

FusionLab

Annual Report 2024-2025





FusionAcademy

Design, delivery and evaluation of academic programmes in Esade in collaboration with universities and design schools.

The **Fusion Point Partnership**, a collaboration between Esade, Universitat Politecnica de Catalunya and Instituto Europeo di Design which creates experiential learning courses for students of the three institutions is part of the FusionAcademy.



FusionLab

FusionCommunity

A community of ongoing sharing and learning for experts and collaborators, a life-long learning environment which transfers knowledge among coaches, faculty and organizations.

FusionResearch

Development or research projects for innovation in pedagogy related to creativity and innovation.

FusionPoint

A space for innovation and experimentation on Esade's Rambla of Innovation in Sant Cugat.

FusionLab

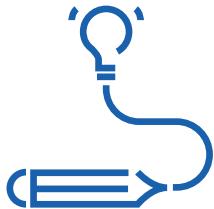
What is FusionLab?

FusionLab is a laboratory for innovation through creative learning processes and collaboration. We are an interdisciplinary ecosystem of academia, business and society that produces solutions to social and business challenges.

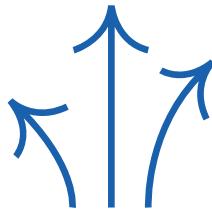
We create academic programmes and do research for Creativity, Innovation and Entrepreneurship skills. We build a community where students, academia, organizations and society collaborate to create a positive impact on society and business.

Our Purpose

We believe that **creativity** and **innovation** are the tools and mindset that future leaders need to navigate uncertainty and to create positive impact for a sustainable future.



Provide technical skills and personal development



Create knowledge through experiments in learning



Tackle challenges with societal impact

How we do it

We craft experimental learning experiences where students collaborate in multi-disciplinary teams using design thinking and systems change to solve complex challenges.



Multidisciplinary teamwork

Management and law (Esade), engineering (UPC) and design (IED) students collaborate in multidisciplinary teams.

Supported by multi-disciplinary faculty and coaching community.



Design Thinking, Systems Change and Futures Thinking

We use methodologies like Design Thinking and Systems Change to provide a human centric and systemic approach to problem solving.



Experimental

The learning methodology is experimental which means that students experiment with new techniques and iterate towards a solution.



Challenge driven

We use the Challenge Based learning methodology where students solve complex challenges from companies, NGOs, or the public sector.

As a result



Personal transformation and mindset

Student teams create solutions such as new products, services or business models which ultimately generate a positive impact on organisations, academia, and society.



Socially relevant & impactful solutions

Student teams create solutions such as new products, services or business models which ultimately generate a positive impact on organisations, academia, and society.



Learn to work in teams

Students learn how to work in teams and develop skills which help them to optimise teamwork.



Creative methodologies

Students learn how to use creative problem finding and problem solving methodologies like Design Thinking and Systems Change.

Our focus areas



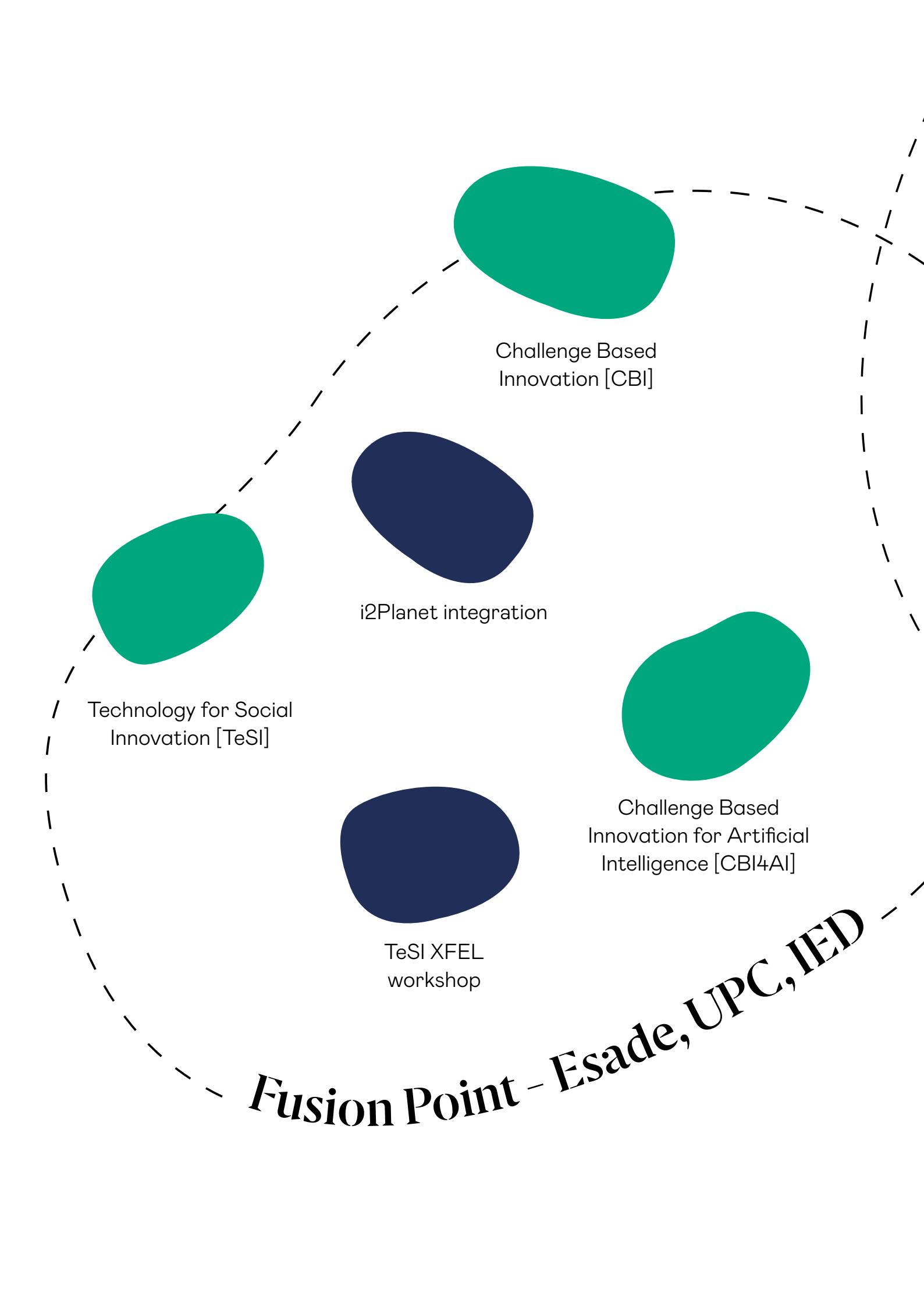
Deep Tech & Science

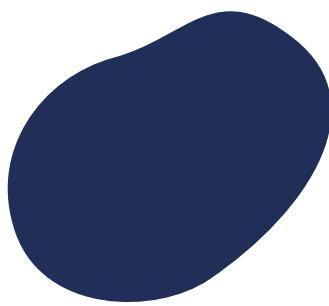
Health & Wellbeing

Mobility & Transport

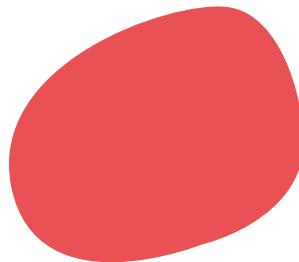
Twin Transition (green & digital)

Sustainability

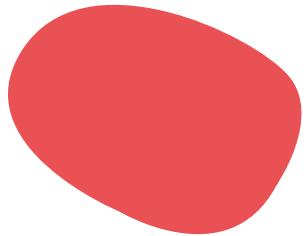




BAIB - I2Planet
workshop



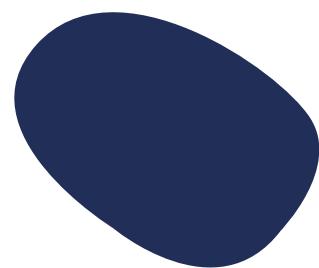
International
week course



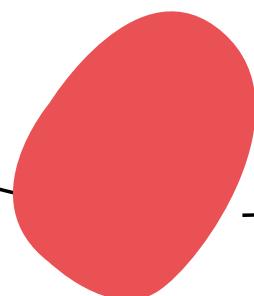
Challenge Based Training
for BBA Faculty



Innovation Through
Design Thinking



Design Thinking
(DT) meets STEM
workshop



TU DELFT-CERN Ideasquare
Summer School 2025

FusionLab Esade

FusionAcademy

The **FusionAcademy** designs, delivers and evaluates creativity, innovation and entrepreneurship academic programmes in collaboration with universities, design schools and business. We offer **a series of courses & workshops** to Esade students and partner universities.

Fusion Point Partnership

The Fusion Point Partnership is a collaboration between Esade, Universitat Politècnica de Catalunya and Instituto Europeo di Design which creates experiential learning courses for students of the three institutions.

Challenge Based Innovation [CBI]

CBI is a unique iteration of the challenge-based innovation program that originated and is grounded at CERN with the explicit goal to link its research, technologies, methodologies and expertise with real-life societal challenges.

It has been delivered annually in the fall since 2014, when Esade, UPC and IED Barcelona came together for the first time to deliver a multidisciplinary challenge-driven program.

The course brings together multidisciplinary student teams who tackle societal challenge in line with Sustainable Development Goals (SDGs), while leveraging the technologies and knowledge at CERN in Geneva. During CBI 2023 students went through a 12-week learning and innovation journey, tackling various aspects of **air and water pollution and contamination**.

In this edition, 38 students worked in 6 teams to tackle SDG 6 challenges: ensuring access to water and sanitation. They focused on two cases—urban water distribution in Barcelona with Aigües de Barcelona, and water salinization in Gambia with the CSIC-IDAEA research group. This edition also included 6 students from UPV Polytechnic University of Valencia for the first two weeks of the course.

Aigües de Barcelona: This challenge explored how to influence urban water consumption using enriched data. Students analyzed usage patterns across households, public services, and industries to propose solutions for more sustainable water management.

CSIC-IDAEA – SALBIA Project: In Gambia's Kiang West, students studied the impact of river salinization on agriculture, communities, biodiversity, and emissions. With CSIC-IDAEA and the Sankandi association, they developed adaptation strategies to enhance resilience and support sustainable transformation.

 **Number of teams** 6

 **Mentors** 8

 **Faculty** from the 3 schools

 **Duration** 3.5 months, 15 weeks

 **Credits** 12 ECTS

Esade students

FT MBA, elective

Partners

Universitat Politècnica de Catalunya

Instituto Europeo di Design

UPV Politechnic University of Valencia

Course website

<https://www.cbi-course.com/>

Participating students

from 16 different nationalities



10 ♂



12 ♂



12 ♂





Challenge Based Innovation for Artificial Intelligence [CBI4AI]

Challenge-Based Innovation for Artificial Intelligence (CBI4AI) is a more compressed version of the original CBI with a strong AI component. The program incorporates early stage development cutting-edge technologies from Attract, and an AI dimension to find solutions to the main social problems of our time. The overarching challenge focused on AI-driven infrastructure network optimization for water access and reuse, food supply and reuse, and health (health providing, drug distribution, emergency assistance) in urban environments, using the technology **Graph Neural Networks (GNN)**. This challenge integrates AI techniques for network architecture, GNNs, optimal design, and scheduling, with a focus on sustainability, human inclusion, and social impact.

The **SDGs** of reference are: **2 - Zero Hunger, 3 - Good Health and Wellbeing, 12 Responsible Consumption and Production, 16 - Water and Sanitation.**

 **Number of teams** 6

 **Mentors** 8

 **Faculty** from the 3 schools

 **Duration** 6 weeks

 **Credits** 6 ECTS

 **Esade students**

MSc students

 **Partners**

Universitat Politècnica de Catalunya
Instituto Europeo di Design

 **Participating students**

 esade

 IED

 UPC

10 

16 

10 

Technology for Social Innovation [TeSI]

Technology for Social Innovation is a course with the goal to link CERN's open science, technology, and expertise to address societal challenges. It focuses on social needs by identifying disruptive applications and business models for cutting-edge technologies. During the program, students learn how to develop and assess the potential impact of novel technologies in addressing societal needs, to lead work in an explorative project involving constant reflection and adaptation to new information, and the ability to communicate and argue for decisions made in the context of an innovation project.

This edition of TeSI works with the following technologies: **Quside Technologies (ICFO spin off)**, **Spectromarine (University of Latvia)** and **1D SiNRs (European XFEL)**.

As of 2025, Fusion Point is glad to announce that we are part of the **TECH2X - Technology for innovation and entrepreneurship excellence project**, an EIT HEI Initiative. Consequently, the 2025-2027 editions of Fusion Point TeSI course will be under the umbrella of TECH2X project. (see page 17 for more information on the project)

 **Number of teams** 5

 **Mentors** 5

 **Faculty** from the 3 schools

 **Duration** 3.5 months, 15 weeks

 **Credits** 5 ECTS

Esade students

MSc in Business Analytics, Capstone

Partners

Universitat Politècnica de Catalunya

Instituto Europeo di Design

Participating students

 esade

 IED

 UPC

10 ♂

2 ♀

13 ♂

TeSI European XFEL Workshop

Thanks to the ATTRACT EU project, Fusion Point started collaborating more closely with one of the research centres that was ATTRACT consortium partner: the European XFEL in Hamburg, Germany. This year TeSI students were invited to their facilities, adding a highly valuable learning experience that aligns with the goals of the TeSI course and their ongoing projects.

15 students took part in this incredible experience where they could:

- Explore one of Europe's leading research infrastructures
- Share their ongoing TeSI projects
- Participate in a workshop with European XFEL researchers solving a data sustainability challenge for EU XFEL
- Work in an inspiring and highly innovative environment



i2Planet sprint integration

After last year's successful pilot, this year we fully integrated the i2Planet sprint into all three Fusion Point courses during our visit to IdeaSquare at CERN, engaging a total of **109 students: 45 in CBI, 28 in TeSi, and 36 in CBI4AI**, representing diverse disciplines and backgrounds.

In **CBI**, including UPV students, teams designed a sustainable settlement on Kepler-452B, tackling multidisciplinary challenges such as water purification, resource management, and community building under extreme conditions. In **TeSi**, students focused on analysing and applying specific emerging technologies to enable life on another planet, assessing their feasibility and potential impact for settlement construction. Meanwhile, **CBI4AI** students worked on designing infrastructure for a settlement of **50,000 people**, using Graph Neural Networks to optimise essential services like water distribution, food systems, and healthcare access.

Integrating i2Planet across all three courses created a unifying, future-oriented challenge connecting science, technology, design, and business. It offered students an immersive environment to develop critical competencies such as managing uncertainty, thinking systemically, and collaborating effectively across disciplines, while tailoring the learning objectives to each program's specific focus.

FusionLab Esade



Design Thinking (DT) meets STEM workshop

Esade FusionLab participates in an Erasmus+ project called **Teaching BE conscious Student (in short TeachBeast 2022-2025)**, mainly focused on the priority of fostering innovative practices in learning and teaching.

The project aim is to develop and implement an innovative approach to teaching STEM subjects, in which teachers develop STEM-related skills within non-technical degree programs by transforming traditional teaching models.

In the first phase of the project, the project consortium identified STEM-related subjects based on fields of study and the actual demands of the labor market, in order to highlight the practical value of the skills and knowledge transferred through STEM subjects.

In the second phase, the consortium aimed to transform classroom approaches by **adapting a STEM subject into a project-based model built around the Design Thinking (DT) framework**.

The training, organized and led by the Esade FusionLab team, took place at Esade Sant Cugat from October 21 to 23, 2024. During the session, we experimented with DT methodologies applied to a STEM subject, with the goal to prepare STEM teachers to transition to a project-based model using the DT framework, which is typically more common in non-STEM subjects.

The training was attended by professors from:

esade

IQS
UNIVERSITAT RAMON LLULL

**POLITÉCNICO
DE PORTALEGRE**

**UNIVERSITY OF INFORMATION
TECHNOLOGY and MANAGEMENT
in Rzeszow, POLAND**



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA

Innovation Sprint Summer Course

In May 2025 FusionLab ran a 5-day innovation sprints in collaboration with Esade's Summer School and ESAN Business School (Peru). Students participated in an immersive learning experience where they applied Design Thinking to understand and solve complex problems.

Students solved 2 complex challenges: Digital intoxication and the negative impact on mental and physical wellbeing; and disinformation and social media

 **Number of teams** 8

 **Faculty** Esade

 **Duration** 1 week

Innovation Through Design Thinking

Innovation Through Design Thinking is an immersive learning experience. During 9 sessions students worked in groups of 5 - 6 students to solve challenges related to the future university experience. The main objective of the course is to develop an experimental mindset and acquire a set of practical tools for creative problem solving based on the design thinking methodology. In this edition students explored the future of education and how they can imagine and create the university experience of the future. **How can we reimagine the student and university experience?** In this edition, experts from **ISS** shared their knowledge of the workspace experience with a focus on people's well-being and sustainability.



Number of teams 5

Mentors 2

Faculty Esade

Duration 9 weeks

Credits 3 ECTS

Esade students

Multidisciplinary MSC's students

Participating students

esade
38

TU DELFT-CERN Ideasquare Summer School 2025

Thanks to the ATTRACT Academy EU Project, we are expanding our partnerships and are proud to team up with new international academic partners such as TU Delft.

This year, TU DELFT/CERN Ideasquare organized a **Summer School 2025 'Translate tech into products for society'** and **5 Esade MSc students have had the unique opportunity to take part** in this immersive innovation experience fully funded, in collaboration with leading European institutions.

Participating students will be from:

esade

TU Delft
Delft University of Technology



UNIVERSITY
OF AMSTERDAM



UNIVERSITAT
POLITÈCNICA
DE VALÈNCIA

Esade students

3 from MSc in Business Analytics

1 from MSc in Sustainability Management

1 from MSc International Management



i2Planet workshop in BAIB

On September 2nd, the new BAIB (Bachelor of Business Administration & Bachelor in Artificial Intelligence) students participated in a Welcome session built around the i2Planet exercise—an activity designed to ignite creativity, teamwork, and bold thinking from day one.

Students were challenged to **imagine and co-create a new society on a fictional planet**, defining key elements such as governance, values, social norms, and resource distribution. Collaboratively, they visualized their ideas and negotiated shared decisions, while also estimating orders of magnitude for essential aspects of life in an unfamiliar planetary context.

The guiding premise was that their new system should strive to be better than the one we have on Earth. The exercise fostered critical thinking, open dialogue, and introduced the interdisciplinary, solution-oriented mindset that defines the BAIB program.

Challenge Based Training for BBA Faculty

FusionLab team delivered a dedicated training for Esade BBA faculty to introduce Challenge-Based Learning (CBL) in the new “Innovation for a Better World” course, which is the first challenge-based course designed for first-year BBA students. This training, taking place at Fusion Point, **equips faculty with the foundations of CBL, systems mapping tools, and class management strategies** specific to the course. The aim is to empower faculty to guide students in developing systems, critical, and normative thinking competencies essential for their future careers while engaging them with real-world social and environmental challenges. This marks an important milestone in **integrating experiential and interdisciplinary learning approaches** with a remark on social impact and systemic approaches **into the BBA program** from its initial stages.

New courses and pilots

Liberal Arts II – Creativity (Design Thinking x Visual Thinking)

Esade students

Core course BITLASI (Year 3)

Participating students

esade
48 ♂

- 🤝 **Number of teams** 8 of 6 students
- ⌚ **Duration** 3 months (Jan – Mar 2025)
- ⭐ **Credits** 4 ECTS
- 💡 **Open challenges** Mental Health, Aging population, Health and Wellbeing

Prototyping Digital Solutions

Esade students

Elective course BAIB (Year 2)

Participating students

esade
16 ♂

- 🤝 **Number of teams** 4 of 4 students
- ⌚ **Duration** Jan 2025 (8 sessions over 3 weeks)
- ⭐ **Credits** 3 ECTS
- 💡 **Open challenges** Mental Health in young people.



Design Thinking and Innovation in Law

Esade students

Elective course Law Faculty (Undergraduate)

- 🤝 **Number of teams** 4 of 2-3 students

- ⌚ **Duration** June 2025

- ⭐ **Credits** 3 ECTS

- 💡 **Open challenges** Related to legal challenges faced by young people

Projects Summary

Challenge Based Innovation

Mangrove restoration in Gambia

Adriene Rivera (Esade) | Gauri Arora (IED) | Alicia Potgieter (Esade) | Frederik Tubbesing (IED) |
Marc Fernández i Temprado (UPC) | Javier Rodríguez Calderon (UPC)



Problem Description

Mangrove forests in The Gambia are rapidly declining due to rising salinity, deforestation, and climate change. Local restoration efforts lack the scientific tools needed for effective site and species selection, reducing survival rates and impact.



Solution Proposition

The Roots Kit is a low-cost, DIY environmental monitoring toolkit that measures water salinity, soil pH, and GPS location. It empowers communities to make data-driven decisions for mangrove planting, improving restoration success.



User / Problem Owner

The main user is the Sankandi Youth Development Association (SYDA), a local community group leading mangrove restoration. Other beneficiaries include NGOs, environmental educators, and rural community members.



Technology Integration

The kit uses affordable components such as stainless steel electrodes, pH sensors, GPS modules, and an Arduino-based microcontroller. It is open-source, battery-powered, and designed for easy local assembly and repair.



Social Impact

The project trains and involves hundreds of local residents, enhancing scientific literacy and community ownership. It supports long-term resilience by improving ecosystems, livelihoods, and climate adaptation capacity.



Future Scenarios

In the next 1–2 years, the Roots Kit will be piloted and tested with local leaders using a train-the-trainer model. Over 5 years, it aims to scale regionally through partnerships and become integrated into broader reforestation strategies.



Next steps

Following its final presentation in the CBI course, the project has been well received by key stakeholders on the ground, including the Sankandi Youth Development Association and the University of Gambia. Currently, the next steps for implementation are being planned. In July 2025, students from the CBI course will travel to Gambia to carry out knowledge transfer activities and launch The Roots Kits on-site.



Challenge Based Innovation

Metrio: Helping hotels make a difference

Shaivya Thapliyal (Esade) | Darina Azamatovna Abuzarova (IED) | Aina Lizhuo Martinez Villegas (UPC) |
Katsuyuki Murai (IED) | Àlex Dominich Uribe (UPC)



Problem Description

Barcelona is facing severe water scarcity, worsened by climate change and high water consumption from tourism, especially in hotels. Current infrastructure lacks granular water usage data, making it hard for hotels to manage or reduce consumption effectively.



Solution Proposition

Metrio is a smart monitoring system using ultrasonic sensors to track water usage in hotel showers and sinks. It includes a dashboard for hotel managers and a gamified web/app for guests to encourage sustainable behavior through feedback and rewards.



User / Problem Owner

The primary users are hotel managers and guests in mid- to high-end hotels. Secondary stakeholders include city authorities and sustainability-focused organizations like Aigües de Barcelona.



Technology Integration

Ultrasonic sensors non-invasively measure water flow, transmitting data to a dashboard for analysis. A companion web/app presents real-time consumption insights, conservation tips, and gamified incentives to guests.



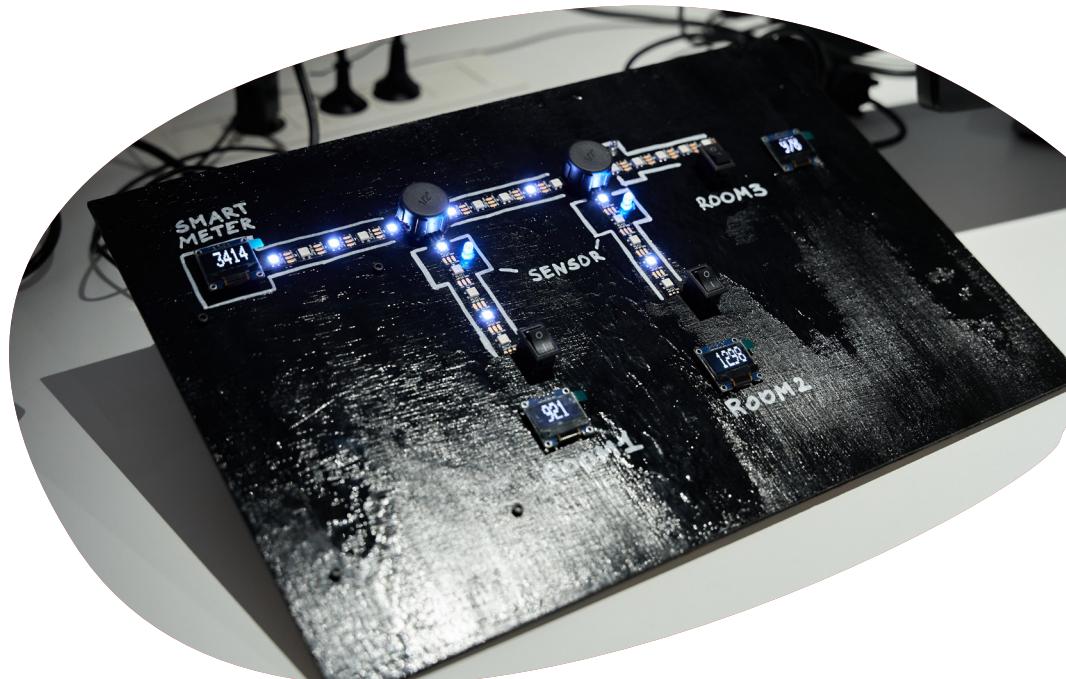
Social Impact

The solution promotes water awareness and behavior change among tourists, with an estimated 17.5% reduction in luxury hotel water use. It also fosters long-term conservation habits that guests may carry back home.



Future Scenarios

Initial pilots will be launched in Barcelona, targeting early-adopter hotels and tourists. Within four years, the plan is to expand across Spain and enter the broader Southern European hospitality market.



Challenge Based Innovation for Artificial Intelligence (CBI4AI)

Digital Twins for Real-World Water Resilience

Enric Boloix Ribas | Pau Soler Duran | Samuel Tschümperlin | Semeli Maria Tisarchontou | Arnau Saumell i Portillo | Dameli Ushbayeva



Problem Description

Many cities rely on outdated water infrastructure and lack tools to simulate risks or plan for climate-related disruptions. This leads to costly repairs, unreliable service, and growing social inequality.



Solution Proposition

wa:sim is a digital twin platform using Graph Neural Networks (GNNs) to simulate urban water networks and test failure scenarios. It helps cities plan proactively by identifying vulnerabilities and optimizing infrastructure decisions.



User / Problem Owner

Main users include city planners, engineers, and public water utilities responsible for urban water systems. End beneficiaries are residents, critical services, and institutions managing infrastructure resilience.



Technology Integration

The system uses GNNs to simulate network behavior even with limited real-time data. It features a scalable graph-based model and a visual dashboard for decision-making support.



Social Impact

wa:sim reduces service interruptions, improves emergency preparedness, and supports fairer infrastructure planning. It helps protect vulnerable communities and contributes to multiple Sustainable Development Goals.



Future Scenarios

Next steps include refining the dashboard and piloting the tool with partner cities. Long-term, it aims to scale as an open-access planning tool for water resilience across regions.



Technology for Social Innovation (TeSi)

TeSi team 1: Recol-lect: Early detection prevents systemic crop failure

TeSi team 2: Empowering data driven solutions with 1D-SiNRs

TeSi team 1: Carlota Tejeda Monell (Esade) | Sassine Nassif (Esade) | Marisa Natalia Franco Aguilar (IED) | Andreea Ioana Kapàs (UPC) | Ilias Khayat El Gharbí Fellah (UPC) | Meret Schuster (UPC)

TeSi team 2: Carlota Galeas Aguilar Varela Martins (Esade) | Marios Contopoulos (Esade) | Jorge Iglesias Costas (UPC) | Paul Maximilian Breuer (UPC)



Technology Integration

Both teams used silicon nanoribbons but used different properties. Team 1 uses SiNR Field-Effect Transistor (FET) biosensors functionalized to detect specific plant-emitted VOCs, integrated into a sensor box and mobile/web platform for real-time monitoring and alerts. Team 2 leverages 2D-silicene nanoribbons engineered with nanopores and chemical dopants for high-efficiency thermoelectric generation and cooling, designed to fit CMOS-compatible chip architecture without disrupting fabrication.



Problem Description

Team 1 addresses the issue of food loss in Catalonia, where over 30% of fruits and vegetables are discarded due to failing aesthetic and quality standards, leading to environmental, economic, and social consequences.

Team 2 tackles the vast energy waste in data centers, where nearly 100% of electricity used is lost as heat, contributing significantly to global CO₂ emissions and inefficiencies in digital infrastructure.



Solution Proposition

Team 1 developed Recol-lect 2.0, a sensor-based system using SiNRs to detect volatile organic compounds from fruits to enable early detection of crop stress, combined with an app for data visualization and service support.

Team 2 designed a chip-level thermoelectric solution using advanced 2D silicene nanoribbons to recover waste heat and/or cool microprocessors, improving energy efficiency and sustainability in data centers.



User / Problem Owner

Team 1 serves small and mid-size farmers and cooperatives in Catalonia, especially those practicing regenerative or organic agriculture who need affordable, predictive tools to reduce waste and increase crop value.

Team 2 targets data center operators, semiconductor manufacturers, and cloud providers seeking energy-efficient solutions, along with regulators and environmentally conscious tech users.



Social Impact

Team 1 reduces food waste, lowers pesticide usage, and supports local agriculture with a scalable tool that empowers farmers with data for better decision-making and resilience.

Team 2 offers a greener pathway for AI and digital services, recovers energy at the chip level, and promotes responsible tech infrastructure by reducing emissions and cooling demands.



Future Scenarios

Team 1 plans short-term pilot testing with local farmers, scaling sensor use to other crops, and incorporating AI for predictive analytics; long-term, the system could expand internationally.

Team 2 foresees integration in data centers and edge devices, with further development of manufacturing processes and expanded use in IoT and low-power electronics, aiming for broad digital sustainability impact.



Fusion Research

Publications

CERN Ideasquare Journal of Experimental Innovation

Mireia Sierra, Matteo di Stasi (2024)

'Multiplicity & diversity: the key for Innovation'

DFGN.R research conference

October 2024, Bogota, Colombia

Global Collaboration DFGN Award for the project 'Hex-a-thon: Collaborative and Creative Learning Experience for Interdisciplinary Students based on hands-on innovation'.

Developed by Fusion Point and Aalto Design Factory

European Society for Engineering Education (SEFI)

Annual Conference 15-18 September, Tampere, Finland.

Practice Paper accepted:

Hex-a-thon: a collaborative and creative learning experience for interdisciplinary students through hands-on innovation.

Authors: Mireia Sierra, Rohan Sachdeva

DFGN.R Research Conference

Unboxed

October 2025 New York EEUU

Conference paper

Prompt, Prototype, Repeat: An experiment on teaching in the Age of regenerative everything

Mireia Sierra, Laura Bellorini, Josep Lluis Berral, Manuela Procopio, Eduard Alarcon

Paper explaining the use of generative and predictive AI such as Graph Neural Networks at the CBI4AI course as technology for their solution.

CERN Ideasquare Journal of Experimental Innovation

Special Issue Career Guidance

Ettore Gorni, Matteo Vignoli, Matteo di Stasi (2024)

'Including career guidance in university courses: the instructor perspective'

Activities Research and Knowledge

→ TECH2X - Technology for innovation and entrepreneurship excellence – New Project

EIT HEI Initiative – Innovation Capacity Building for Higher Education (2025-2027)

The TECH2X project aims to boost the innovation and entrepreneurial capacity of the consortium's HEIs to foster deep tech talent and respond to the need to transition towards the 4th generation university model. Through practice-based collaborations and enhanced networking both within, between and beyond the institutions involved focusing on the areas of climate and mobility, the project intend to create a scalable initiative for excellent science-based innovation and entrepreneurship practices in Europe. The 2025-2027 editions of Fusion Point TeSI course will be under the umbrella of TECH2X project.

PARTICIPANTS:

- Fusion Point, Eworks, Rambla of Innovation, Esade
- Design Factory Università di Bologna (IT)
- Middle East Technical University (TR)
- Hochschule Mannheim (DE)
- CERN Ideasquare (CH)
- Almacube (IT)

→ Teach BEast project – Ongoing

EU funded project 2022-2025 Erasmus + Cooperation partnerships in higher education.

“Stimulating innovative practices in learning and teaching.” The goal of the project is to develop and implement an innovative approach to teaching STEM subjects in which the teacher develops skills related to STEM subjects in non-technical majors by changing the teaching model.



Press & outreach

DoBetter Article

March 2025

CBI-Fusion Point: University innovation to tackle water access challenges

Esade news

ATTRACT article

January 2025

CBI-FP program: bridging innovation and societal impact through multidisciplinary collaboration

ATTRACT article

February 2025

CBI4AI program: connecting technology with human needs

ATTRACT article

April 2025

TeSI program: connecting science and business to address societal challenges

CBI 2024 press and media coverage

9 Online Press Impacts: 7 national + 2 international in Financial Times and Education Times

Videopodcasts series on

Sustainability by Esade

Economic Value: 180k

Audience reached: 3,9 mill. people

→ Defining and implementing common metrics for measuring competence acquisition

As part of the TECH2X project, consortium partners will implement methods to assess learning outcomes and competence development. Esade will contribute tools like Creativity Self-Efficacy Surveys and Self-Assessment methods. All partners will implement University of Bologna's Design Thinking Mindset Tool before and after the course for measuring behaviours aligned with a 4.0 university model, including psychological flexibility. The goal is for all four HEIs to collect data from training participants to evaluate impact. This data will also support research aimed at enhancing innovation and entrepreneurship education.

→ RISES Recovery Innovation for Secondary School - Proposal

Erasmus+ Cooperation partnerships in school education (2025-2028)

RISES aims to revolutionize the way psychological well-being is addressed in European schools, through co-design of innovative practices that combine the power of Design Thinking and Recovery College with these specific objectives:

- Pedagogical Innovation, strengthening The capacity of institutions to respond to The challenges of psychological well-being students
- Promote transnational collaboration between schools and universities
- Professional development of schools and universities.

PARTICIPANTS:

Fusion Point, Rambla of Innovation, Esade
Design Factory Università di Bologna (IT)
Colegio Pureza de María, Sant Cugat del Vallès
Istituto Comprensivo 5 Bologna (IT)
THE CARe NETWORK for recovery and inclusion (NL)

→ HEART Humor, Engagement and Active Role Techniques in Higher Education - Proposal

Erasmus+ Cooperation partnerships in higher education (2025-2027)

Addressing the problem of students' decreasing attention span and increasing distraction, the main objective of HEART in HED is to increase student engagement by fostering the use of standup and improvisation techniques from university professors. Classroom management will be improved and teaching efficiency will be increased. HEART in HED has the potential to create a new market where universities can address a pressing challenge and standup/improvisation trainers can cater to a new audience.

PARTICIPANTS:

Fusion Point, Rambla of Innovation, Esade
House of Improv (EL)
Technologiko Panepistimio Kyprou (CY)
University of Athens (EL)



→ FECYT Innovacion - From Innovation & Entrepreneurship Management Science to Business and Citizens (FIEMS2BC) - Proposal

The FIEMS2BC project aims to promote changes in attitudes toward science and technology. It seeks to bring research on innovation and entrepreneurship closer to both entrepreneurs and the general public. The project intends to strengthen entrepreneurs' capabilities in key areas for business success. Additionally, it aims to foster stronger connections between researchers and entrepreneurs. All of this is designed to create a measurable and positive impact on the Spanish entrepreneurial ecosystem.

PARTICIPANTS:

EEI and Fusion Point, Rambla of Innovation, Esade

→ Understanding innovation and measuring learnings research

The Fusion Point research team has deepened its investigation into the impact of interdisciplinary, challenge-based learning on students' innovation capabilities and team dynamics. We conducted extensive quantitative and qualitative data collection across all programs, such as:

- Learning self-assessments,
- Personality traits,
- Team compositions
- Final outcomes.

We completed a quasi-experimental study on team composition based on extraversion levels and initiated a new round of alumni interviews to assess long-term personal and professional impacts. Our current work includes:

- Analysing the relationship between diversity, leadership emergence, and innovation outcomes;
- Exploring more objective ways to assess learning and innovation beyond grades;
- Developing tools for real-time evaluation of student learning and team performance.

These efforts aim to generate actionable insights to improve course design and contribute to academic literature on innovation education.

→ Inspirational Paradigm RFP Round V - New Project



This proposal presented by Fusion Point together with Ateneo de Manila aims to integrate a challenge from Ateneo de Manila into Esade's CBI course, fostering cross-regional collaboration and experiential learning. The project supports the Jesuit Business Education paradigm by addressing global challenges through ethical leadership and innovation. The final outcome will be teaching resources, case studies, and best practices as teaching resource for the IAJBS Community.

The project has been awarded funding to be developed in the upcoming academic year 2025-2026.

→ Optical spectroscopy real time water analysis platform – ORIENT – Proposal

HORIZON Action Grant Budget-Based

The participation of Fusion Point in this project translated into bringing the developed technology to TeSI experiential learning course focused on sustainability and innovation, where students from business, engineering and design work together to identify disruptive applications and business models of the technology, as well as exploring its environmental impacts for various uses and/or products. An important aspect of the TeSI program envisaged for ORIENT is to engage students in Life Cycle Assessment (LCA), a methodology used to evaluate the environmental impacts associated with all stages of a product's life.

PARTICIPANTS (12 in total, among others):

Fusion Point, Rambla of Innovation, Esade

Institute of Solid State Physics, University of Latvia (LV)

WE&B: Environmental Consulting Company (ES)





FusionCommunity

Our team

Fusion Community is an ecosystem for ongoing sharing and learning for creativity, innovation and entrepreneurship. The community aims to create and share knowledge, with the objective of growing together and to support each others' work while addressing common challenges.

Outreach activities

16th September 2024
Fusion Point space

Rambla & Fusion Point Open Day

Fusion Point space on Esade Rambla of Innovation opened its doors to Esade students community to showcase best final projects with posters and physical prototypes from FusionLab courses.

Sept-Dec 2024

Aguas de Barcelona Challenge

FusionLab collaborated to promote the Aguas de Barcelona Challenge as an Open Challenge to the entire students' community, and two of the participating teams were made by Esade FusionLab students.

30th Sept to 4 Oct 2024,
Bogota, Colombia

DFGN international week & Research conference

FusionLab team participated in DFGN week hosted by Universidad Javeriana de Bogotá. At UnBoxed conference, we received the 'Global Collaboration DFGN Award' for the project 'Hex-a-thon: Collaborative and Creative Learning Experience for Interdisciplinary Students based on hands-on innovation'.

January 2025

CBI Financial Times *highly commended* project

Fusion Point Esade presented the CBI experience at the [Financial Times 2025 Responsible Business Education Awards](#) and have been selected as *highly commended* project.

6th February 2025,
Brussels

ATTRACT session at Science & Business event

Students from Fusion Point, Pau Jordan Oliveras, CBI 2022 student from UPC and Lucienne De Waal, TeSi 2022 student from IED, participated in a presentation showcasing successful projects of the ATTRACT Academy project.

21-23 October 2024

Design Thinking meets STEM training

As part of TeachBEAST EU project, this training was organized by FusionLab to prepare STEM professors to shift to the project model using the DT framework.

Participants were from Esade, Universities of Poland, Portugal and Bologna (IT), and invited professors from IQS, from URL network.

16-26 October 2024

Barcelona Design Week

During the Barcelona Design Week, representatives from Esade Fusion Point students showcased their project prototypes coming from Fusion Point courses.

8th November 2024,
Cern Ideasquare, Geneva

IdeaSquare 10th anniversary

Fusion Point team took part in the 10th year anniversary ceremony of Ideasquare, CERN, in Geneva, the long-time partner of Fusion Point flagship courses.

7th February 2025,
EGarage

1st Research Seminar on student learning outcomes and innovation drivers

Participants explored Fusion Point's research on student learning outcomes and innovation drivers. They shared insights on how soft skills, teamwork, and diversity foster innovation and discuss findings on links between personality traits, leadership, teamwork dynamics and innovative results. Additionally, participants assessed long-term course impact through alumni interviews.



18th February 2025,
The Social Hub, Barcelona

CBI wins Esade Sustainability Award

The Challenge Based Innovation – CBI course has won the first edition of the prestigious Esade Sustainability Awards in the category: *The campus as a laboratory for innovation and learning*.

19th February 2025
Fusion Point space

Esade Sustainability Week – Discover Esade FusionLab

During this activity, students from Esade French course were introduced to FusionLab to discover how interdisciplinary teams work on projects that have a social impact on society. In addition, they explored the prototypes developed by students in previous projects.

3-6th March 2025,
MWC-4YFN, Barcelona

Fusion Point students prototypes showcase

Fusion Point alumni from CBI and TeSI showcased best final projects with posters and physical prototypes from Fusion Point courses in the Esade stand.

IdeaSquare
Comunicaciones y Electrónica
Tecnica de Catalunya y
el Istituto Europeo di Design



2th May 2025,
Fusion Point space

Visit to Barcelona Supercomputing Centre (BSC)

Fusion Point students community have been invited to a special visit of the BSC hosted by Professor Josep Lluís Berral, as great opportunity to explore one of Europe's leading research centers in supercomputing and data analytics teams to explore and share challenges and opportunities related to innovation.

22th May 2025

DFGN May Gathering

The DFGN hosted an online gathering where Fusion Point and NYC Design Factory shared their perspectives on integrating equity and AI tools in teaching and learning. In particular, Fusion Point team will present a session by the title: *Prompt, Prototype, Repeat: An experiment on teaching in the Age of regenerative everything.*

29th May 2025,
Fusion Point students community kick off event

Fusion Point students community kick off event

Fusion Point students community organized the first official gathering to kick off the community of the +2000 students who attended Fusion Point courses and activities over the past 11 years. Representatives from Fusion Point students from Esade, UPC and IED shared past and future projects updates, as well as we listened to alumni stories, selected the official alumni logo through live voting, and enjoyed networking and drinks in the Esade MBA garden.



2-3th July 2025

Brussels

ATTRACT final conference

Fusion Point team took part in the final conference of the ATTRACT EU initiative. The funded projects showcased their achievements and impact, and Fusion Point co-facilitated the workshop From Deep Tech to Deep Impact to leverage ATTRACT ecosystem and learnings.

July 2025

Fusion Point wins MetaRed International Award

meta@redX
by unিersia

Fusion Point won MetaRed Award in the category EMprende MetaRed X 2025 - innovación emprendedora, a recognition that celebrates the most outstanding innovation and entrepreneurship programs presented by Ibero-American universities. The project has also been **awarded a Special Mention** for its category.

29th July – 12th August 2025

CBI project implementation in Gambia

The Roots Kits, a project developed in CBI 2024 to support mangrove restoration in Gambia through low-cost tools that help communities monitor key environmental factors has been further developed to be implemented on-site in Gambia by a team of Fusion Point students.

FusionLab Coaching Community of Practice

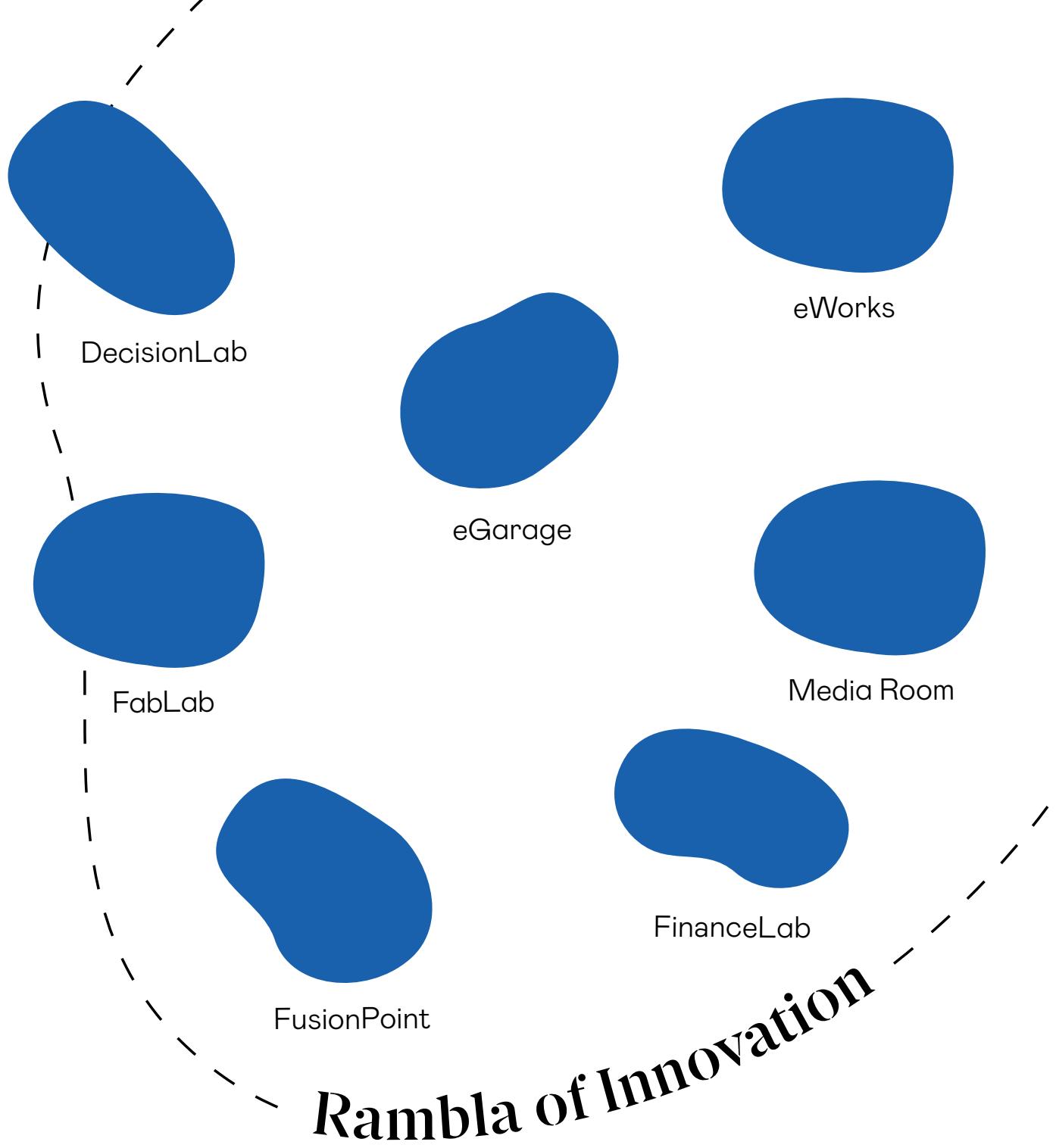
FusionCommunity is a vibrant community where experts, faculty, and organizations come together to share knowledge, learn from one another, and drive positive change in society and business. It is a lifelong learning environment about collaboration and continuous growth. During the academic year, we organized a series of peer-to-peer trainings facilitated by members of the Community on specific themes, exploring new or going deeper into a variety of topics around innovation, open to all members of Esade Rambla of Innovation ecosystem.

- **10 Oct 2024:** training session by Dr. Hanna Poikonen on Neural Networks of the Creative and Goal-Oriented Thinking.
- **15 Nov 2024:** training session by Ellina Watanabe on Coaching towards relational way of being.
- **13 Dec 2024:** escape room experiment by Esade professor Carlos Royo.
- **7 Feb 2025:** 1st Research Seminar by Fusion Point Research Team (este punto poner con fondo de color par resaltar).

- **21 March 2025:** workshop by Manuela Procopio on Digital Collage, where participants worked together to discover the environmental and social impacts of the digital world.
- **9 May 2025:** Aurélie Glorieux on teaching methods sharing (part 1), as part of our journey to improve the student experience at Fusion Point.







FusionPoint

FusionPoint is a space for innovation and experimentation on Esade's Rambla of Innovation. The 200m² space is a meeting place for events and activities which develop creativity and entrepreneurship. Over the past academic year more than 300 events and 170 classes were hosted.

Collaborating Organisations

FusionLab collaborates with a variety of companies, non-for-profit organizations and public authorities who sponsor or launch challenges in our courses. We have collaborated with the following organizations:

Health and Wellness



Mobility & Transport



Public sector & NGO's



Finances & Legal



FMCG



Consulting, Tech & Utilities



Tecnology & twin transition



Thank you to the students, teachers, coaches, experts and organizations who have collaborated with FusionLab.

We look forward to a bright and impactful future.

[FusionLab Esade website](#)

For more information, please contact fusionpoint@esade.edu







esade | The Rambla
of Innovation