

INNOVAMARE ACADEMY 2.0

- program -

Place: The Polytechnic of Šibenik, Trg Andrije Hebranga 11

Date: 14th -19th of October 2024

Max range of 20 participants

Academy insight:

The Innovamare Academy is a six-day educational workshop on topics related to digital and green transformation of the blue economy and the application of marine technologies with focus on robotics and sensors.

With Innovamare academy we intend to work on 3 key missions for sustainable blue economy:

1. Development of new blue skills for sustainable blue economy
2. Improve innovation capacity in blue economy and marine technologies
3. Improve Science to Business knowledge and technology transfer

The topics of the Academy will cover the impact of the traditional sectors of the blue economy, that include tourism, aquaculture, shipbuilding, maritime transport, and infrastructure on marine ecosystems and green and digital transformation of those sectors for the purpose of building a sustainable marine ecosystem by applying innovative technologies.

Academy will provide a comprehensive exploration of the negative impacts inflicted upon marine ecosystems by traditional sectors of the blue economy. Furthermore, it will go beyond mere identification of these issues, offering innovative solutions and technologies to pave the way for a more sustainable future. For 6 days, renowned lecturers will hold a variety of educational workshops in English for a total duration of 29 hours. After gaining theoretical knowledge, students will be divided into groups and work on their solution for detected problems caused by activities in the blue economy.

By participating in the Academy, attendees will gain valuable knowledge, competencies, and skills in the field of digital and green transformation of the blue economy and the use of marine technologies, which are highly valuable given the dynamics of circumstances and the needs of the global economy.

Program:

Monday, 14.10.2024.	Arrival to Šibenik, short meet-up
Tuesday, 15.10.2024.; 09-14 h	Introduction, satellite monitoring, robotics and sensorics
09:00-09:45	Lecture: Introduction – general negative impacts on marine ecosystem of traditional sectors of blue economy Lecturer: Fran Domazetović, Assistant Professor at Geospatial Analysis Laboratory, University of Zadar
09:45-10:30	Lecture: Water quality monitoring through satellite data analysis and the development of innovative, tailor-made products and services for various sectors of the blue economy Lecturer: Mario Špadina, Sea Cras d.o.o., CEO
10:30-10:45	Coffee break
10:45-12:15	Lecture: Application of robotics and sensorics in blue economy Lecturers: Massimo Caccia, Italian National Research Council Dimitris Zisis, University of the Aegean at the Department of Product & Systems Design Engineering
12:15-12:30	Coffee break

12:30 – 13:15	Sustainability in the Blue Economy: emerging expectations and regulations Lecturers: Petra Počanić & Riki Pahlić, Hauska & Partner
13:15 – 14:00	Technology transfer from science to the private sector Lecturer: dr.sc. Petra Karanikić, University of Rijeka
14:00	Lunch

Wednesday, 16.10.2024.; 09-14 h	Aquaculture and marine tourism
09:00-09:45	Lecture: Challenges and opportunities in aquaculture with eye on sustainable marine ecosystem Lecturer: Mia Brkljača, Cromaris d.d.
09:45-10:30	Lecture: Advanced Aquaculture Data Analysis - infrastructure and fish inspections in aquaculture Lecturers: dr.sc. Ana Bedalov, Bedalov d.o.o., CEO
10:30-10:45	Coffee break
10:45-11:30	Lecture: Sustainability in aquaculture Lecturer: Hrvoje Čepnija, WWF Adria
11:30-12:15	Lecture: Sustainable practices in tourism Lecturer: Samra Ljubunčić, Valamar Riviera d.d.
12:15 – 12:25	Coffee break
12:25-13:05	Lecture: Good practice example – WWF Adria and Valamar Riviera d.d. - Cooperation for

	sustainability and the protection of the Adriatic Sea Lecturers: Samra Ljubunčić, Valamar Riviera d.d. and Hrvoje Čeprnja, WWF Adria
13:05-13:15	Coffee break
13:15 – 14:00	Lecture: Negative impacts of marine tourism on marine ecosystem Lecturer: mr.sc. Tanja Radić Lakoš, Polytechnic of Šibenik
14:00-14:30	Lecture: Introductory in practical work Lead: Antonia Lučev, Ruđer Bošković Institute
14:30	Lunch

Thursday, 17.10.2024.; 09-17 h	Maritime transport and shipbuilding
09:00-09:45	Lecture: Sustainable practices in maritime transport - Port of Zadar - example of good practice Lecturers: Đoni Štambuk, Zadar Port Authority
09:45-10:30	Lecture: Sustainable practices in shipbuilding - Composite materials, Autonomous surface vehicle Lecturers: Ljubomir Pozder, R&D engineer DIH Innovamare
10:30-10:45	Coffee break
10:45-12:15	Lecture: Introduction to AI in Blue Economy Lecturers: dr.sc. Frane Urem, Polytechnic of Šibenik
12:15-12:30	Coffee break

12:30 – 13:15	<p>Lecture: Stress Waves-Challenges and Stressors in the Lives of Seafarers</p> <p>Lecturers: Andrea Russo, University of Split</p>
13:15 – 14:00	Lunch
14:00-17:00	<p>Field work – boat trip: sampling, drone inspection of different sites</p> <p>Boarding the boat and taking samples in two groups (due to boat capacity) at two locations:</p> <ul style="list-style-type: none"> - Shipbuilding site (ISKRA Shipyard 1) - Mariculture farm (Platforma 22) <p>Drone inspection of the seafloor situation at the site (measuring visible pollution via measuring square and drone)</p> <p>Lead: Fran Domazetović, Assistant Professor at Geospatial Analysis Laboratory, University of Zadar, Antonia Lučev and Tomislav Bulat, Ruđer Bošković Institute</p>

Friday, 18.10.2024.; 09-15 h	Practical appliance
09:00-12:00	<p>Field work – boat trip: sampling, drone inspection of different sites</p> <p>Boarding the boat and taking samples in two groups (due to boat capacity) at:</p> <ul style="list-style-type: none"> - Sea in front of a beach/resort <p>Drone inspection of the seafloor situation at the site (measuring visible pollution via measuring square and drone)</p> <p>Lead: Fran Domazetović, Assistant Professor at Geospatial Analysis Laboratory, University of Zadar, Antonia Lučev and Tomislav Bulat, Ruđer Bošković Institute</p>

12:00-13:00	Lunch
13:00-15:00	<p>Practical work: analysis of samples, planning of practical appliance, presentation preparation and solution development</p> <ul style="list-style-type: none"> - Analysis of previously taken samples, summary of results to transform them in a format that can be used for final presentation - Planning and designing of practical appliance of the group project and solution development and presentation preparation <p>Lead: Antonia Lučev and Tomislav Bulat, Ruđer Bošković Institute</p>

Saturday, 19.10.2024.; 09-16 h	Solution development - development of potential sustainability models to lower negative impacts, presentation, cultural evening
09:00-11:00	<p>Practical work: sustainability models development</p> <ul style="list-style-type: none"> - Continuation of solution development and presentation preparation <p>Lead: Mateo Ivanac, DIH Innovamare</p>
11:00-11:30	Coffee break
11:30-13:00	<p>Practical work: sustainability models development</p> <ul style="list-style-type: none"> - Continuation of solution development and presentation preparation

	Lead: Mateo Ivanac, DIH Innovamare
13:00 – 14:00	Lunch
14:00 – 16:00	Presentations <ul style="list-style-type: none">- Group presentations of their analysis, specifying the problem and the developed solution