VILNIUS TECH
Lithuanian Maritime Academy

BIP for STUDENTS

at VILNIUS TECH LITHUANIAN MARITIME ACADEMY

Green Ports for Green Ships: Preparing Infrastructure and Skills

📍 Physical part: 13-17 April 2026
💻 Virtual part: 21-24 April 2026
⏳ Registration deadline: **1 March 2026**
👉 📝 Registration form >>>

VILNIUS TECH
LITHUANIAN MARITIME ACADEMY
I. Kanto str. 7, Klaipėda, LT-92123, Lithuania

🌍⚓ Dear Students,

VILNIUS TECH Lithuanian Maritime Academy (Klaipeda) warmly invites you to take part in the **Blended Intensive Programme (BIP): "Green Ports for Green Ships: Preparing Infrastructure and Skills"** 🌱🚢

By participating in this BIP, you will:

- gain practical knowledge of **green ports, alternative marine fuels**, and **sustainable maritime infrastructure** *(detailed BIP description below),*
- earn **an additional 3 ECTS credits**,
- meet students from different countries and build international connections 🤝,
- experience **Lithuanian culture** and student life in Klaipeda LT.

🗓️ Programme dates

📍 **Physical part:** 13–17 April 2026 (Klaipeda, Lithuania)
💻 **Virtual part:** 21–24 April 2026

🏠 **What is covered during the physical part?**
VILNIUS TECH Lithuanian Maritime Academy will cover:

- accommodation at the **LMA dormitory**
  Dormitory address Karklų g. 2 / Kalvos g. 8, LT-92242, Klaipėda
- **lunch breaks**,
- selected **social and cultural events**.

Important information

⏳ **Registration deadline: 1 March 2026**
👉 📝 **Registration form >>>**
P*lease fill in the application form and upload the Erasmus+ Coordinator approval for this BIP.*

Do not miss this opportunity to broaden your knowledge, gain international experience, and become part of a truly European learning environment.
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You are very welcome to join us!

BIP description

Topic: Green Ports for Green Ships: Preparing Infrastructure and Skills
Blended Intensive Programme ID: 2024-1-LT01-KA131-HED-000195730-1
Type of Participants (Learners): Students
Objectives and Description:
The objectives of the course:
1. Explain the principles of green ports and green shipping technologies, including the characteristics, standards, and operational implications of alternative marine fuels (LNG, methanol, ammonia, hydrogen, electricity) on port activities.
2. Analyse port infrastructure readiness to serve alternative-fuel vessels, assessing technical, safety, and environmental requirements, including the IGF Code, bunkering procedures, and port energy transition processes.
3. Apply practical bunkering and safety procedures using simulation tools (e.g., Transas/Wärtsilä Bunkering Simulator) and real-case scenarios to develop operational skills and risk management competencies.
4. Evaluate the integration of green supply chains into port logistics systems, considering EU energy and climate policies (Fit for 55, FuelEU Maritime, ETS) and criteria for sustainable logistics operations.
5. Design and model port transformation solutions, developing infrastructure and operational readiness plans based on sustainability principles, technological advancements, and international best practices.
6. Develop interdisciplinary competencies and intercultural collaboration skills by working in mixed international teams to address green port development challenges and prepare applied project proposals.
Description:
The course Green Ports for Green Ships: Preparing Infrastructure and Skills provides students with an in-depth understanding of how maritime ports must adapt to accommodate the growing transition toward low- and zero-emission shipping. The programme focuses on the technological, infrastructural, regulatory, and operational changes required to support alternative marine fuels such as LNG, methanol, ammonia, hydrogen, and electricity. Through a combination of theoretical sessions, interactive discussions, simulation-based training (e.g., Transas/Wärtsilä Bunkering Simulator), and field visits to port terminals, participants explore the principles of green port development, safe and sustainable bunkering operations, and the integration of green supply chains into port logistics systems. Special attention is given to EU climate and energy policy frameworks—including Fit for 55, FuelEU Maritime, and the EU ETS—highlighting their implications for port transformation and sustainable maritime logistics. Working in international, multidisciplinary teams, students develop practical solutions and strategic recommendations for port infrastructure readiness, energy transition pathways, and the support of green shipping operations. The course equips future maritime professionals with the knowledge and skills needed to operate safely, sustainably, and innovatively in a rapidly changing maritime industry.

Methods and outcomes:

Teaching Methods

Lectures and Discussions: Online and in-person lectures provide foundational knowledge on green port development, alternative marine fuels, and sustainable maritime logistics. Interactive discussions encourage critical thinking, enabling students to link theoretical concepts with real-world port transformation challenges. Lectures are delivered by selected experts from international partner institutions.

Simulation-Based Training: Hands-on training using the Transas/Wärtsilä Bunkering Simulator exposes students to realistic operational scenarios involving alternative fuel bunkering, safety procedures, and emergency response. This enhances practical competencies and risk-management skills.

Guest Speakers: Invited speakers share insights into current industry practices, challenges, and emerging solutions in the field of green shipping and port sustainability.

Team work and research project task: Collaborative project work enables students to explore specialised topics—such as port infrastructure readiness, bunkering safety, or green supply chain integration—allowing them to develop analytical skills and work effectively in multicultural, interdisciplinary teams.

Field Visits: Visits to seaport terminals or logistics facilities provide firsthand exposure to operational processes, technological innovations, and challenges associated with implementing green port solutions.

Upon completion of the course, students should be able:

1. Describe the main principles of green ports and alternative marine fuels and their impact on port operations.
2. Assess port infrastructure needs and safety requirements for serving alternative-fuel vessels.
3. Perform basic bunkering and safety procedures in simulation environments.
4. Evaluate how green supply chains are integrated into port logistics and affected by EU climate policies.
5. Propose practical solutions for port transformation toward sustainable and energy-efficient operations.
6. Work effectively in international teams to address green port development challenges.

Field of Education: 1041 Transport Services

Level of Study: First cycle / Bachelor's or equivalent level (EQF-6)

Physical start and end dates: 13/04/2026 – 17/04/2026

Virtual Component Timing: After physical part

Virtual Component Description: Modelling of modern logistics guidelines according to the logistics operations research results based on the research studies using of the artificial intelligence AI tools: scientific data bases analysis, reference list creation, citation, research papers creation and presentation. Guest speakers will be invited to share various countries experience of the research in the field of logistics trends, challenges, and opportunities. Final event and projects presentation. Dates of virtual meetings: 21/04/2026 – 24/04/2026

Venue: Lithuania, Klaipeda

Main Teaching/Training Language: English

Number of ECTS Credits Awarded: 3 ECTS

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