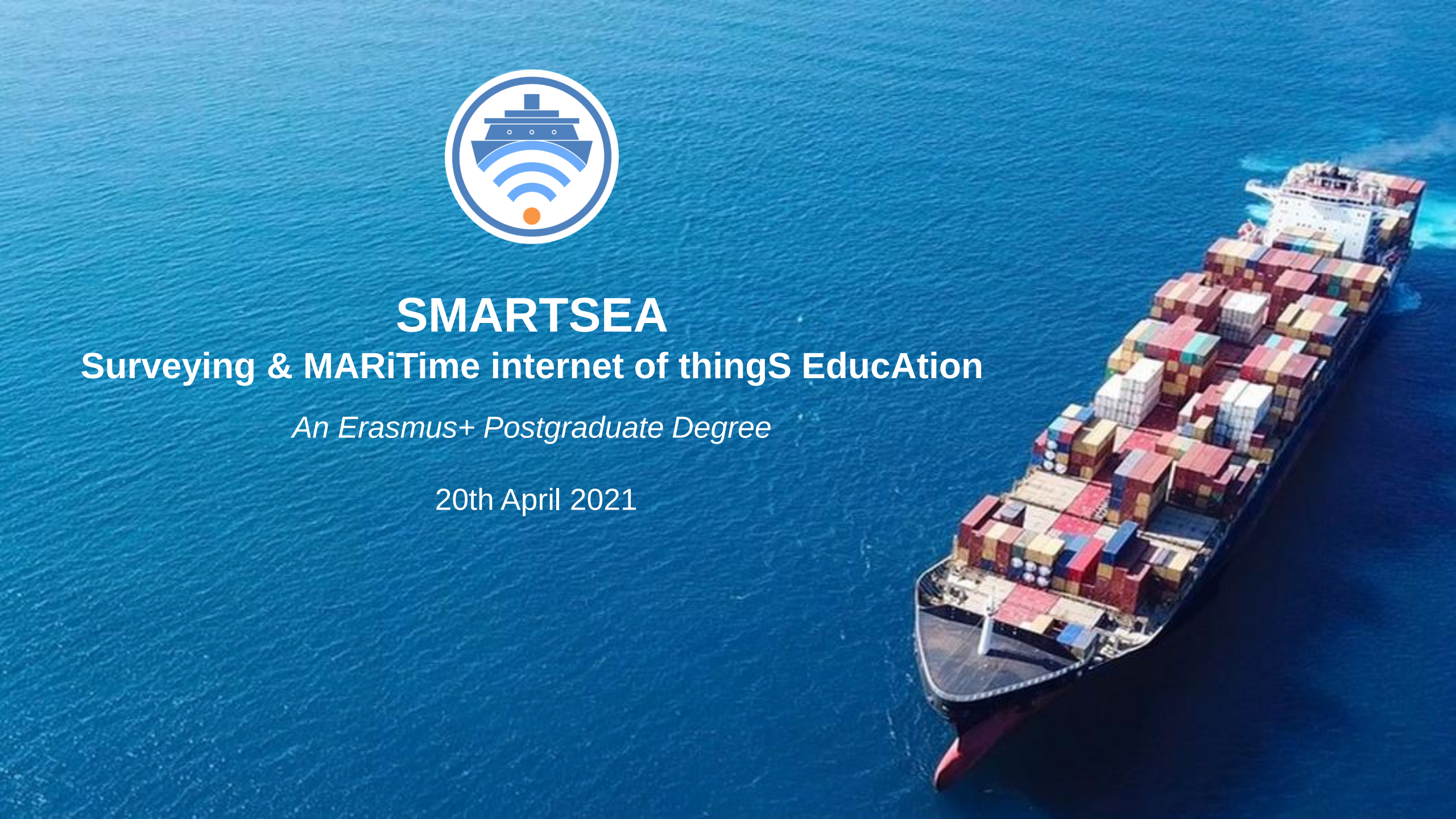

SMARTSEA

Surveying & MARiTime internet of thingS EducAtion

An Erasmus+ Postgraduate Degree

20th April 2021

Erasmus+

12
PARTNERS INVOLVED

11
EU COUNTRIES

3
YEARS (2019-2022)

€ 971,365.00
TOTAL FUNDS

USAL
PROJECT COORDINATOR

Co-funded by the Erasmus+ Programme of the European Union

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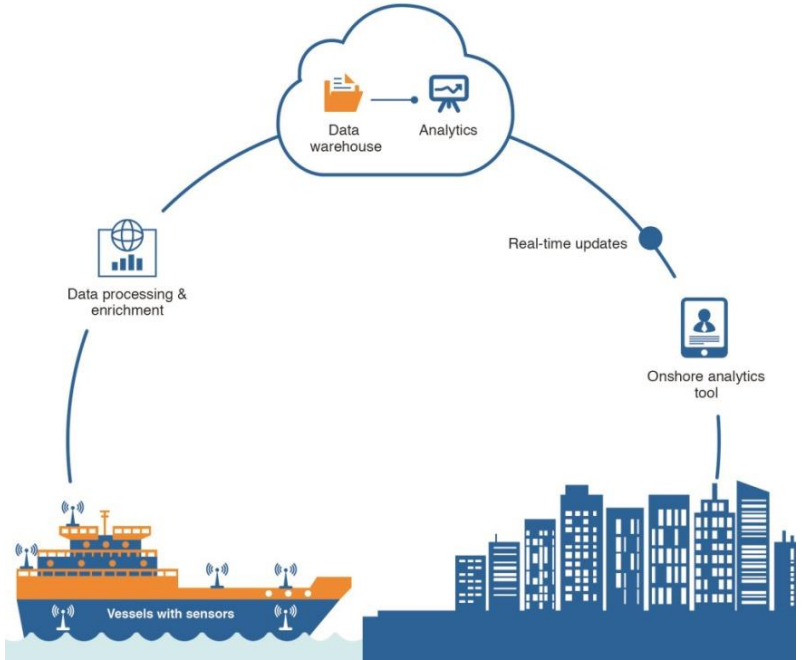
IOT IN THE MARITIME SECTOR

IoT applications enable shipping companies to connect their vessels in one platform, allowing data sharing with the corporate ecosystem.

IoT systems have the potential to improve efficiency and transparency, increase safety, reduce risks and costs and minimise environmental impact.



SMARTSEA MOTIVATION

The market has shown a rapid increase in Maritime & Surveying IoT systems and their infrastructures. Corporations are interested in investing and promoting their growth.

There is a global shortage of trained engineers and technicians to handle this new technology safely.

There are no hands-on IoT educational and training programs dedicated to the application of IoT solutions to the Shipping industry.

SMARTSEA AIM

To develop an MSc degree related to Maritime and Surveyor IoT applications that will train individuals with the necessary skills and knowledge to work in the rising *Smart Maritime and Surveying industry*.

SMARTSEA CONSORTIUM

SMART**SEA** PROGRAM OVERVIEW

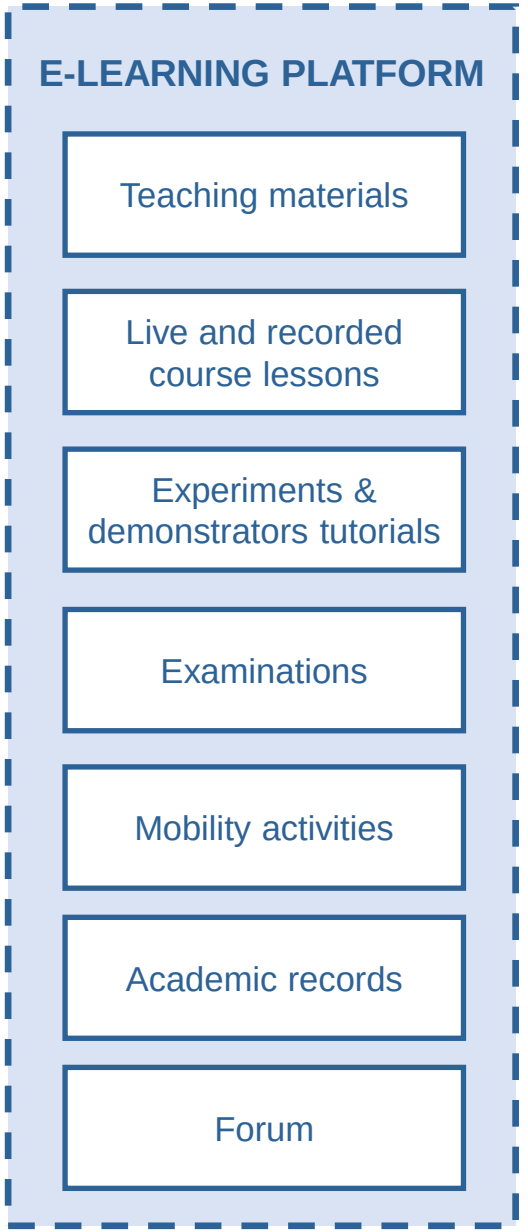
The program spreads over one academic year comprising two terms for a total of 60 credits ECTS and three mobility periods.

New learning and teaching methods through interactive reconfigurable laboratory apparatus.

An e-Learning platform to enable distant sharing of knowledge and remote access to measurements systems.

The student will distribute across two teaching universities according to their chosen thesis specialization:

- *Maritime IoT systems* (University of Ljubljana, Slovenia)
- *Marine surveying underwater drones* (International Hellenic University, Greece)



SMARTSEA SYLLABUS

24 courses with applied engineering concepts as well as industry insights.

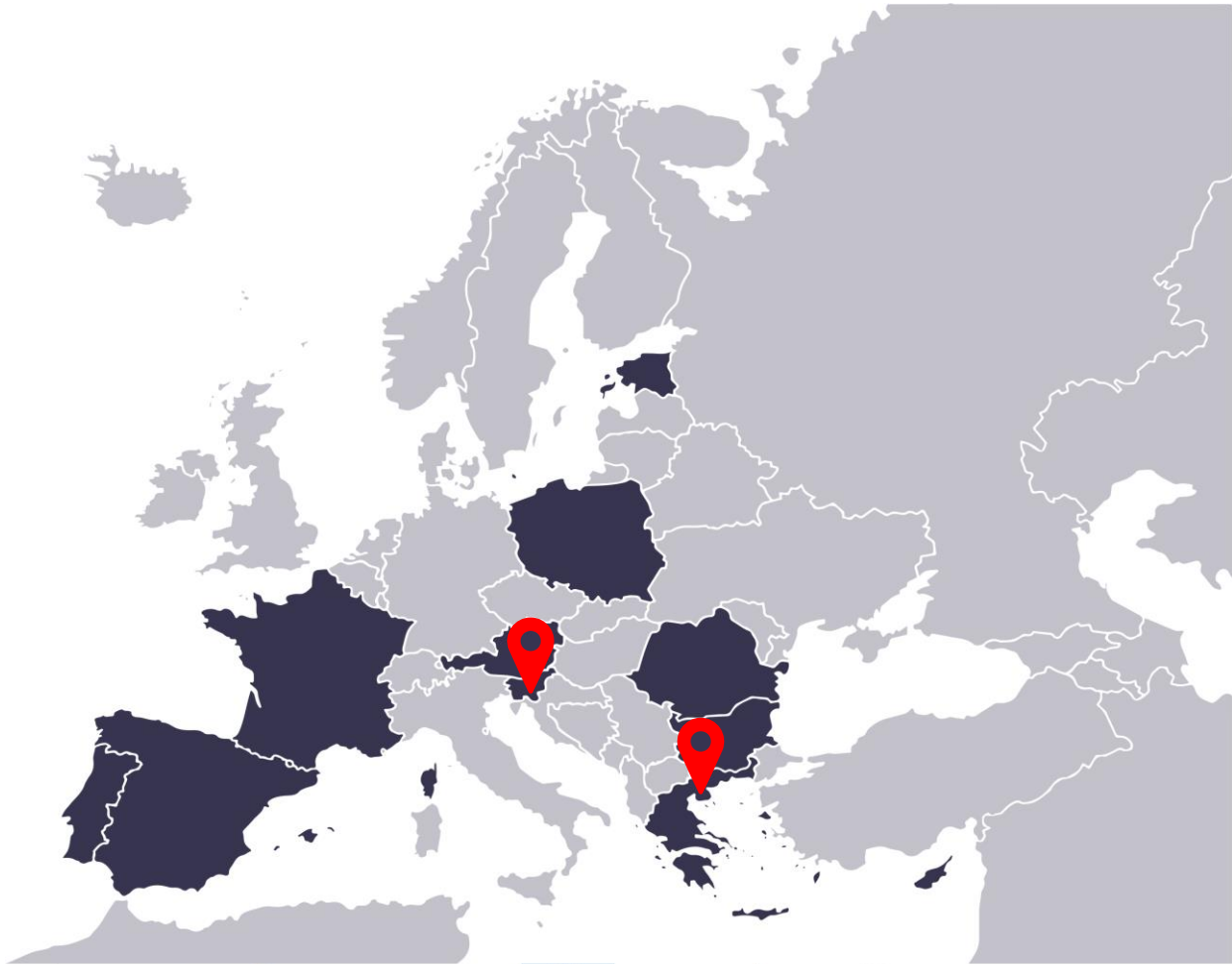
Teaching language = English

Language courses in Slovenian and Greek to enable students immersing in the local culture.

CODE	TITLE	IN-CLASS	WEB	LAB
TS1.1	Maritime Control Systems		X	X
TS1.2	Marine Surveying	X		
TS1.3	NI LabVIEW Training	X	X	X
TS1.4	Data Acquisition & Sensors		X	X
TS1.5	IoT Platforms & Systems		X	X
TS1.6	ROUV Electric System	X		X
TS1.7	Artificial Intelligence	X		
TS1.8	Maritime Environment	X	X	
TS1.9	Safety at Work on Sea	X	X	
TS1.10	Diving Observation Techniques		X	
TS1.11	Language Lessons	X		
TS1.12	Intermediate Project	X	X	
TS2.1	Remote sensing & positioning	X	X	
TS2.2	Distributed Ledgers – Blockchain		X	
TS2.3	Lightweight Materials		X	X
TS2.4	Underwater Comms & navigation	X	X	X
TS2.5	Data Processing	X		X
TS2.6	Geographic Information Systems	X		
TS2.7	Underwater Physics		X	X
TS2.8	Innovation & Entrepreneurship Management		X	
TS2.9	Business Administration		X	
TS2.10	Maritime Legal Arrangement	X	X	
TS2.11	Language Lessons	X		
TS2.12	Developing Tool Demonstrator	X		X

SMART**SEA** MOBILITY PERIODS

PERIOD	A	B
Duration	14 days	14 days
Hosting university	University of Ljubljana	International Hellenic University
Hosting company	-	-
City	PORTOROŽ	THESSALONIKI
Students from	International Hellenic University	University of Ljubljana
Educators from	Both universities	Both universities



SMART**SEA** MOBILITY PERIODS

PERIOD	C
Duration	1 month
Hosting university	-
Hosting company	MUS, RINA, CREOCEAN, DANAOS
City	SZCZECIN, PIRAEUS, LA SEYNE-SUR-MER
Students from	Both universities
Educators from	-

SMART**SEA** SCHOLARSHIPS

The SMARTSEA program has a total of 40 scholarships offered for the 2021-2022 academic year.

The scholarship includes:

- Students participation costs (tuition fees and any other administrative costs)
- Contribution to students travel and living costs during the mobility periods between institutions and to their one-month industrial practice.

Join us for a unique educational experience !

Admissions are now open: ***https://bit.ly/3kpPhxx***

THANKS FOR LISTENING ☺

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