurship education for all Aalto students: skills, tools, and global networks for the creation of new business.

Students as co-creators and leaders



SLUSH in Beijing
October 2015

- World-class event organised by Aalto students
- 1,500 growth companies and 14 000 participants
- CEOs of more than 100 listed companies present

Seidenberg
School of Computer Science
and Information Systems



Pace University
New York



PHILADELPHIA
UNIVERSITY

**PhilaU Nexus
Design Factory**
Philadelphia



**Duoc UC Design
Factory**
Santiago



**Frisian Design
Factory**
Leeuwarden



Aalto Design Factory
Helsinki



**RTU Design
Factory**
Riga



**Porto
Design
Factory**
Porto



DESIGN FACTORY KOREA

**Design Factory
Korea**
Seoul



**IdeaSquare
CERN**
Geneva

**Sino-Finnish
Centre**
Shanghai



SWINBURNE
DESIGN FACTORY

**Swinburne
Design
Factory**
Melbourne


Educating World's best product developers?

A? Aalto University

A person is holding a piece of light blue and white patterned fabric with yellow accents. The fabric has a subtle pattern of small white dots and a yellow border at the bottom. The person's hands are visible at the top of the frame, holding the fabric. The background is a plain, light-colored wall.

Students connecting disciplines

The awarded CHEMARTS project combines students of arts and design and students of chemical technology in order to produce new concepts for the forest industry. Examples vary from smart clothing to new cellulose fabrics.



Three collections from Aalto University students in the finals of the Hyères Fashion Festival 2015

The judges of the annual competition represent the top international figures in the fashion world.

Service design and the City

Dep. of Design prof Tuuli Mattelmäki

- Research collaboration with Helsinki from 2009 ->
- Platform for experimenting, engaging, learning and developing
- Research themes from human-centered design to cross-sector collaboration and social and healthcare services
- Outcomes include academic publications, MA thesis and new ideas, tools and processes



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A man in a white t-shirt and blue jeans stands at the front of a classroom, writing on a whiteboard. The whiteboard has the years 2014, 2015, 2016, 2017, and 2018 written on it. Several students are seated at desks in the foreground, looking towards the presenter. One student in a blue and white striped shirt is looking at a laptop. Another student in a red and white polka-dot shirt is looking towards the presenter. The room has a modern, open-plan feel with wooden pillars and white walls.

AppCampus, a joint program of Aalto University and Microsoft created new, innovative applications

The three-year old AppCampus programme helped application developers become growth entrepreneurs and to create mobile apps with a higher degree of innovation than average




Synoste, which extends bone with smart metal, got millions in funding

A company which came out of Aalto University uses its funds for the commercialisation of painless bone extension treatment.



€12 million capital investment into new materials

Canatu is developing transparent carbon nanomaterial membranes for electronics manufacturers.

A man with blonde dreadlocks and glasses is speaking into a microphone. In the background, a white robotic arm is visible. To the right, another man with glasses and a blue hoodie is looking towards the robot.

ZENROBOTICS

Robots improve the world

ZenRobotics manufactures artificial intelligence for robots which learn efficiency in work that is dangerous for people, but necessary: recycling.



Better control of the risks associated with winter shipping

The Stormwinds project increases the safety of winter shipping and reduces the risk of environmental accidents.



Nexstim

Help for stroke patients

A device developed by **Nexstim** has achieved very promising results in the rehabilitation of stroke victims in the United States.



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Photo: Aalto University Material Bank



A brighter future

The efficiency ratio of black silicon solar cells developed by professor Hele Savin and her research group breaks records.



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