
Skills

SUSTAINABLE DEVELOPMENT OF NAUTICAL AND CRUISE TOURISM ¹

Summary of the Curriculum

Within Activity A3.2 of the SKILLS project, the Cross-Border Higher Education Learning Module (HELM) was implemented in Kotor with the aim of strengthening students' competences for careers in the blue economy sector, with a particular focus on nautical and cruise tourism, marina and port management, digitalisation, and sustainability.

The programme is structured around **seven thematic units**, combining theoretical lectures, case studies, field-based practical exercises, and simulator training, delivered by university professors and industry experts.

Thematic Units

1. Sustainable Development of Nautical and Cruise Tourism

Focus on global trends, socio-economic impacts of maritime tourism, its connection with the blue economy, and the design of sustainable tourism experiences. The programme includes field visits (mussel/fish farms and agrotourism sites in the Bay of Kotor).

2. Modern Management of Marinas and Cruise Ports

Analysis of operations, sustainability, and customer experience in marinas and cruise ports, with case studies of Porto Montenegro Marina and the Port of Kotor, including on-site visits.

3. Safety and Security in Marinas and Cruise Ports

Overview of international standards (ISPS Code), risk management, security threats, and safety procedures, with emphasis on cyber security and smart port security systems.

¹ SKILLS A3.2 CB HE Learning Modules – Kotor HELM

Skills

4. Planning and Development of Marina and Cruise Port Infrastructure

Infrastructure requirements, logistics support, vessel types and their technical characteristics, and strategic planning for marina and port development.

5. Assessment of Basic Navigational Parameters

Application of international conventions (SOLAS, COLREG), use of RADAR/ARPA and ECDIS systems, including demonstration exercises on Wärtsilä simulators.

6. Smart and Digital Marinas and Cruise Ports

Application of IoT, AI, digital twins, blockchain technologies, and digital platforms in marina and port management, as well as in marine ecosystem protection.

7. Green Marinas and Cruise Ports

Environmental protection frameworks (MARPOL, EU regulations), decarbonisation strategies, circular economy principles, green certifications (Blue Flag, ISO 14001, EcoPort), and practical monitoring of air and water quality.

Key Learning Outcomes

The programme enables students to:

- Analyse socio-economic and environmental impacts of nautical and cruise tourism
 - Apply international conventions and safety protocols in maritime operations
 - Evaluate infrastructure and operational requirements of marinas and ports
 - Use advanced navigational and digital tools (RADAR/ARPA, ECDIS, IoT, AI)
 - Develop sustainability, decarbonisation, and circular economy strategies
 - Assess risks and manage safety and security challenges in maritime operations
-

Teaching Methodology

- Lectures supported by presentations
 - Case studies (Porto Montenegro, Port of Kotor)
 - Field visits and practical exercises
 - Simulator demonstrations
 - Interactive discussions
-

Skills

Strategic Importance

The Kotor HELM represents a model for integrating academic knowledge with practical competences, in line with the objectives of the SKILLS project: strengthening higher education in the blue economy sector and enhancing youth employability in the South Adriatic region.

The programme directly contributes to capacity building in:

- Marina and cruise port management
- Sustainable tourism
- Digital and green transition of the maritime sector
- Marine ecosystem protection

In this way, the HELM module constitutes a concrete contribution to building a competitive and sustainable blue economy in the region.

About the Project:

The SKILLS project, spanning from July 2023 to October 2027, aims to bolster the availability of skilled labor in the South Adriatic region's blue economy sectors. With a total budget of 4.799.677,09 €, including significant EU funding of 3.983.815,88 €, the project operates through a consortium of diverse partners. These include University of Montenegro - Institute of Marine Biology, as Lead partner, Department of Labor Market Policies, Education, Training from Puglia Region, Italy, Service for the Competitiveness of Productive Systems from Molise Region, Italy, State Agency for Strategic Programming and Aid Coordination, Albania, Ministry of Economic Development of Montenegro, and Ministry of Agriculture and Rural Development, Albania. Through collaborative efforts, the project endeavors to enhance existing educational pathways, establish novel ones, and implement on-the-job training schemes, thereby empowering the workforce and fostering economic growth in the region.

Website:

<https://southadriaticskills.org/>

www.italy-albania-montenegro.eu/programme/south-adriatic-2021-27