



IdeaSquare student programs

ISAB Meeting 2020
Santeri Palomäki



Idea^s



Contents

- 2019 summary
- 2020 and beyond



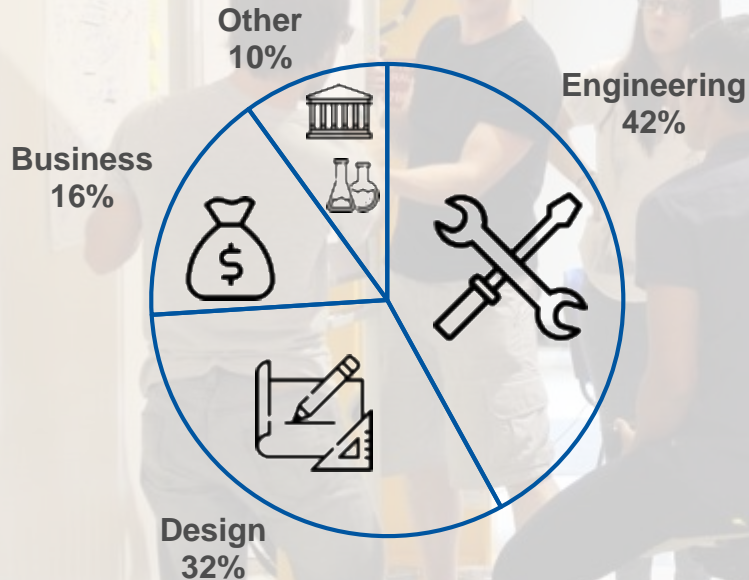
Idea^s

2019 Summary



Idea^s

In 2019, IdeaSquare hosted a total of 280 students



23
universities

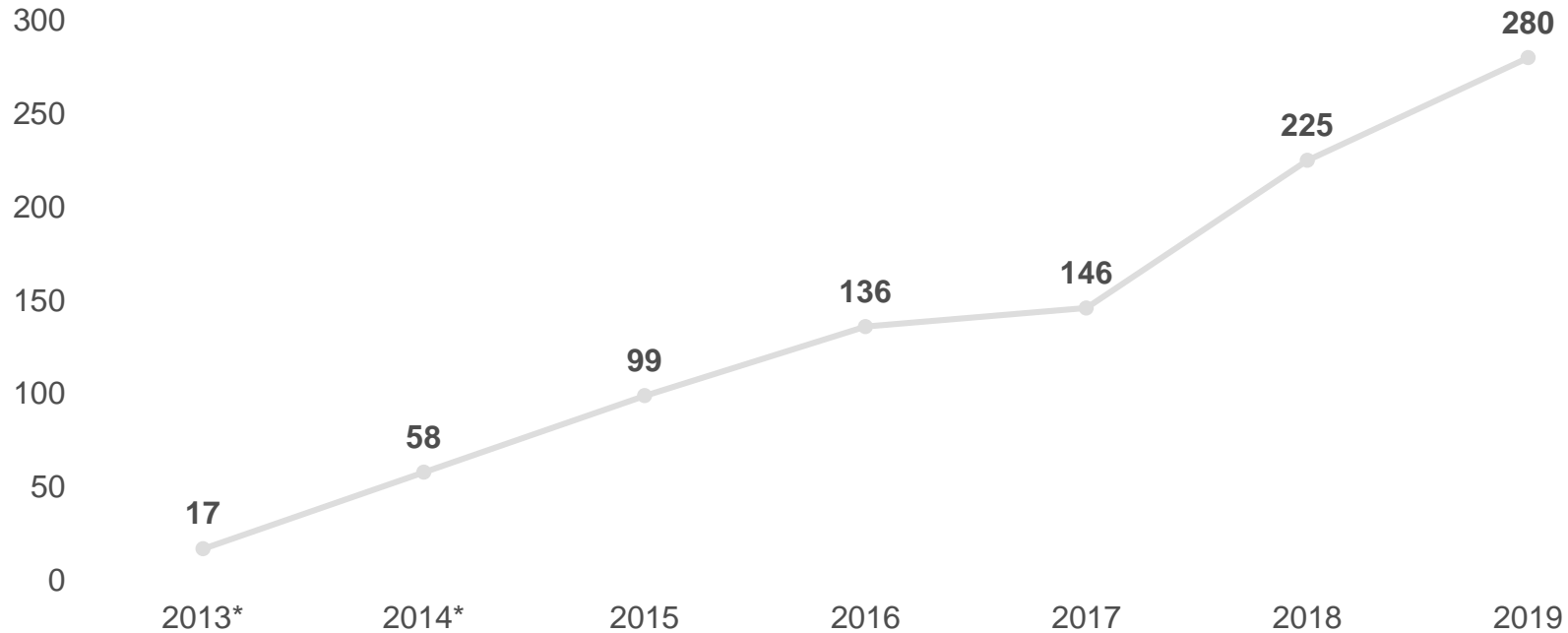


51% female
students

**4 CBIs +
8 other courses:**

- Innovation for Change (50 students)
 - Royal College of Art (17)
 - IED Design Management (14)
 - Laurea BootCamp (20)
 - CREA Geneva (20)
 - CESP (14)
 - Honours Programme Delft (20)
 - Design the Future (27)
- **Relevance of each course under evaluation**

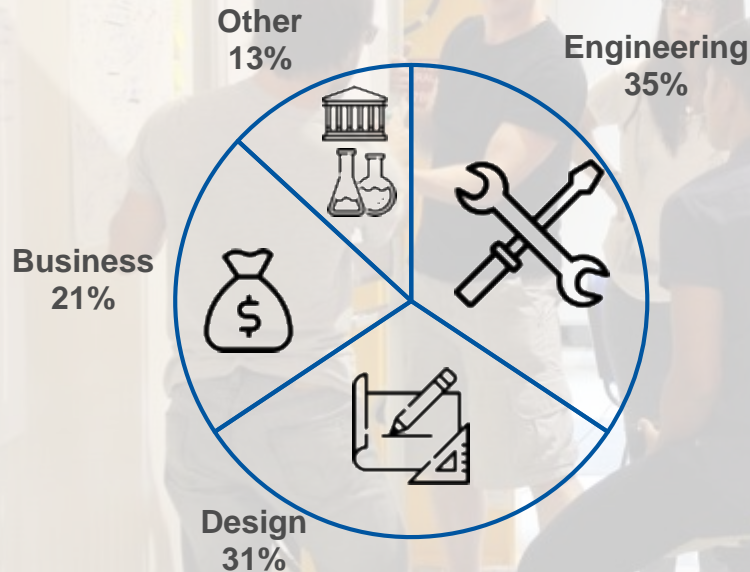
IdeaSquare has hosted over 900 students since 2015



*2013-2014 data on IdeaLab, predecesing IdeaSquare



In 2019, 4 CBI courses with a total of 97 students



43% female students

10 Universities:

ESADE Business School, IED Barcelona, Universitat Politècnica de Catalunya, Pace University New York, Swinburne University of Technology, Hochschule Mannheim, Tampere University, University of Bologna, University of Ferrara, University of Modena e Reggio Emilia

→ 50% interested also in **ATTRACT**

Two CBI teams admitted in Dubai Design Weeks

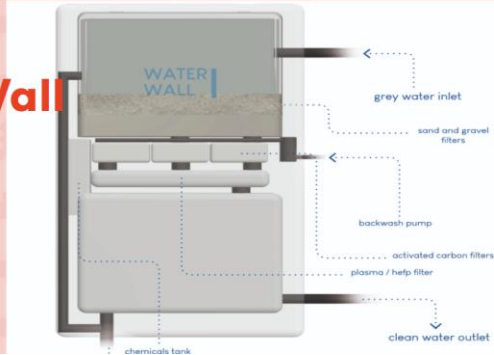
We-Be

THE HOME



Water Wall

THE HOME



SHOW
GRAD
GLOBAL

In partnership with



INVESTMENT
CORPORATION OF
DUBAI



Idea^s

Monitoring chronic asthma to prevent asthma attacks

INNOVATION
WORLD CUP®
SERIES

11th IOT/WT INNOVATION WORLD CUP®

TOP 16 HEALTHCARE IOT
SOLUTIONS 2019

HALL 13, STAND D45
MEDICA DÜSSELDORF

NOVEMBER 18, 2019

MEDICA

Patient

Doctors

Continuous monitoring

Unnecessary and

Exact

Non-intrusive interaction

Objective and reliable

the gap be

Daniel Albert

Innovation 4 Change

2019

- Students' contribution to CIJ in the form of 5 published papers
- DG Gianotti joined for the gala and Tech weekend in Turin to see the results of the 8 teams
- Four teams (out of eight) got selected in the Dubai Design Weeks Global Grad Show

2020

- Project themes being selected
- First visit planned for April
- CIJ papers will be submitted again



COLLÈGE
DES
INGÉNIEURS



Idea^s

Royal College of Art (RCA)



2019

- 74 innovation teams worked on SDG-themed challenges, 4 of which visited IdeaSquare in February
- Working on a joint paper based on the collected data

2020

- 80 innovation themes working on the theme “Enhancing the human” (RCA Lead: Fashion and Textile)



Idea^s

Honours Programme Delft (HPD)

- Challenges framed around Dutch-based ATTRACT technologies
- Included also (honours) BSc students
- Great learning also for us, e.g. patent-related lecture by Dap Hartmann, design thinking content by Sem Carree & Romy Welschen
- Two publications in CIJ, more in the pipeline
- TU Delft & UvA engaged in ATTRACT & DFGN discussions
- To be continued in 2020



2020 & Beyond



Idea^s

Transition year for student courses

- In 2020, we will maintain our “open doors” policy to our old collaborators as thus far (CBIs, RCA, I4C, Laurea Bootcamp, CREA etc.)
- Institutions approaching us with new course ideas will be critically evaluated with regards to alignment to our strategy, compatibility with ATTRACT, as well as estimated effort required from our side (Lincoln University UK, Brunell, Frisian Design Factory)
- One new planned program: Quantum Student Summer Program
- Most importantly, further development of ATTRACT-related student courses (HPD, Aalto Creative Sustainability)
- “CBI Teachers workshop” + “CBI Report / Guidebook” at the end of the year



ATTRACT Phase 2 Student involvement (11) @ AALTO



23 Jan 2020, 08:30 → 24 Jan 2020, 20:00 Europe/Helsinki

Espoo

Martti Tapio Jerkku , Pablo Garcia Tello (CERN) , Roy Pennings (3d Impact BV) , Santeri Palomäki (Aalto University (FI))

- Participants from 13 organizations, including CBI universities from Fusion Point (BCN), inno.space (Mannheim) and OPER.Space (Bologna) design factories (+ Melbourne interested)
- Proceedings to be included in the proposal



Idea^s

Personal reflections (1/2)

1. Mixing different academic backgrounds is beneficial, however, good results can be achieved with engineer or designer only teams as well
2. Design thinking appears to be a great tool for overcoming the technology-oriented approach that often burdens the students
3. However, alternative methodologies, such as multiverse thinking, may provide better premises for disruptive/lateral/moonshot thinking



Personal reflections (2/2)

4. Careful consideration should be made when planning future courses where focus is shifted from need/SDG-driven to technology-driven assignments
5. Will we need more “talking with scientists” type of workshops when interaction with experts will become more crucial for success?



New courses and methodologies (1)

- The focus of ATTRACT in breakthrough detection and imaging technologies challenges IdeaSquare to develop new, unique and *made in-house* innovation methodologies for student pilots and beyond (e.g. executive education courses).
- The ultimate goal is developing a unique *IdeaSquare innovation toolbox* that will differentiate us from any other innovation space.
- Three of them have been put to test successfully:
 - Multiverse Thinking
 - Innovation with space
 - Quantum Concept Dynamics



Idea^s

New courses and methodologies (2)

Multiverse Thinking

- Focus on the ideation of breakthrough technologies with the capacity of transforming our society in the future.
- Tested with students from Spain, Israel and Finland in a second edition of the *Design the Future* course. <https://indico.cern.ch/event/851568/timetable/>
- More editions on demand for 2020 (Finland, Spain, Israel and Lithuania) as part of *Design the Future*.
- Special editions on demand for 2020 from European Institute of Design (IED) in Barcelona and Madrid.

Innovation with Space

- Focus on a new and experiential way of using the surrounding space as an innovation building block.
- Tested with students from Spain, Israel and Finland in a second edition of the *Design the Future* course. <https://indico.cern.ch/event/851568/timetable/>
- More editions on demand for 2020 (Finland, Spain, Israel and Lithuania) as part of *Design the Future*.

Quantum Concept Dynamics

- Focus on the creative fuzzy front end.
- Tested with students from Melbourne as part of the *A³-CBI Programme 2019* <https://indico.cern.ch/event/857498/timetable/>



A green plush hand is holding a blue sign with white text. The sign lists various fields: Love, Design, Business, and Engineering. The word 'PHYSICS' is written in white on the sign. The background is a blurred green and yellow pattern.

All you need is
..Love PHYSICS
..Design
..Business
..and Engineering.

Questions? Comments?

Contact information:

Email: santeri.palomaki@cern.ch



Idea^s