Maritime Tech and Digital Transformation: GenAI, Big Data and Blockchain for present and future of logistics.

FONASBA ACB Online Course. 3rd Edition

From November 4th to December 11th, 2025

REGISTER NOW
acb@consignatarios.com

KEY OBJECTIVES

1. Understand the technological foundations: Provide participants with a clear and accessible understanding of blockchain, big data analytics, and generative AI, tailored to the specific context of maritime transport and global supply chains.

2. Explore practical applications in shipping: Demonstrate how these technologies are already being used to optimize port operations, secure transactions through smart contracts, enhance cargo traceability, improve demand forecasting, and support more sustainable and efficient shipping practices.

3. Develop analytical and decision-making skills: Enable professionals to critically analyze the opportunities and risks of digital transformation, assessing how these technologies can be implemented in their organizations to improve competitiveness and compliance.

4. Foster innovation and future readiness: Encourage participants to design innovative solutions that leverage emerging technologies, preparing them to anticipate and adapt to future scenarios of disruption and transformation in the maritime sector.

KEY BENEFITS

- Practical knowledge with real-world relevance: Participants will not only learn about the concepts but also see concrete case studies of blockchain-enabled documentation, big data-powered route optimization, and AI-driven decision support systems applied across international shipping.

- Enhanced professional value: By mastering these technologies, participants will strengthen their strategic and operational capabilities, positioning themselves as key drivers of innovation within their companies and the wider shipping ecosystem.

- Networking and collaboration: The course provides a collaborative learning environment where professionals from different regions and functions of the maritime industry can exchange perspectives, share experiences, and explore joint opportunities.

- Future-oriented mindset: Participants will leave the course with a clear vision of how blockchain, big data, and generative AI are likely to shape shipping in the coming years, enabling them to make informed strategic decisions and lead digital initiatives within their organizations.

By the end of the course, participants will not only gain a comprehensive understanding of these transformative technologies but also acquire the tools to translate knowledge into innovative, applicable, and original solutions for the maritime industry.

AUDIENCE

This course is designed specifically for professionals in international shipping, port operations, and maritime logistics as well as for employees of shipping companies and shipping agents who want to learn about technology in shipping and logistics and how it is already affecting the way their companies operate and will operate in the future.

It is also suitable for employees of import/export companies, freight forwarders, customs agents, port terminals and logistics companies interested in this subject.

INSTRUCTOR PROFILE

Jaime Paz, with his extensive career in the logistics and shipping sector, will be in charge of delivering the classes, which will follow an approach based on clear explanations, real-world cases, interactive activities, and project-based learning

Jaime Paz
Head of Customer Service Spain at Ocean Network Express
Data Center of Excellence Lead for Spain at Ocean Network Express
Master degree in Blockchain Management
Master degree in big data / data analytics
Master degree in Generative AI
Executive Program - Singularity University - Silicon Valley.

CONTENT

NO TECHNICAL KNOWLEDGE IS REQUIRED TO ENROL.

Session 1 – Introduction: Digitalization of Shipping

Content

- **Global trends**: automation, IoT, sustainability pressures, digital twins.
- **Current challenges**: fragmentation, interoperability, cybersecurity, regulatory gaps.
- **Examples**: Maersk–IBM blockchain (TradeLens), predictive analytics in congestion, automated ports, digital twins.

Activity (20 min – guided debate)

Trigger questions:

1. What is the biggest digital challenge in your daily work?
2. Which technology (blockchain, AI, big data) will most transform shipping in the next 5 years?
3. Where do you see the main resistance to adoption?

Session 2-3 – Blockchain in Maritime Logistics

Objectives

- Understand blockchain fundamentals and applications.

Content

- Blockchain basics (blocks, ledgers, consensus explained simply).
- **Electronic Bill of Lading (e-BL):** efficiency, fraud prevention.
- Use cases: smart contracts, customs clearance, cargo traceability.

Activities

- Case study: **TradeLens** analysis (why it succeeded/failed).
- Group exercise: map risks & benefits of e-BL for participants' companies.

Session 4 – Big Data Analytics for Shipping

Objectives

- Equip participants with tools to use data in decisions.

Content

- **What is big data?** Sources: AIS, sensors, weather, ports.

- Data analysis tools: dashboards, descriptive vs predictive analytics.
- Applications: route optimization, demand forecasting, fuel efficiency, port congestion.

Activities

- Guided exercise: interpret a **sample dashboard** (small dataset provided).
- Debate: How can smaller companies leverage data with limited resources?

Session 5-6 – Generative AI in Shipping

Objectives

- Explain genAI and link to shipping applications.

Content

- **Technological baseline:** GPT, diffusion models (non-technical).
- Current capabilities: text, images, predictive scenario generation.
- Maritime uses: automating documentation, customer communication, training simulations.
- Risks: bias, hallucination, over-reliance.

Activities

- Guided task: design a **genAI use case** for a shipping company.
- Group discussion: Which tasks in your role could AI realistically support?

Session 7 – Integration of Technologies

Objectives

- Understand how blockchain, big data & genAI **complement each other**.

Content

- Blockchain = **trust**, Big Data = **insight**, GenAI = **decision support**.
- Integrated scenarios: digital twin ports, autonomous ships, sustainable routing.
- Recap of key learnings across sessions.
- **Emerging trends:** cybersecurity, sustainability pressures, AI governance, green corridors.
- **Projection:** The next decade of maritime digital transformation.
- **Final project planning.**

Evaluation: Mid-project checkpoint — students present **integrated project outline**.

Evaluation Checklist

- Applicability to maritime logistics.
- Originality and creativity.
- Clarity of explanation.
- Consideration of risks and benefits.

COURSE STRUCTURE

This online course starts on **4th November** and ends on **11th December** 2025 with a total duration of **10.5 hours**. The course offers **7** online sessions of **1.5 hours** each conducted over the **MS Teams** platform.

Dates: 4, 11, 18 and 27 November – 2, 9 and 11 December. Classes start at **17.30h** and finish at 19.00h. Reference time zone: CET.

Students will be given the course syllabus (PDF, presentations, etc.) prior to the start of the course.

ENROLMENTS

To confirm your interest send an email to acb@consignatarios.com. With this email you can book your place on the course. Once you have paid for the course, your enrolment will be considered definitive.

CERTIFICATE

Final course work is required. On passing the course you will receive a certificate of aptitude. Certificate will be released as well in digital format on blockchain.

COURSE FEE

375 Eur (+ VAT if applicable)

How to pay for your course:

Bank Transfer:
Payment currency: Eur
Bank name: Banco Sabadell
Account: ES05 0081 0057 3600 0153 0461.
Swift Code: bsabesbbxxx - Bank Country: Spain

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