

Challenge@PoliTo

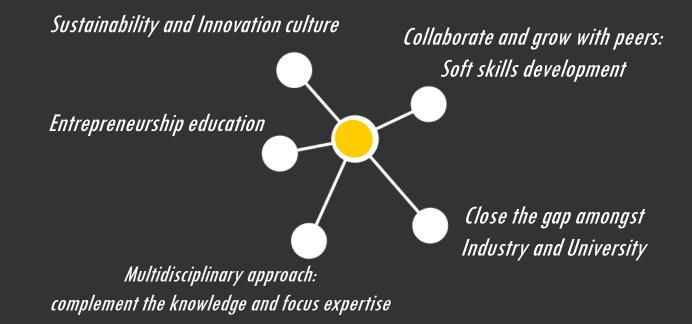
Innovative Teaching Model





Connection Lab nnovation Kitchen

The Cross- Connection Model



A place where students can experience and put in practice knowledge learned in classroom

An informal environment which promote a creative and collaborative spirit to develop competences





Challenge@PoliTO is an innovative teaching activitiy carried out by 30 Master's Degree students to find the most innovative ideas.

They are divided into multidisciplinary teams with different backgrounds from all degree courses, looking for new solutions that solve the proposed challenges

Problem driven Challenge by Company partner

One vertical Problem \rightarrow 5/6 different solutions

- Company Partner applies for the Challenge Call
- Comitato Lab TT selects five Challenges
- Students apply to partecipate

Challenge@PoliTo: Value Propositions



Companies:

- Employer branding
- Scouting & Recruitment
- New idea generation
- Different points of view to solve the problem
- 1 challenge \rightarrow 6 different solutions
- 30 master students involved on your challenge

Students:

- Work in multidisciplinary team
- Increasing of skills
- Learning by doing

Challenge @ PoliTo — Structure



Where: CLIK / online

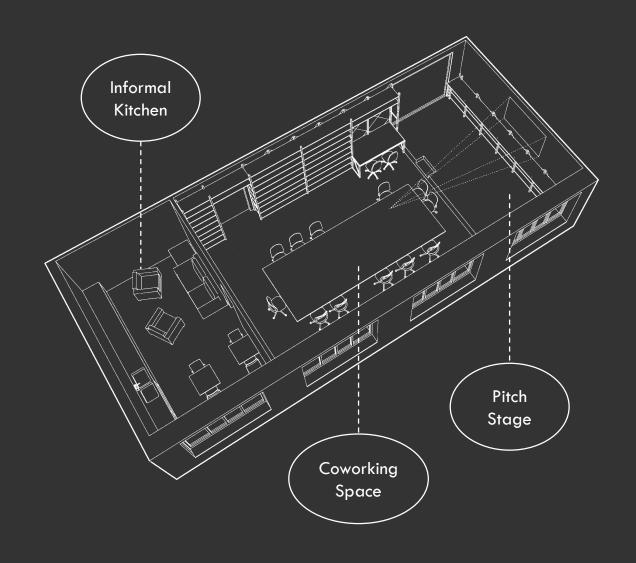
Duration: 14 weeks

Student Effort: 200 hours → 8 CFU

Student n°: max 30 (5 team of 6 people)

Actors Involved:

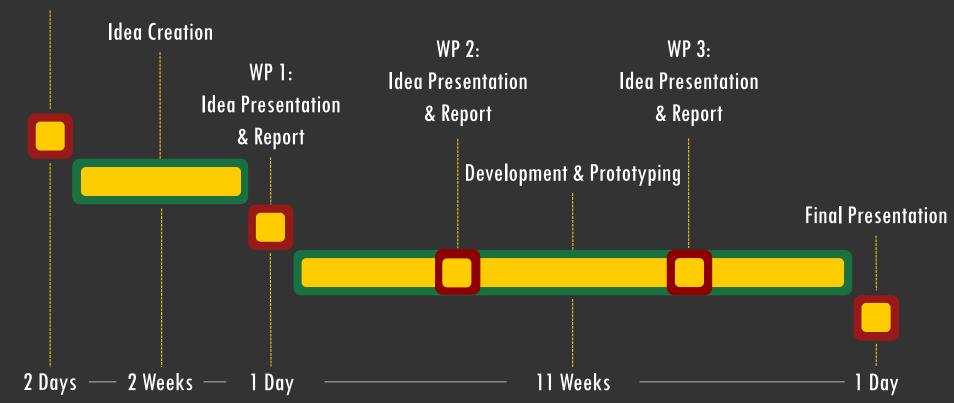
- Professors & Mentors
- CLIK Staff
- Company



Challenge_By Firms - Timeline









Is up to the Company to decide the involvement during the development phase

Global Meeting

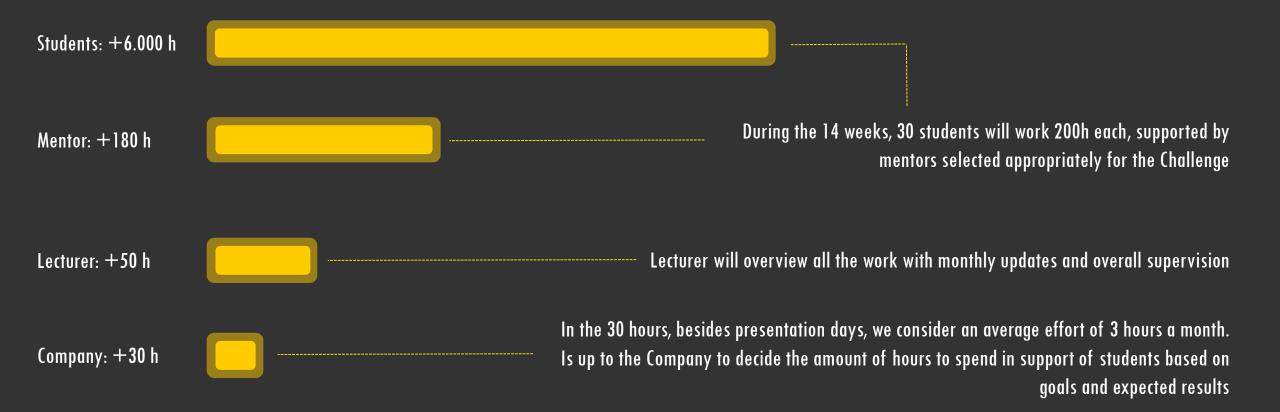
- 1. 1 Kick off
- 2. 1 monthly Work Progress
- 3. 8 Educat. Workshops
- 4. 1 Final Presentation

Student Constraints

- 1. 3 ppt Work Progress
- 2. 1 monthly report
- 3. 1 final Presentation
- 4. 1 final report

What's the effort?





CHALLENGES ENDED 1/2



















Ambiti di Integrazione Territoriale - programmare risorse e pianificare territori

The Cutter - design new machineries and processes

Smart Tower - new way to use the Terna's Smart Towers

e-Mobility - solutions to reduce "range anxiety" on electric vehicles

PeopleFlowing - analysis and management of pedestrians in critical spaces

CLEAR - separation of microplastics from water

PerformANCE - real time monitoring of a construction site



CHALLENGES ENDED 2/2







CASE (Connected Autonomous Shared Electric) NEXT GEN - next gen car



Crickets in the space - food for space travel



Smart Area 24h - solutions to make Poste's services more smart



Green energy in motorway - design an optimazed storage system



Dress-up chocolate with care - new packaging system



Treasure Track - multi Functional Area Development



Seat as a suit - design the new innovative seat



CHALLENGES IN PROGRESS













KPIs for Green Mobility Services - sustainable services for mobility

S.E.L.F. TOOL - new approaches to the lunchbreak

Save Our products: Ship with care - a new system for packaging

Students from the future - map the education system and rethink it

For more information visit: https://clik.polito.it/



550 Students, 115 Teams, 30 Master's degree courses 30 Lecturers, 120 Mentors







Informal space





Challenge Insight





Team Building





Covid mode





Prototyping



VISION



We see a world in which technology can help us identifying and finding every object, decreasing human error

RFID on each item











Pitching





Workshops

l'π Tekkie

Cross-functional Workshop program — Challenge@PoliTo



1. Team Building: work sharing and Team construction

Learning objective: Development of cohesive, multidisciplinary and strong Team

2. Design processes and concept generation

Learning objective: Knowing and knowing how to apply different process development methodologies

3. Project Management

Learning objective: Project management tools and how to use them

4. Value Proposition and Value creation: What are they?

Learning objective: Creation and development of an useful and valuable project

5. IP and Prior Art

Learning objective: Knowing the different types of IP and to be able to develop a prior art research

6. Communication & Pitch

Learning objective: To be able to present himself/herself and the team's idea in effectively and appealingly way

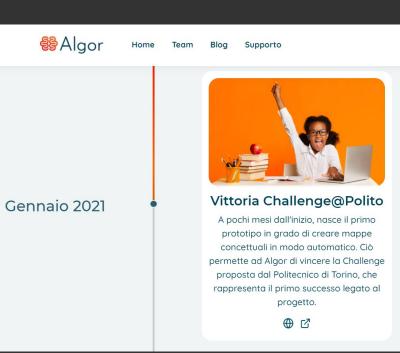
7. Social Impact

Learning objective: Quantification of macro and micro impacts of the different business strategies on world and how to mitigate them

Outcome







Startup foundation



Social Media Traffic

Prototyping

Feedbacks from students on Challenge@PoliTo



- 1. It is one of the **best experience** at **Politecnico**!
- 2. Good for networking;
- 3. I think that is a great opportunity to grow as a person and as a team member, an opportunity to learn by doing and to face the real word outside university;
- 4. It has been a stimulating experience that taught me a lot of skills that are going to enrich my experience and provide me tools to better approach the "work world";
- 5. I think these experiences are the best connections the university can build between students and working/entrepreneurial world, not comparable with exams;
- 6. Yes because it's a value added to the theoretical exams that everyone does at university;
- 7. It is a perfect place to sharpen personal and professional skills;
- 8. It is the best way to practice with different technologies, to learn all the different aspects of a project, from the theory behind to the business plan;
- 9. The Challenge@PoliTo gives the possibility to understand how to work in a team with different backgrounds, how to manage the time to achieve the deadlines and the importance of the communication between the team members and the mentors. It makes you understand that if you have an idea you can implement it from zero and do it.

Challenge Prices

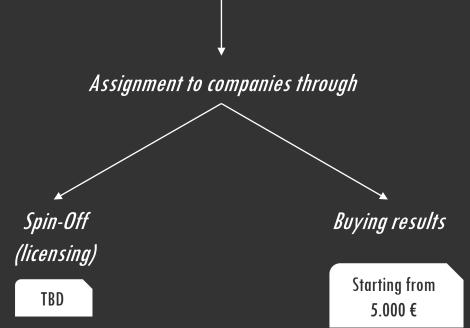
Prices and conditions will be agreed based on Company dimension

(Revenues and n° of Employees)

Intellectual Property



- 1. Moral rights always belong to the inventor (students)
 - 2. **Economic rights** always belong to Politecnico





Thanks!