



University  
of Gdańsk

# INNOVATIVE METHODS IN OCEAN LITERACY & BLUE ECONOMY

## HIGHER EDUCATION PRACTICES FROM THE UNIVERSITY OF GDAŃSK

Ocean literacy and blue economy

Basia Dmochowska, Hanna Łądkowska, University of Gdańsk



**ANNUAL CONFERENCE**  
**Ostend, Belgium**

**17-19 SEPTEMBER 2025**





Faculty of Oceanography & Geogrpahy  
University of Gdańsk, Poland



EUROPEAN UNIVERSITY OF THE SEAS



Employees: 148

Academic Staff: 98

Bachelor's and Master's students: about 550

PhD students: about 40

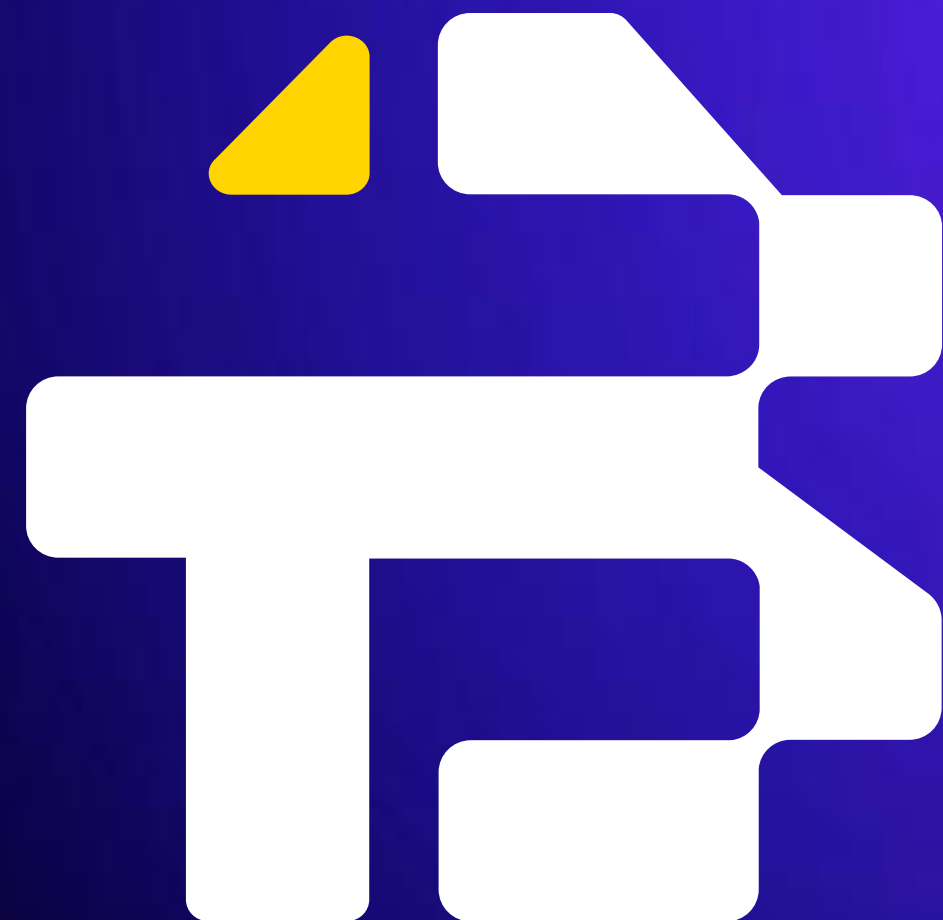


*A sustainable blue economy is only possible if we truly understand the ocean, making ocean literacy crucial in advancing it.*

- Strong marine science programs with practical outreach
- Outreach through research stations
- Sea-EU educational collaboration and sustainable blue economy track
- Participation in public events and ocean awareness initiatives
- Student and staff participation at global ocean events
- Marine Data Literacy Course (SEA-EU partnership)
- **International cooperation/projects**







# Blue Bio Techpreneurs

EMFAF 2023 Blue Career  
09/23-02/26



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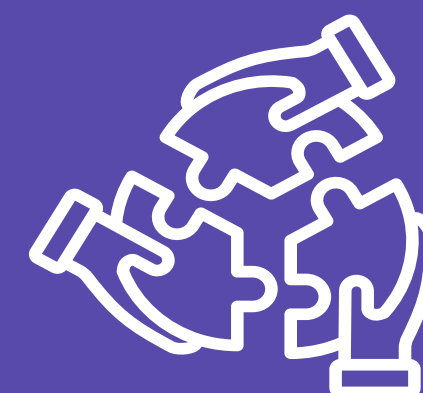
## Partners



BLUEBIO ALLIANCE  
The Portuguese Network for Marine Bioresources and Biotech



## Activities



6 WEBINARS



3 HACKATHONS



MOOCS  
Massive Open Online Course



# INTERREG SB 2023 Sustainable South Baltic 09/2023 – 08/2026



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South Baltic



## Partners



GULDBORGSUND

GÅRDSFISK®



## Activities



PILOTS

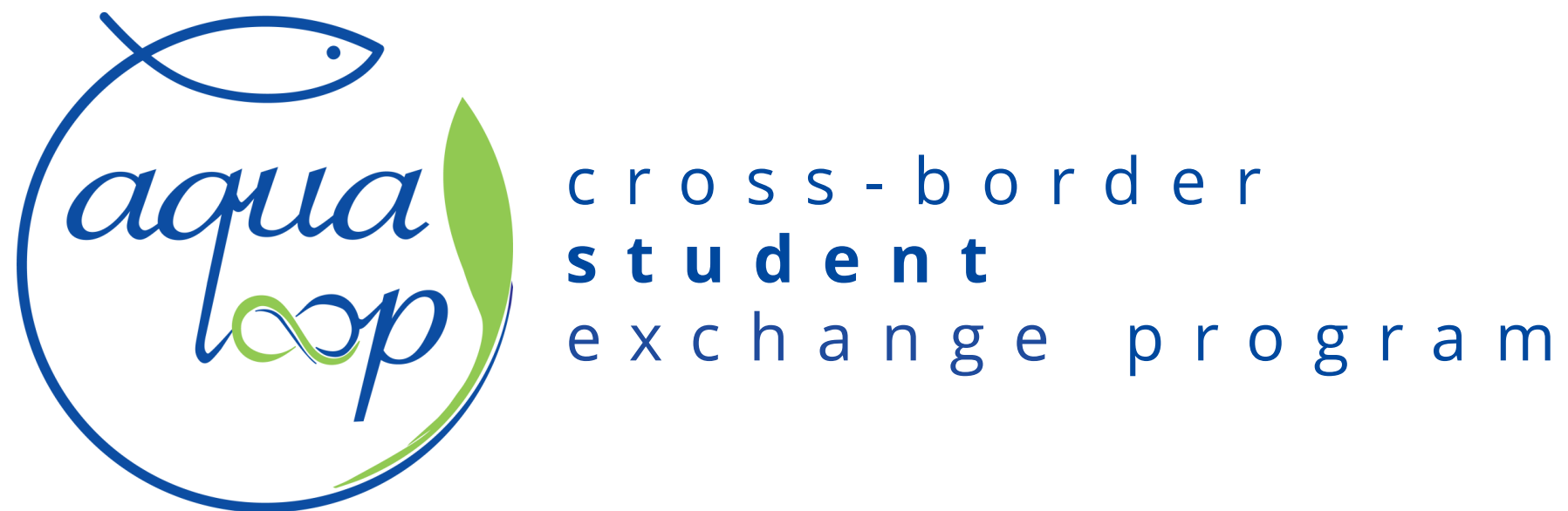


TRAININGS



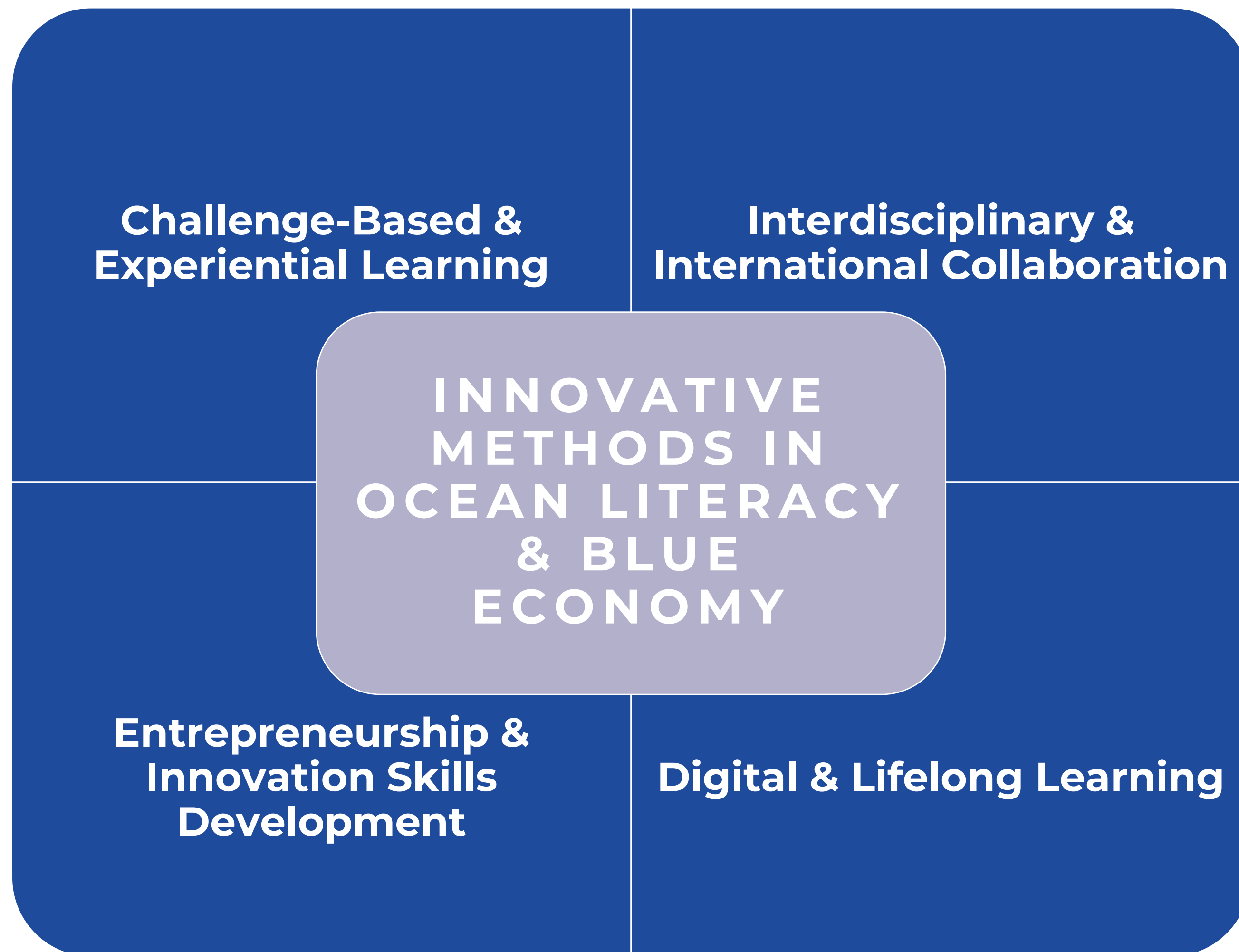
STAKEHOLDER SUPPORT





**MOOC – Online Courses**

## TRAINING ELEMENTS







## cross-border student exchange program

### What?

A week long exchange program based on the AquaLoop project pilots, hands on experience, laboratory work, study trip, cross-border cooperation and networking.

### For whom?

Aquaculture (and related majors: biology, marine biology, etc.) undergraduate and graduate students from the AquaLoop project partner universities: University of Rostock, University of Gdańsk, and Klaipeda University.

### Why?

To get familiar with AquaLoop pilots, circular economy practices in aquaculture, partner institutions, and students from Germany, Poland and Lithuania.



### When?

January – March 2025

### Where?

University of Rostock (DE)  
University of Gdańsk (PL)  
Klaipeda University (LT)



Pilot 1: Testing Algae Applications in Recirculating aquaculture systems (RAS) to improve aquaculture circularity potential in the SB region, University of Gdańsk



Pilot 2: Increasing the nutrient efficiency of commercial aquaculture through increased application of circular economy concepts, University of Rostock



Pilot 3: Development of the Fish-Shrimp-Vegetables integrated system of aquaponics to showcase the potential of circular economy principles in RAS, Klaipeda University



Are you enthusiastic about circular economy & aquaculture, and you study at one of the AquaLoop project universities?  
**Then, the program is for you!**

More on: [www.aqualoop.edu.pl](http://www.aqualoop.edu.pl)

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## OVERVIEW

January–June 2025

1 week long

19 Bachelor's & Master's students

University of Rostock (DE)

University of Gdańsk (PL)

Klaipeda University (LT)



## Challenge-Based & Experiential Learning

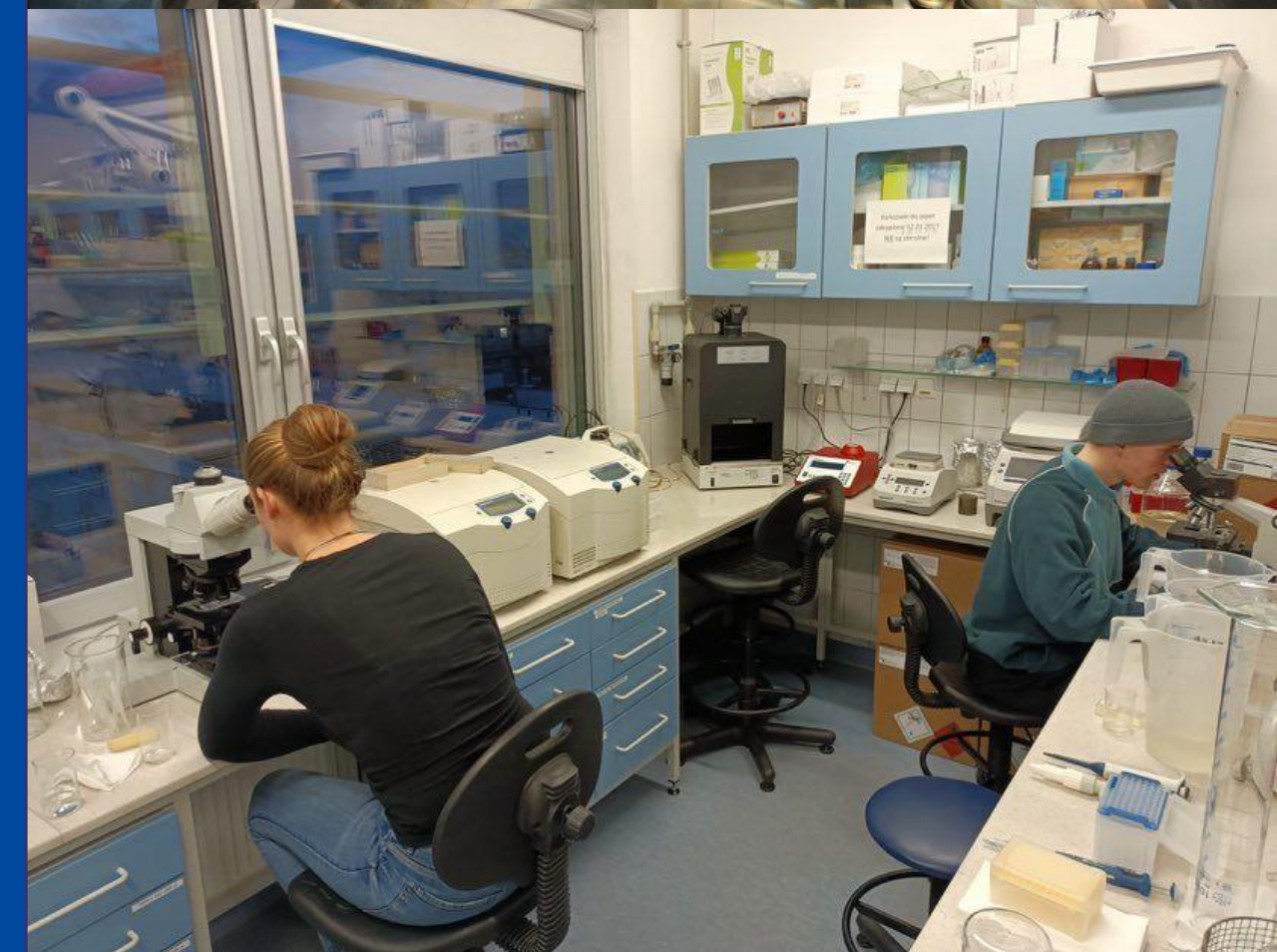
Pilot-based, practical skills development in circular practices in blue economy

## Entrepreneurship & Innovation Skills Development

Enhanced cooperation between industry and academia fostered through study visits during exchange stays

## Interdisciplinary & International Collaboration

Networking and cultural exchange between 3 countries & further collaboration between project partners and their students in the scientific field



Program participants at



# BBT Baltic Hackathon



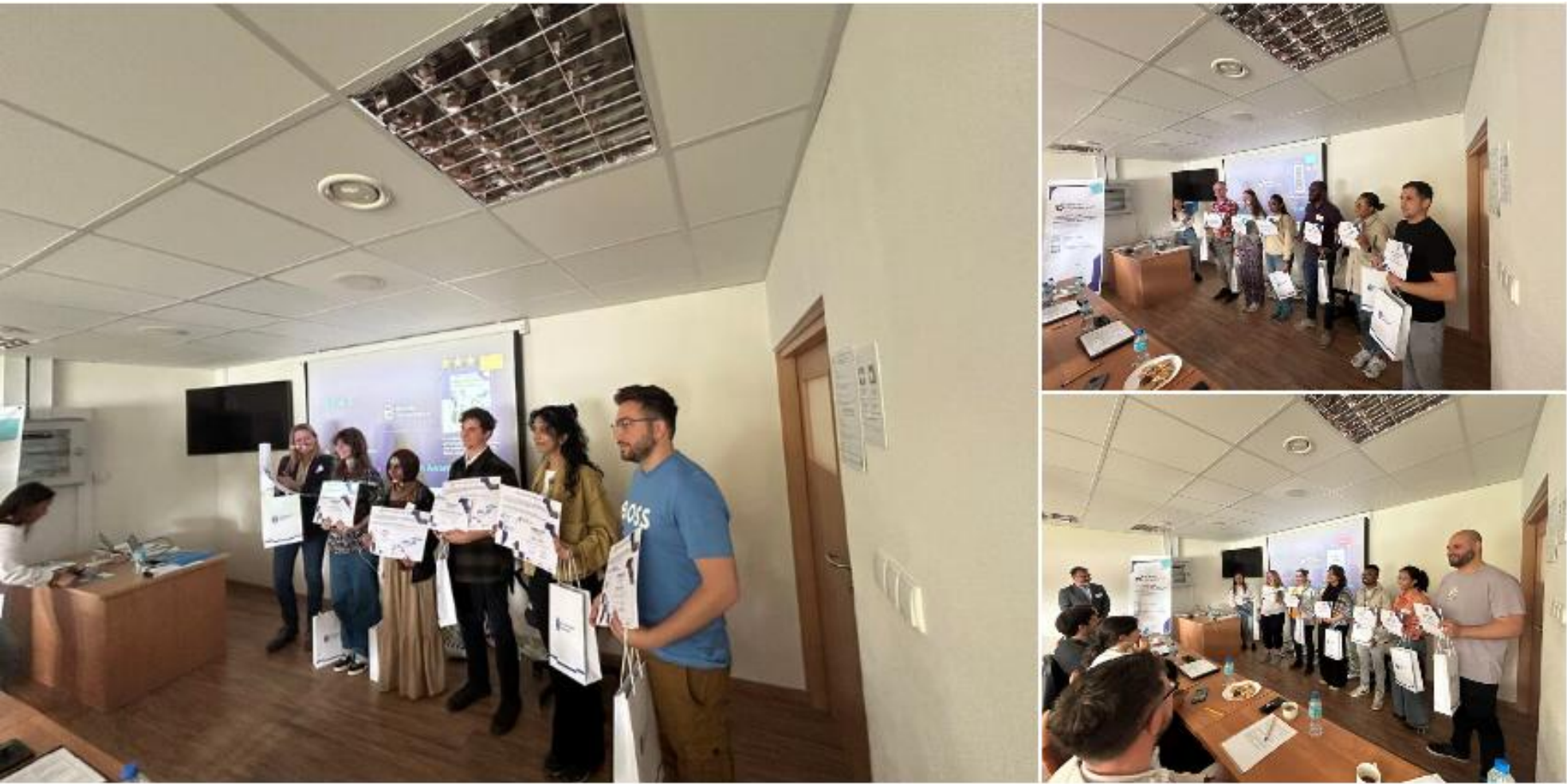
02

## BBT Baltic Hackathon

6th to 8th June 2025  
Borucino, Poland

Blue Bio  
Techpreneurs

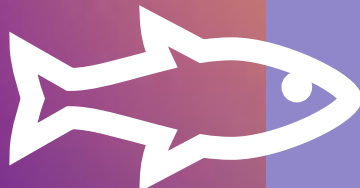
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### OVERVIEW

- 25 Participants
- 15 Countries
- 23 Nationalities
- 5 blue bioeconomy challenges
- 6 challenge owners and mentors
- 5 great solutions



**Challenge-Based & Experiential Learning**  
Real-life challenge solutions' development



**Entrepreneurship & Innovation Skills Development**  
Enhanced cooperation between industry (challenge owners and mentors) and academia fostered through direct cooperation at the event and after



**Interdisciplinary & International Collaboration**  
Networking and cultural exchange between 15 countries, academia, industry, participants, mentors, jury members and project partners



Program participants



# MOOC Online Courses

## OVERVIEW

Free MOOC created by Blue Bio Techpreneurs  
4 published courses (with more to come)  
Designed to equip learners with key  
competencies for a successful blue career  
**Already more than 1500 participants**



### Digital & Lifelong Learning

- Interactive learning through theory, case studies & hands-on projects
- Career-boosting skills tailored to the blue biotech sector
- Problem-solving approach to foster blue innovation and sustainable growth
- Receive a certificate upon completion



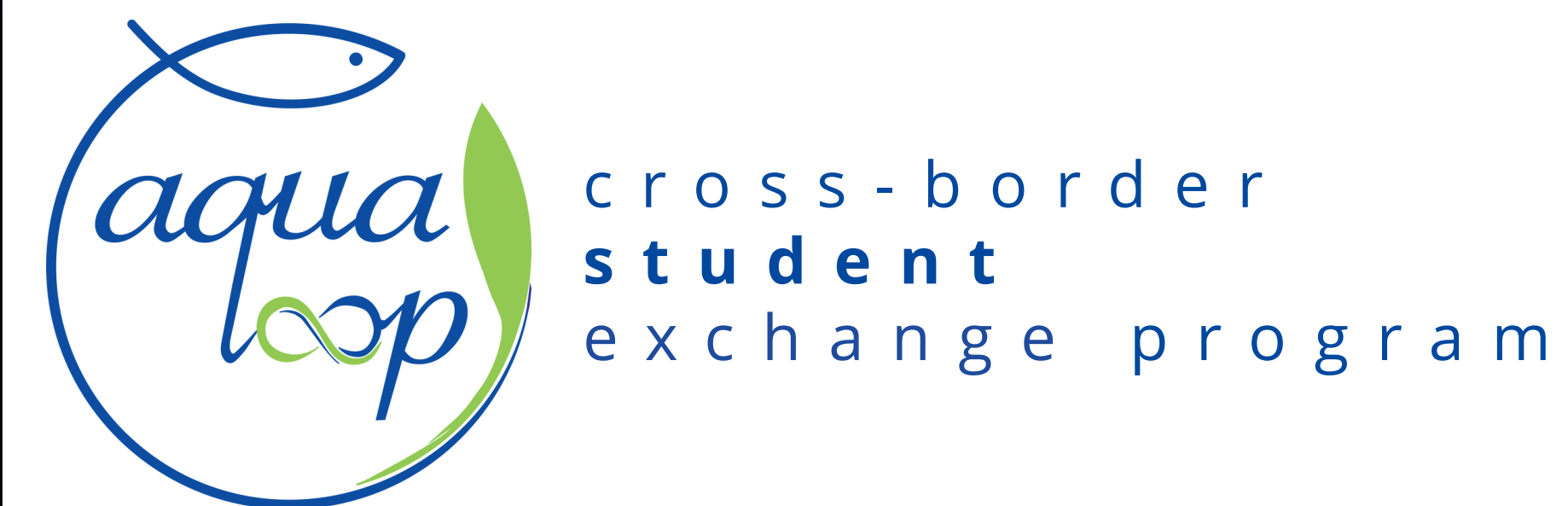
**Introduction to Blue Bioeconomy Entrepreneurship**

**Beyond the Shore: Innovating the Blue Bioeconomy on Land**

**Navigating the Blue Bioeconomy: Innovation and Entrepreneurship in Coastal Aquaculture**

**(Coming Soon) Integrated Ocean Planning: Marine Protected Areas, Multi-Use and Business Pathways**





cross-border  
student  
exchange program

## POSITIVE FEEDBACK

Evaluation scores ranged from 96% to 100% among the participants, in all categories: communication, organization, collaboration, and overall satisfaction. The program was highly recommended!



Very high evaluation scores! 78% of the participants were very satisfied with the event, 22% satisfied, and 67% claimed the event exceeded their expectations, and 33% that the event met the expectations.



02

### BBT Baltic Hackathon

6th to 8th June 2025  
Borucino, Poland

### Baltic Hackathon Reflections

What was the main lesson you learned from the hackathon?

Carlos Montaner

"I truly believe the positive ripples of this Hackathon will be felt worldwide and for decades to come.

Every participant's resolve has grown larger and steadier through the connections made here with like-minded individuals, which will facilitate future collaborative work towards a more sustainable future."



### Baltic Hackathon Reflections

What was the main lesson you learned from the hackathon?

Cassia Wilson

"My main lesson learnt from the hackathon was probably the **power of a diversity of backgrounds** and research in helping to **create a feasible solution to real-world problems** in such a short time frame."



### Course.1

Introduction to Blue Bioeconomy Entrepreneurship

"The **Introduction to Blue Bioeconomy Entrepreneurship** course really expanded my knowledge. It is a fantastic resource for anyone looking to explore **how marine resources can drive innovation, business, and real-world solutions.** I particularly enjoyed learning **essential business skills tailored to the Blue Bioeconomy**"



Freya Robinson



# KEY TAKEAWAYS

**Innovative methods proved effective and should be continued**

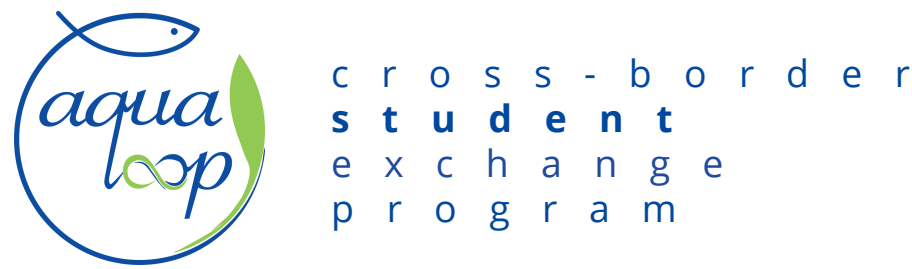
Challenge-Based & Experiential Learning  
Interdisciplinary & International Collaboration  
Entrepreneurship & Innovation Skills Development  
Digital & Lifelong Learning

**Adapting training for blue economy expansion is required**

## OCEAN LITERACY & BLUE ECONOMY FUTURE TRAINING PERSPECTIVE

**Teaching ocean literacy requires Integration of blue economy**

**Ocean literacy is key to sustainable blue growth**





THANK YOU!

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Photo/material credits: AquaLoop, BBT partners, University of Gdańsk



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