



Capstone 15 ECTS = 400 h work/student
Weeks 44-50, (7 weeks): First semester
Weeks 2-16 (15 weeks): Second semester



Capstone-coordinators:
Hazem Al-Bermanei & Kari Haajanen

Poster exhibition 28.10.2019 10:15 to 12:00, ICT-City lobby

You can meet project owners (PO) and ask more details about the project.



Choose your 3
favorite projects
(webropol survey).



Kari
Haajanen



Hazem
Al-bermane



Jani
Pelkonen



Sari
Loppela-
Rauha



David
Oliva



Raimo
Lehto



Gylen
Henry



Ville
Huhtinen



Suhonen
Mauri



Markku
Rajala



Östman
Timo

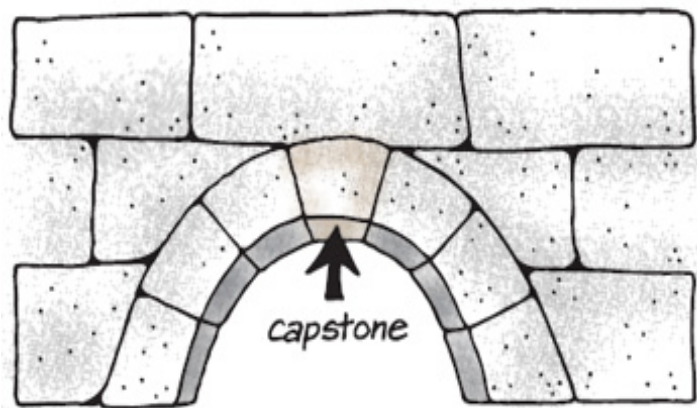


Mbare
Otieno



Emmanuel
Querrec

Capstone 2019-2020 tutors



Value for the companies

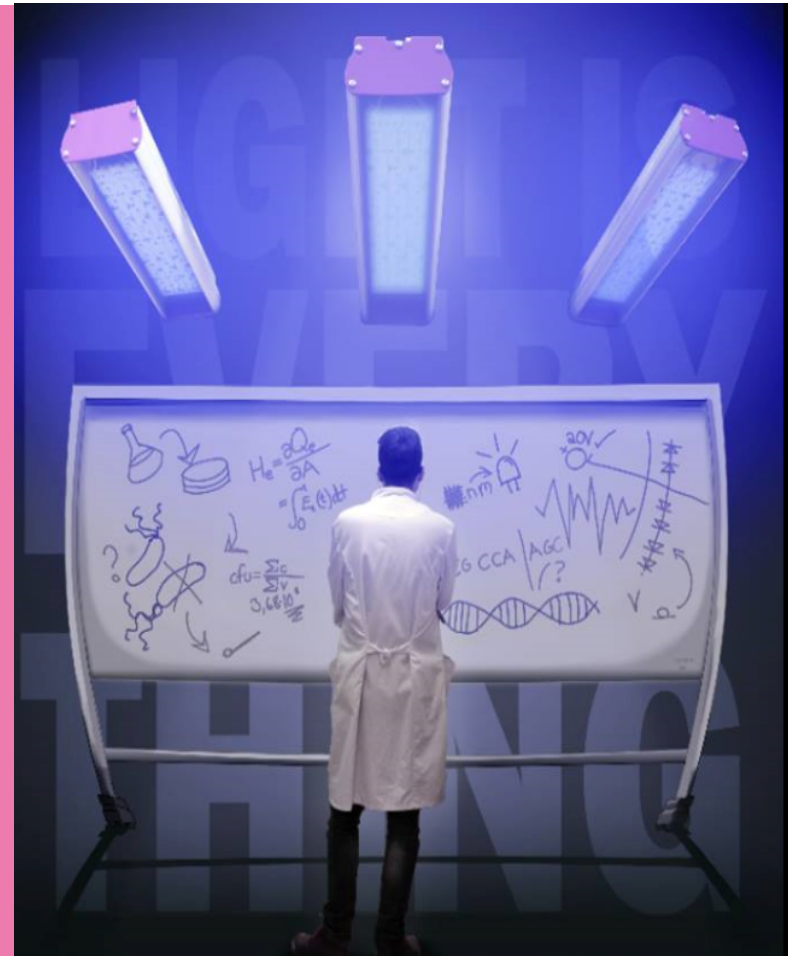


- How to decide what ideas are working and what isn't?
- How to develop further prototypes/products/applications?
- How do you know what is the right solution of tens of potential solutions?
- How to find a new business model/purpose of use for existing technology/product?

**CAPSTONE CREATES
OPPORTUNITIES FOR NEW APPROACHES**

Capstone projects

- Real customers
- Real companies
- Real problems
- Act like a professional
- **Inform, communicate**



1	AudioWizards Multiplayer
2	Illuminator Device
3	Machine vision for brain analysis
4	Phone App and Community Development for BisnesAkater
5	Know Your Hoods
6	Business Development for UNICA Deli Pharma
7	New waves off thinking - to making
8	Circular Economy in Metal Industry
9	MMAM Centre of Expertise
10	Suomen Uusiokuori Oy
11	Magnet Live AR
12	Haavoittuneen evakointijärjestelmä saaristoon
13	Wiring system for TUAS eRALLYCROSS car
14	Stera Industries
15	Jobitti - quality game
16	New business from food chain byproducts
17	Improving capstone 2020
18	Led Tailor - Blue is clean
19	IoT Monitoring for Smart Buildings
20	Private UHF radio network simulation in NS-3
21	My Turku memories
22	Opiskelija 360-videOculus Go
23	Parkinghub with Anders Innovations
24	Gasum - Kierrätyslannoitteet ja kiertotalous
25	Information security day
26	On the road to making a global difference in infection preve
27	Paste Filling/Packing Device Project
28	Admneres Group Oy
29	Browser based UI for internal logistics management system
30	3D scanning of the panel for automatic welding purposes
31	Development of the Order-to-Delivery process
32	VR/AR platform for training
33	Punnu Games
34	Usability game

Capstone 2019-2020

34 different projects

Gasum

HONKAJOKI®
 NEW BUSINESS FROM FOOD CHAIN BYPRODUCTS

**IoT Monitoring for
Smart Buildings**

everon™ STERALUX®
 THE BEST MADE LIGHTING.

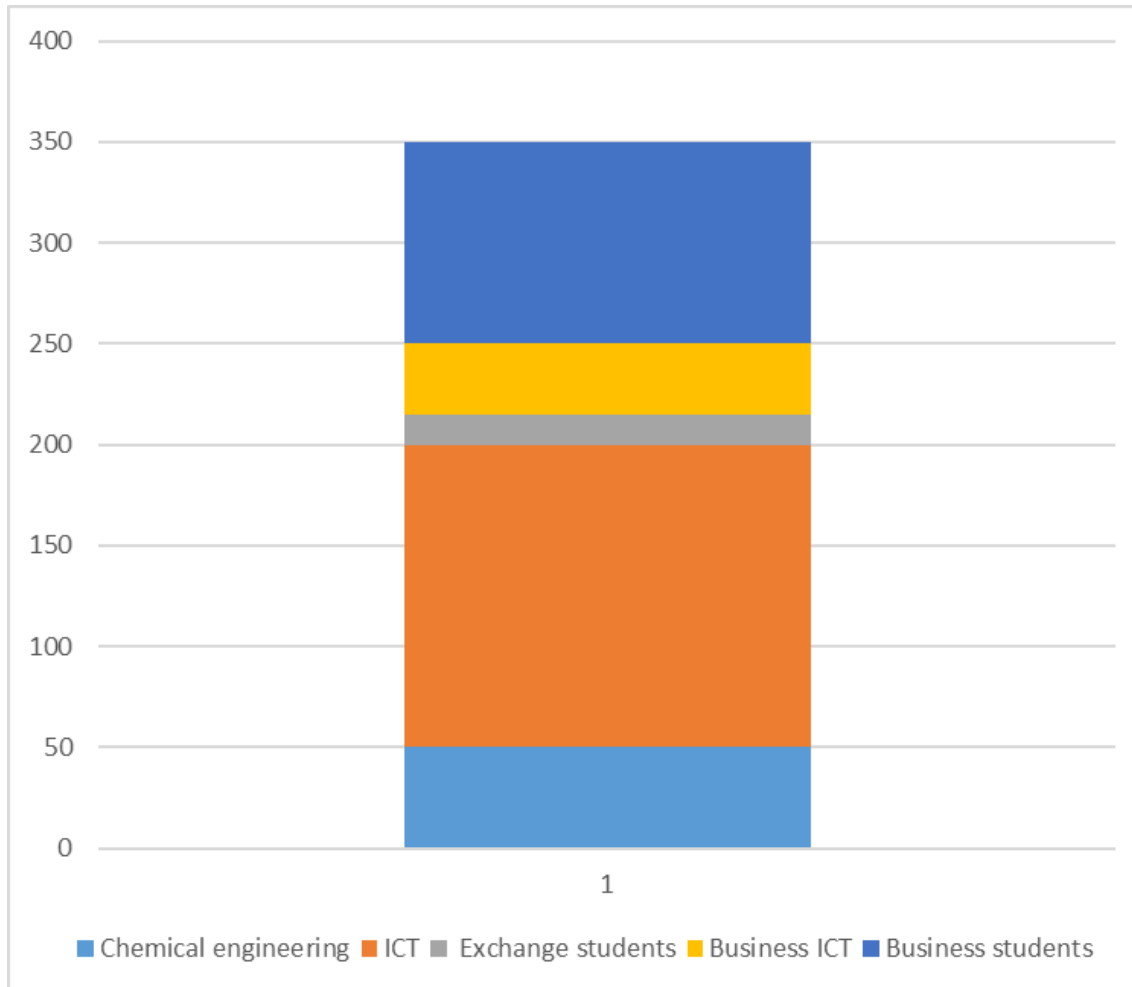


**Parkinghub with
Anders Innovations**

**LED
TAILOR®
INNOVATION**

bonalive
 paste filling/packing device project

Resources



Teams:

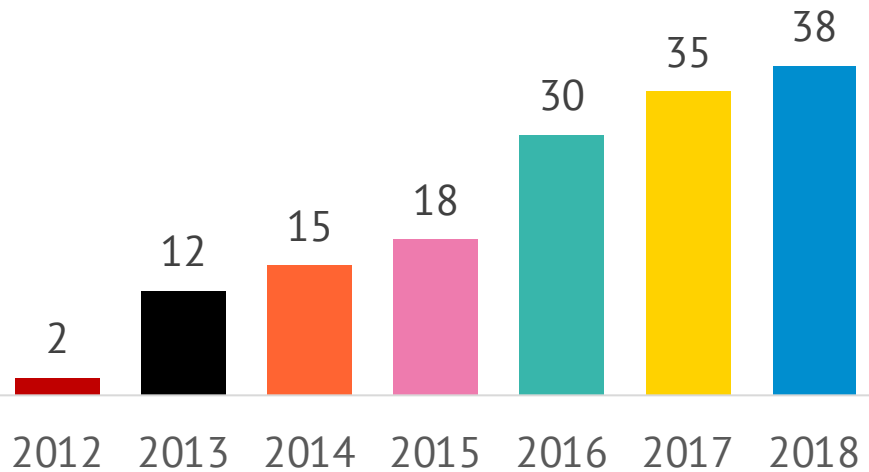
max 10 students +
tutor + PO (project
owner)

Workload/student:

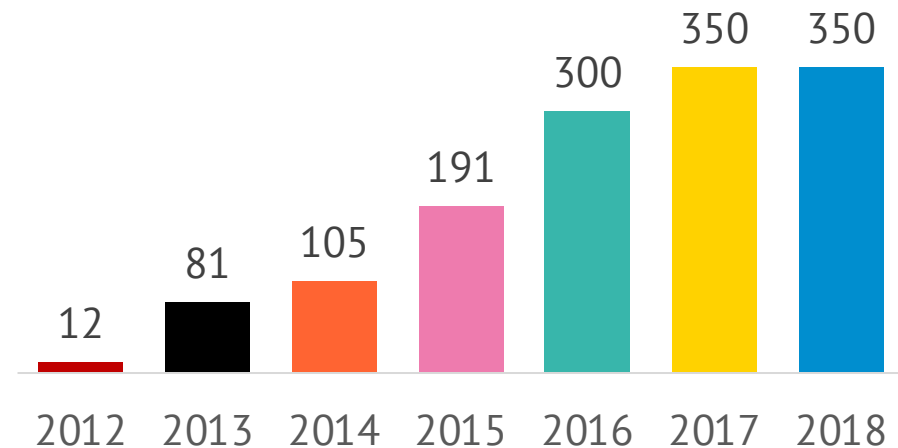
15 hours per week for
26 weeks →
400 h total

Number of projects and students 2012-2018

PROJECTS



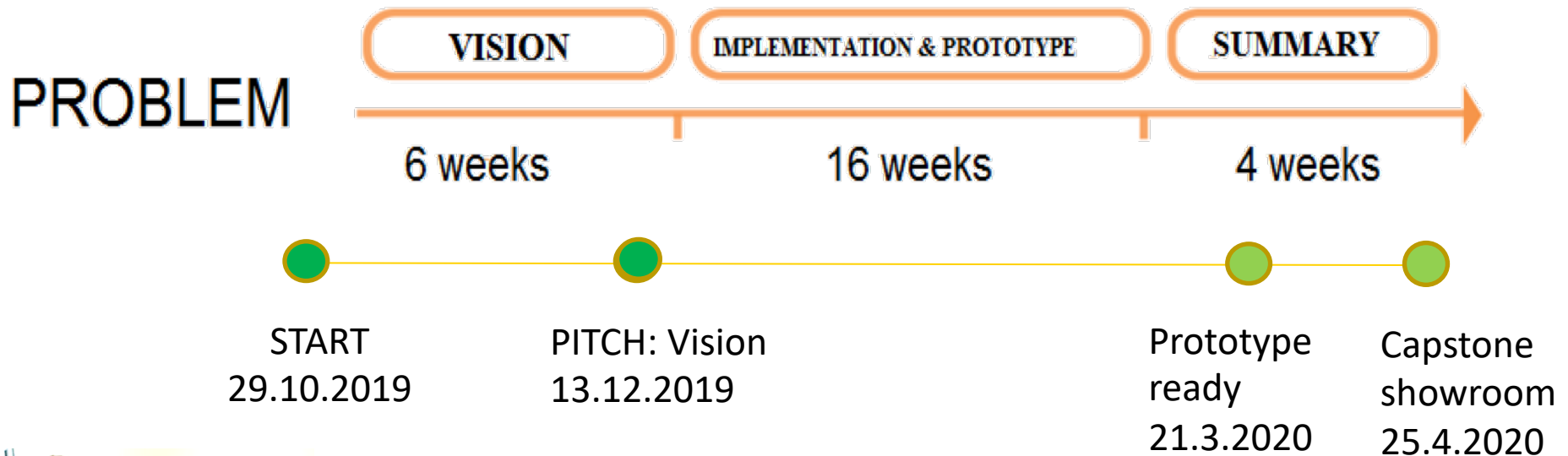
STUDENTS



See projects: <http://capstone.dc.turkuamk.fi>

Deliverables & phases

Work process aims to simulate start-up company



Pitching the ideas

3 to 5 minute pitch

Slogan

Problem

Solution

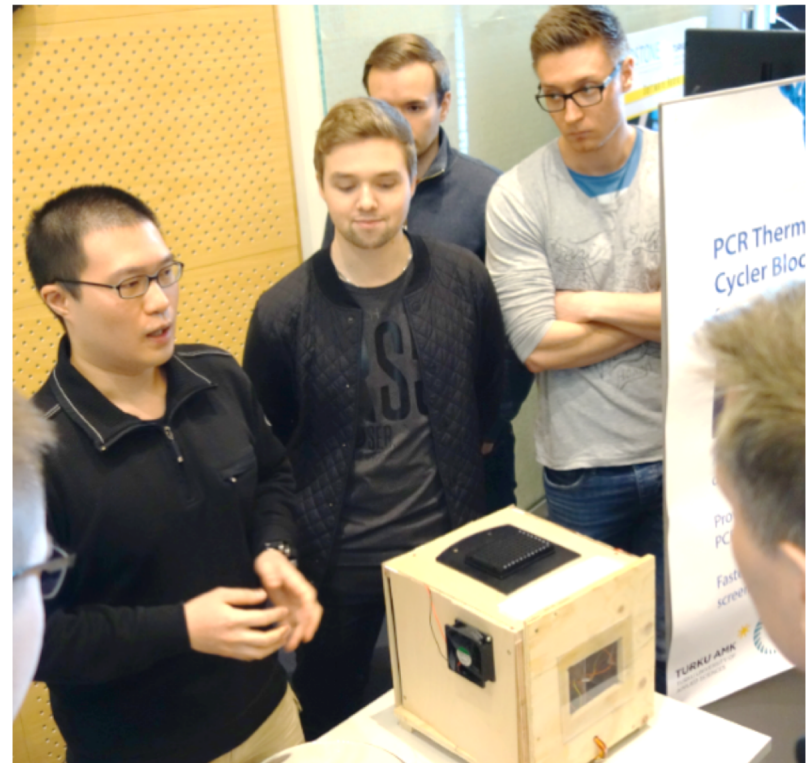
Value

Business Model

Team

Execution

Slogan/Ask



ICT-showroom 9.3.2018

53 teams: TUAS 31, UTU 12, ÅA 10

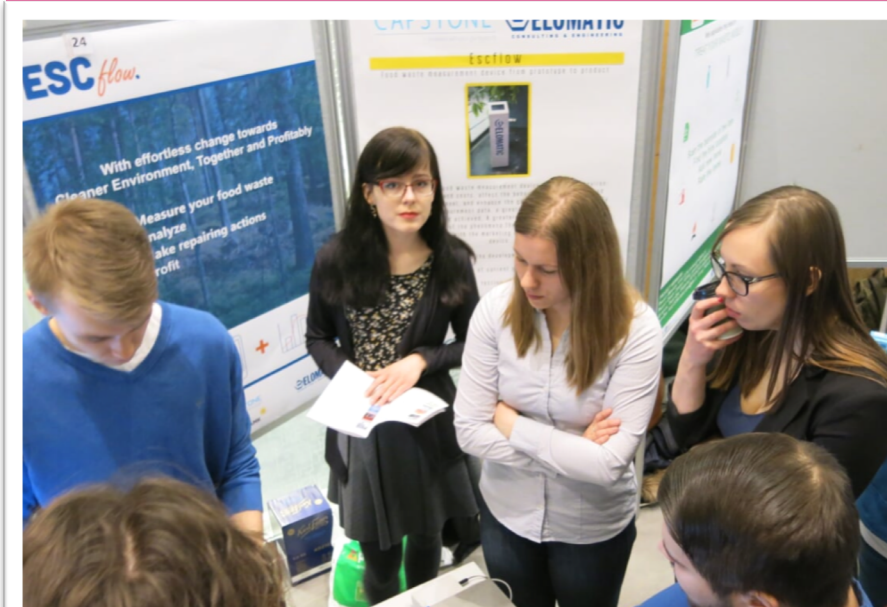
Team "Buster"

The winner of the Public Voting both in the series of Best Presentation and Best Technical Content.



Capstone showroom 18.4.2017

The winners of Capstone showroom:
Shift, *Best Presentation*
Buster, *Best Technical Content*



ICT showroom 2016 –winner team

Team Escflow,

TUAS Capstone innovation project



ICT showroom 2015 –winner team and jury

Celia-dyslexia, TUAS Capstone innovation project



Project owner (PO): role & responsibilities

- Voice of the customer
- Gives feedback for the team
- Makes decisions with the team
- Provides information for the team

Before project start:

- Project description with pictures/graphics

PO's presence required:

- Capstone start in week 44
- 1-2 meetings in vision phase
- Sprint planning meeting every 4th week in realization phase (Jan-Apr.)



How to create perfect project groups.

Step to step to the success.

1. Check the posters, discuss with POs
2. **Make your choices** (webropol survey)
3. Tutor team will organize groups...
 - Data from webropol
 - Max 10 students/project
 - Prefer priority projects 1-3
 - Demands of the project
 - Discuss with the project owners
 - Notice different student skills, backgrounds and comments
 - Spoken language (English in every group)
 - Avoid the project you do NOT like to work with
 - Repeat cycle if needed

Project selection survey (webropol)

- Based on project exhibition at ICT Lobby, choose your 3 favorite projects
<https://link.webpolsurveys.com/S/D873185CF2508335>
- The link is also in Messi
 - **Messin etusivu – opiskelijauutiset**
 - **Messi – student news**
- **Answer to the survey before 29.10.19 at 15:00.**
- Grouping starts immediately after deadline so if you are late your selections can't be promised.
- Project groups will be presented on Friday 1st of November.

Assesment



Areas of evaluation/evaluation models	Weight (%)	Peer-evaluation	Self-evaluation	Client's evaluation	Pitching	Capstone Final	ICT-showroom	Tutor/expert evaluation	Exam
Team work	20 %	30 %	30 %					40 %	
Project management & project doc.	20 %							100 %	+/-1 Individual
Presentation & communication skills	15 %				33 %	33 %	34 %		
Communication with client & outcome of the project	30 %			100 %					
Learning (DP based competences)	15 %		30 %					50 %	20 %
Attendance will influence to individual assessment									

CAPSTONE CAN BE THE BREAKING POINT

