Research excellence
Focus and relevance by building on strengths

Themes driving interdisciplinary research

World class potential

World class

Digitalization
Energy & sustainable use of natural resources
Human-centred living environments

Global business dynamics
Process and systems competence
Architecture
Art

Computation and modeling
ICT
Materials
Design
New media

Based on extensive international research evaluation (RAE), 2009

Aalto University

4 National Centres of Excellence in Research
5 ERC Advanced Grants
12 ERC Starting Grants
7 Academy of Finland professors and over 35 research fellows.
Aalto is participating both of the 1 billion euro EU FET flagship projects (Human Brain and Graphene).
Aalto is a major player in Digi

- Some 80 professors in ICT and another 80 in core applications.
- Competitive research funding 50+ million per year.
- Annually 400+ masters´ degrees and some 100 PhD´ s.
- Students make some 100.000 ECTS/a in DIGI-relevant courses.
- Centers of Excellence:
  - Former: Algodan, GIM, Smarad.
- ERC Grant grants
- Re:KnoW– a 5-year strategic research excercise of Tekes.
- Close collaboration with University of Helsinki
  - HIIT – Helsinki Institute for Information Technology
  - HICT - Helsinki Doctoral Education Network in Information and Communications Technology
- European level networks: EIT ICT Labs.
ICT in Finnish Universities

Research/Publications

Aalto

Education/Master degrees

Åbo

ISY

Hanken

LTY

TTY

HY

JY

Oulu

TaY

TuY

VY
Engineering education nation-wide and in Aalto

National M.Sc. degree targets / Aalto % share by 2016

- Biotechnology (75/47 %)
- Civil and Structural Engineering & Urban Planning (250/68 %)
- Industrial Engineering and Management (344/17 %)
- Electrical and Automation Engineering & ICT (1027 = 407 + 620 / 37 %)
- Mechanical Engineering (336/31 %)
- Applied Physics and Engineering Mathematics (140/50 %)
- Materials Technology (100/40 %)
- Environmental Engineering (120/29 %)
- Chemical Technology and Process Engineering (222/32 %)
- Architecture (156/32 %)
- Energy Technology (125/44 %)
- Landscape Architecture (25/100 %)

Increase

Decrease
Aalto Ecosystem for crossing borders

Covers research, education and societal interaction & impact!

Joint vision creation

Multidisciplinary Platforms

Joint activities

Hubs

Joint spaces to meet and act

Programs
Aalto University Platform Concept

Platform X

Initiatives leading to internal, national and international research programmes

Board

Operator activity

Stakeholder forums

Societal interaction and impact

Task force for joint education

Thematic groups
Topics of ”DIGI Breakfasts”

• 13.5.2014 "Industrial Internet” (Martti Mäntylä et al.)
• 5.6.2014 "Designing for Future Life” (Philip Dean et al.)
• 27.8.2014 "E-learning and MOOCs” (Lauri Malmi, Katrina Nordström, Teemu Leinonen et al.)
• 19.9.2014 ”Data Science” (Aris Gionis, Pekka Malo, Johanna Bragge et al.)
• 1.10.2014 "Network Security” (Digital Freedom and Resistance to Censorship and Monitoring) (Jörg Ott et al.)
• 12.11.2014 ”Digital Consumer Services” (Retail store, Games, Administration etc.) (Matti Rossi, Virpi Tuunainen et al.)
• 10.12.2014 ”Smart Spaces” (Marko Turpeinen, Giulio Jacucci et al.)
Visit the DIGI Platform website

http://www.aalto.fi/en/research/platforms/digi/