



## Strategies of Implementation Challenge-Based Learning

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## **Type of Challenges**

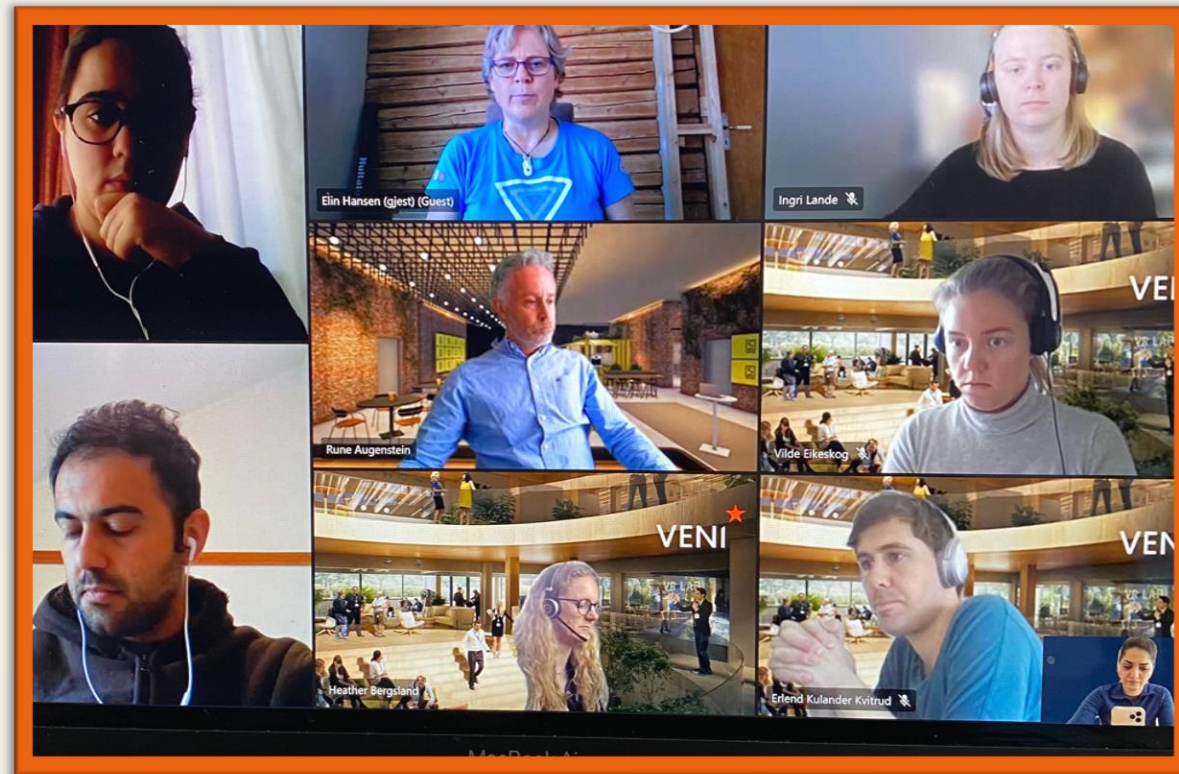
- Extracurricular and Intracurricular

### Extracurricular

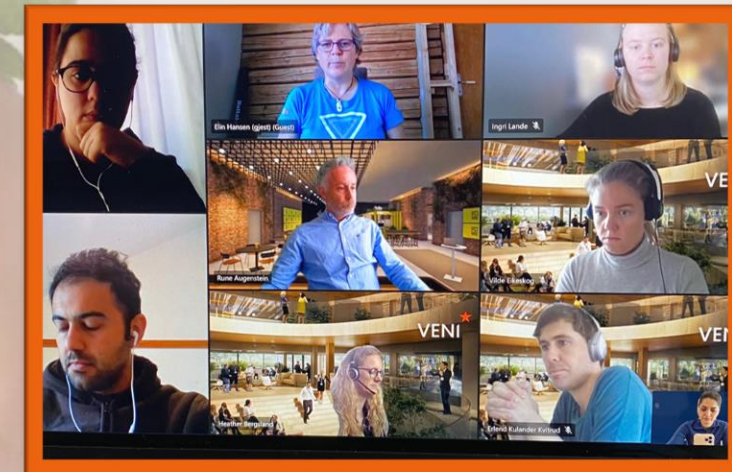
- Regarding duration of challenge:
  - Nano challenge : (1-3 days, 2 ECTC and ECIU certificate)
  - Mini challenge: (2-4 weeks, 3 ECTS)
  - Standard challenge: (3-6 months, 5 ECTS)
  - Strategic challenge: (more than 6 month, 30 ECTS)

# Challenges at UiS

## Extracurricular challenges



Challenges	Universities	Field of Studies	Challenge Provider
<b>Nano (1-3 days)</b>	<ul style="list-style-type: none"> <li>• Twente University</li> <li>• University of Stavanger</li> <li>• University of Trento</li> </ul>	<ul style="list-style-type: none"> <li>• Global and Local Studies / Sociology</li> <li>• City and Regional Planning</li> <li>• Literacy Studies</li> <li>• Public Administration</li> </ul>	Byverksted
Make urban area and complexes greener			
<b>Mini (2-4 weeks)</b>	<ul style="list-style-type: none"> <li>• Twente University</li> <li>• University of Stavanger</li> </ul>	<ul style="list-style-type: none"> <li>• Public Administration</li> <li>• Risk Analysis and Governance</li> <li>• City and Regional Planning</li> <li>• Literacy Studies</li> <li>• Business Administration</li> <li>• Embedded Systems</li> </ul>	Byverksted
Intimate cityscapes			
<b>Standard (3-6 months)</b>	<ul style="list-style-type: none"> <li>• University of Stavanger</li> <li>• University of Aveiro</li> <li>• Twente University</li> </ul>	<ul style="list-style-type: none"> <li>• Civil Engineering</li> <li>• Geoinformation Science and Earth Observation (specialisation Land Administration)</li> <li>• Petroleum Reservoir Engineering</li> </ul>	Site 4016
Mapping the constructions' recyclable, reusable and renewable materials			





Nano Challenges (3 days)	No .	Fields of Study	Challenge Provider
Reducing car traffic at UiS campus	14	<p><b>Team1:</b>Data Science(master), economy(bachelor),Petroleum engineering (master),Marketing Analytics (master).</p> <p><b>Team2:</b>Industrial management(bachelor), Change management and investment(master),Automatisering og electronic design(bachelor).</p> <p><b>Team3:</b> Business Administration(master),Leadership/Hospitality(master), Strategic Marketing and Analytics(master).</p> <p><b>Team4:</b> Data technolog(bachelor), Strategy &amp; management(master),Industrial asset management(master),management(master), Law(bachelor).</p>	Kolumbus
More sustainable data centres	13	<p><b>Team1:</b> Data Science (Master), Automatisering og electronic design(Bachelor),Energy, environment and society(master).</p> <p><b>Team2:</b>Industrial AssetManagement(master),Business(bachelor), Building engineering(bachelor), Mechanical and Structural Engineering(PhD),</p> <p><b>Team3:</b>Industrial management(bachelor),Risk management (PhD), Data science(master), Risk Management &amp; Societal Safety(PhD).</p> <p><b>Team4:</b> Reservoir engineering(master), Business development(master), Energy, Environment and Society(master)</p>	Lyse
Artificial intelligence for drones	3	Risk management (Bachelor), Data technology (Master), Risk Analysis and Governance (Master), Mathematic og physics (Bachelor)	KVS Technologies



Nano Challenges (2 days)	No .	Fields of Study	Challenge Provider
How to build a democratic organisation from scratch	4	Cognitive Psychology(bachelor) Uni Trento, Education(master), University of Tampere, literacy studies(master) UiS, Philosophy(bachelor) UiS	Byverksted



- <https://vimeo.com/759506517/15dce6eeea>
- <https://www.soi.unitn.it/activities/challenges/>

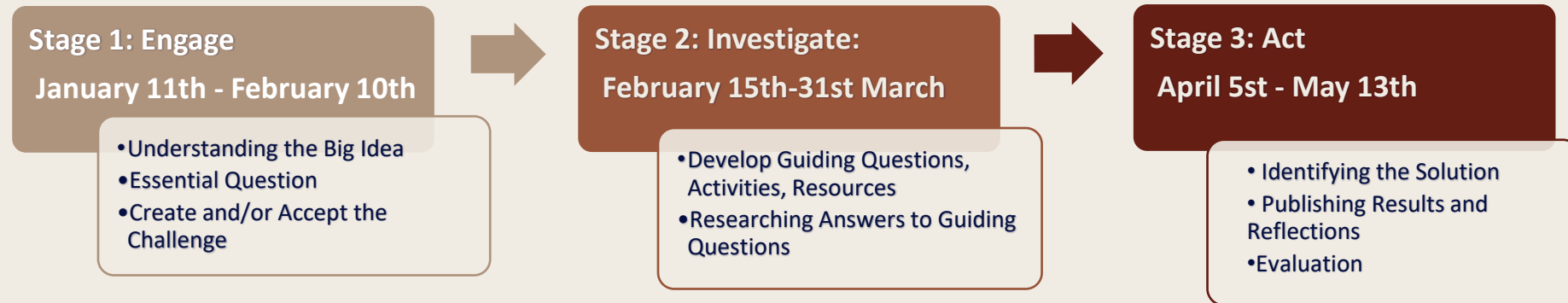


## Two different strategies of CBL implementation

- Information Management and Digitalization course, 37 master students, Spring 22
- Corporate social responsibility in service organizations, 52 Bachelor student, Fall 2022

# Intracurricular challenges

## Challenge based-learning Framework: Schedule for Information Management and Digitalization, 2022



### Students' Presentations:

Thursday 27th of January: Working process stage1 Presentation  
Thursday 10th of February: Final stage1 Presentation and submission stage1  
Thursday 3th of March: Check working process stage2 presentation  
Thursday 31st of March: Final stage2 presentation and submission stage2  
Thursday 1st of May: Check working process stage3 presentation  
Wednesday 11th May submission final report

### Lectures:

Tuesday 11th January Teamformation and presenting the whole semester plan  
Tuesday 13th January Introduction CBL and Plan Stage 1  
Tuesday 8th February Stage 2 lecturing  
15th March lecturing methods

**Assistants** control check the process: Every two weeks from 11th January to 10th May.

### CBL Team Members:

**Expert:** Bjarte Ravndal

**CBL expert:** Sanaz Masoumeh Shahverdi

**Teamcher Assistant:** Timothy Marshal

**Challenge coordinator:** Tanzina, Serinha and ...

**Challenge provider:** Bouvet and EFAB

In case Students have Critical questions, They can e-mail: [Masoumeh.shahverdi@uis.no](mailto:Masoumeh.shahverdi@uis.no)  
Or can make an online or physical appointment with Sanaz Masoumeh shahverdi.

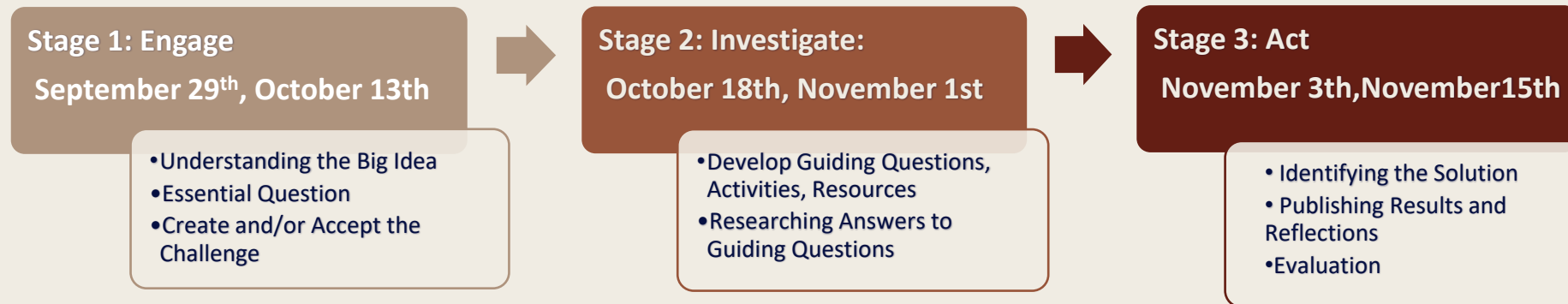
	Date	Topics	Responsibility
Stage 1	11.01	Introduction	Bjarte and Sanaz
	13.01	Introduction CBL and CBL Stage 1 Engage	Sanaz
	18.01	Foundations to IS Strategy and Strategizing	Bjarte
	20.01	Work on CBL project	Students, AT & Sanaz
	25.01	Bouvet and Efab – Digital Challenges	Bjarte, Bouvet, Efab
	27.01	Working process stage 1 presentation	Students, Sanaz
	01.02	Digital Strategy and Organizational Transformation	Bjarte
	03.02	Work on CBL project	Students, AT & Sanaz
	08.02	Work on CBL project	Students, AT & Sanaz
	10.02	Final stage1 presentation and submission	Students, Sanaz
Stage 2	15.02	CBL Stage 2 Investigate	Sanaz
	17.02	Work on CBL project	Students, AT & Sanaz
	22.02	Work on CBL project	Students, AT & Sanaz
	24.02	Work on CBL project	Students, AT & Sanaz
	01.03	Work on CBL project	Students, AT & Sanaz
	03.03	Working process stage 2 presentation	Students, Sanaz
	08.03	Work on CBL project	Students, AT & Sanaz
	10.03	Work on CBL project	Students, AT & Sanaz
	15.03	Work on CBL project	Students, AT & Sanaz
	17.03	Work on CBL project	Students, AT & Sanaz
	22.03	Work on CBL project	Students, AT & Sanaz
	24.03	Work on CBL project	Students, AT & Sanaz
	29.03	Work on CBL project	Students, AT & Sanaz
31.03	Final stage 2 presentation and submission	Students, Sanaz	
Stage 3	05.04	CBL Stage 3 Act	Sanaz
	07.04	Work on CBL project	Students, AT & Sanaz
	19.04	Work on CBL project	Students, AT & Sanaz
	21.04	Work on CBL project	Students, AT & Sanaz
	26.04	Work on CBL project	Students, AT & Sanaz
	28.04	Working process stage 3 presentation	Students, Sanaz
	06.05	Individual Take Home Exam – Due Date 13.05	

## Spring 2022

Course title: Information Management and Digitalization course  
37 master students , 9 Teams

	Challenge Provider	Challenges
1	<b>Aarbakke Group</b>	An efficient implementation industry 4.0 principles in Aarbakke AS' manufacturing process
2	<b>Efab AS</b>	Increase the awareness of the importance of digitalization
3	<b>Stavanger Kommune</b>	Increase collaboration's in mutually-beneficial learning and sharing of best practices
5	<b>Coop</b>	reduce food waste using digitalization
6	<b>IVAR IKS</b>	Manage and minimise food wastage efficiently with digital tools in IVAR
7	<b>Bouvet</b>	Maintain employees job affiliation in the home office
8	<b>TBC - A company in the oil industry via Bouvet</b>	Implementation of block chain in the oil and gas industry
9	<b>UiS - Digitalisation strategy</b>	Develop a strategy and use cases regarding the use of data that is generated whilst using digital systems

## Corporate social responsibility in service organizations, 2022



Date	Classes	Lecturer
23. August	Lecture 1. Welcome to BHO308 – Practical Information	Lukasz Derdowski
25. August	Lecture 2. Irresponsible Corporate Behaviors	Lukasz Derdowski
30. August	Lecture 3. General background to CSR: ‘What is it all about?’ PAR	Lukasz Derdowski
1. September	Lecture 4. General background to CSR: ‘What is it all about?’ PAR	Lukasz Derdowski
6. September	Lecture 5. Influential Theories in CSR	Lukasz Derdowski
8. September	Discussion Session 1. ISO 26000	Lukasz Derdowski
13. September	Lecture 6. CSR in Action:	Lukasz Derdowski
15. September	Discussion Session 2. UN Global Compact Performance Model	Lukasz Derdowski
20. September	Guest Lecture: CSR & Green Demarketing	Shiva Ghorban Nejad
22. September	Guest Discussion Session 3: Cases – Patagonia & REI	Shiva Ghorban Nejad
27. September	Lecture 8. CSR and Innovation	Lukasz Derdowski
29. September	<u>Introduction to Stage 1: Engage</u>	Sanaz Masoumeh Shahverdi
4. October	Groupwork Project: <u>Facilitated Group Work</u>	Sanaz, Masoumeh Shahverdi, Assistants & Students
6. October	Lecture 9. CSR and Psychosocial Risk Management	Lukasz Derdowski
11. October	Lecture 10. CSR in the Age of Artificial Intelligence (AI)	Lukasz Derdowski
13. October	Groupwork Project: <u>Short (5 min) Students’ Presentations</u>	Students, Sanaz
18. October	<u>Introduction to Stage 2: Investigate</u>	Sanaz Masoumeh Shahverdi
20. October	Groupwork Project: <u>Facilitated Group Work</u>	Sanaz Masoumeh Shahverdi, Assistants & Students
25. October	Lecture 11. CSR and Leadership	Lukasz Derdowski
27. October	Lecture 12. CSR in the Norwegian Context	Lukasz Derdowski
1. November	Groupwork Project: <u>Short (5 min) Students’ Presentations</u>	Students
3. November	<u>Introduction to Stage 3: Act</u>	Sanaz Masoumeh Shahverdi
8. November	Groupwork Project: <u>Facilitated Group Work</u>	Sanaz Masoumeh Shahverdi, Assistants & Students
10. November	Lecture 13. Critical Perspective on CSR	Lukasz Derdowski
15. November	Groupwork Project: <u>Short (5 min) Students’ Presentations</u>	Students, Sanaz
	Summary of the Course (Questions, comments, and discussion)	Lukasz Derdowski

### Fall 2022

Course titled: Corporate social responsibility in service organizations  
52 Bachelor-level students, 13 Teams

	<b>Challenge Name</b>	<b>Challenge Provider</b>
1	<b>Scandic Stavanger Park</b>	Reduce food waste at the hotel
2	<b>Studio Alf hairdresser</b>	Reduce health strain among employees
3	<b>Avarn Security (Airport)</b>	Enhance work motivation amongst employees at AS
5	<b>Slingrebekken barnehage in Saetre Asker</b>	Reduce food waste at kindergarten
6	<b>UiS</b>	Reduce plastic use at UiS
7	<b>Carnival cruises</b>	Reduce the environmental impact generated by Carnival in Barcelona port
8	<b>Ydalie</b>	Reduce the use of towels and bed linen in hotel rooms
9	<b>Vinmonopolet</b>	Reduce alcohol consumption
10	<b>Stavanger Port authority</b>	Reduce impact of cruise ships on local community
11	<b>McDonald's</b>	Reducing food waste and single-use plastic at McDonald's
12	<b>UiS</b>	Increase a healthier lifestyle options on campus
13	<b>SuS</b>	Minimise textile wastage and recycling



- **Lukasz Andrzej Derdowski” Social science faculty, Norwegian hotel college, Course:Corporate social responsibility in service organizations**
  - “In my view, potential benefits deriving from implementation of CBL accrue to students, teachers, and the University as a whole. Specifically, students gain a set of transferable skills that could be applied to challenges that go far beyond the classroom. Teachers are given a chance to expand their battery of pedagogical skills. And the Uni can, through international collaboration, establish new professional links and recognition. For a long time, we in academia have prioritized mainly *research* networks, but now we are given a fantastic opportunity to join a *teaching/pedagogical* network as well (both within the Uni, and across the national and international institutions).”
  
- **Tatiana Aleksandrovna Iakovleva" UiS Business School, Course: Knowledge-based entrepreneurship**
  - “I can see that students have great value by pursuing the CBL methods, like defining the problem, collecting information and coming up with solution. it is very helpful for them to have a stage-based “recipe” for how to work with such challenges. CBL is based on a general method of working with challenges, and it can be “backed in” in many courses where students have to interact with the real world.”



Questions?