Course title:

Eficiencia Energética y Energías Renovables en el Sector Marítimo
Energy Efficiency and Renewable Energies in the Maritime Sector

Modality: CFA- Advance Training Course

Orientation:

- ☐ Ocean Observation and Global Change
- ☐ Sustainable use of Marine Resources
- ☐ Integral Management of the Sea
- ■ Technological progress. Engineering and Business Management

Dates: 24, 26 and 27 of April/2023 and 02 and 03 of May/2023

Timetable: 16:00 to 20:00

Duration: 20 h

Location: DOMAR space in CITECXVI and ONLINE

Language: Spanish/English

Academic coordinators:

Name	Institution	e-mail
Camilo Carrillo González	UVIGO	carrillo@uvigo.es

Lecturers:

Name	Institution	e-mail
Eloy Díaz Dorado	UVIGO	ediaz@uvigo.es
José Cidrás Pidre	UVIGO	jcidras@uvigo.es
Blanca Nieves Miranda Blanco	UVIGO	blancan@uvigo.es
Ana Belén Albo López	UVIGO	aalbo@uvigo.gal
Miguel Ángel Vilar Montesinos	Navantia	mvilar@navantia.es
Evripidis Intzempelis	EVS Marine Consulting	e.intzebelis@gmail.com
Adrían Sarasquete	VICUS D.T.	a.sarasquete@vicusdt.com

General description:

The maritime sector is involved in a process to reduce its environmental impact. In this context, several aspects are involved in technological advances in regulatory development. In this course, it will be analyzed those developments in the area of ship transportation.
The implementation of renewable energies ships is being tested in several ways and several prototypes are under development or investigation. The most important development in this area will be analyzed in the course.

Contents:

- Renewable energies in ships
- Energy Efficiency Management Plan
- Equipment, systems and electrical installations. Lighting, motor and other loads.
- Electric propulsion systems in the maritime-fishing sector
- Generation and distribution of electric energy. Analysis tools.
- Power quality in ships.

Teaching methodologies:

Lectures, participative debates, and practical exercises. Tutored works will be proposed to use the theoretical knowledge presented in the classroom.

Evaluation system:

Attendance and participation in the scheduled sessions. The students will have to complete a series of practical exercises.

- Attendance to class: 70%
- Satisfactory completion of the proposed tutored works: 30%

Brief CV of the lecturers:

J. Cidrás works at the Department of Electrical Engineering of the University of Vigo. He is the coordinator of the research group on Electric Energy (http://en.edi.webs.uvigo.es). He was the IP of several projects in the energy and renewables area with public and private funding. More info in:

E. Díaz works at the Department of Electrical Engineering of the University of Vigo. He is the member of the research group on Electric Energy (http://en.edi.webs.uvigo.es). He was the IP of several projects in the energy and renewables area with public and private funding.

C. Carrillo works at the Department of Electrical Engineering of the University of Vigo. He is the member of the research group on Electric Energy (http://en.edi.webs.uvigo.es). He was the IP of several projects in the energy and renewables area with public and private funding.

A. Belén Albo López is Mining Engineer since 1997 and nowadays she is associate professor at the University of Vigo. Previously, se worked at FAIMEVI, Norcontrol and Xunta de Galicia. She is currently a PhD student in a research related to emissions and renewable energy in the maritime sector (more info in: https://www.linkedin.com/in/ana-bel%C3%A9n-albo-76062155/)

M. Á. Vilar Montesinos is Industrial Engineer from the University of Vigo. He began his professional career as an Electrical Engineer at ASTANO, later deriving to Information Systems. He is currently head of the Engineering Systems Department at NAVANTIA.

Evripidis Intzempelis is the CEO at EVS Marine Consulting. Previously, he worked at Hijos de J. Barreras, Royal Caribbean Group and Celecrity Cruises. He has over 20 years of experience working in electrical systems of vessels (more info in: https://www.linkedin.com/in/evripidis-intzempelis-56079aa3/?originalSubdomain=de).

A. Sarasquete is Managing Director at VICUS DESARROLLOS TECNOLOGICOS S.L. Previously, he worked at SLIDIAN, Baliño and Navantia. He has over 20 years of experience working in vessel design and analysis (more info in: https://www.linkedin.com/in/adrian-sarasquete/).