



Università
degli Studi
di Palermo



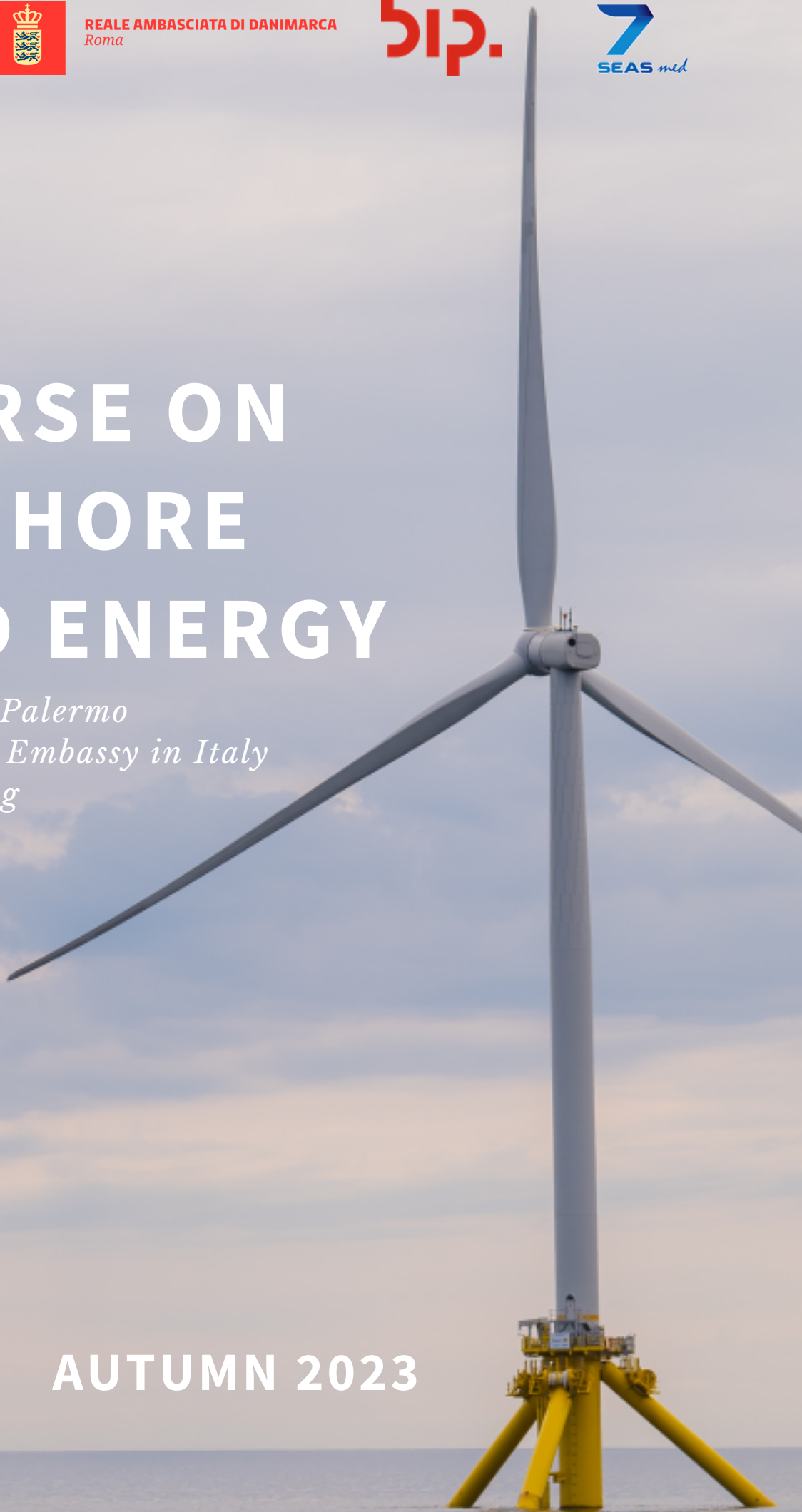
REALE AMBASCIATA DI DANIMARCA
Roma



COURSE ON OFFSHORE WIND ENERGY

*University of Palermo
Royal Danish Embassy in Italy
Bip Consulting
7SeasMed Srl*

AUTUMN 2023



Objective of the course (1/2)

Departments of interest: Engineering and Geology

Main partners: Royal Danish Embassy in Italy, University of Palermo (UNIPA), Bip Consulting, 7SeasMed Srl

Technical and scientific partners: CNR/Istituto di Ingegneria del Mare, OWEMES, iLStudio Engineering & Consulting Studio srl, Studio di Ingegneria Antonio Nastri, Fincantieri, Prysmian Group, Renantis, University of Copenhagen

CFU: The overall course is composed of 2 modules and it is required to attend all seminars and complete the Project Work to receive the 4 CFU points.

Language: The course material and the Project work will be provided in **English**.

All lecturers and partners are **Italian-speakers** and open to clarify and answer questions in Italian.

MODULE 1 - Classroom Training (2 CFU)

Over 4 seminars, equivalent to **2 CFU**, the course is aimed at engineering students with various specializations (about 25-30 selected students). **Offshore wind (floating) projects** are infrastructural projects that require a multidisciplinary approach to be effective and to respect all dimensions of analysis (environmental, social, economic). The course provides the educational **tools** to best understand offshore wind projects concerning:

- The **technological challenges** regarding the design, construction, and connection of offshore wind projects at great distances from the coast, which are sustainable from an economic and financial point of view;
- The **challenges and opportunities** for development regarding the **Italian and European supply chain** (infrastructure for maritime and land transportation, for the production of floaters and the necessary port areas, etc.);
- The **regulatory and market context in Italy** for the development of offshore wind projects, and the implications for a developer in adhering to the constraints set by the current legislation (e.g. landscape and environmental constraints, interactions with relevant local stakeholders).

Organizational Notes

- The seminars will be held over 4 days, spread across two weeks at the UNIPA headquarters;
- **Classroom: C330**, in Building 7, Viale delle Scienze
- The maximum number of students is set to 50.

Objective of the course (2/2)

MODULE 2 – Project work (2 CFU)

With the support of the Center of Excellence for Sustainability & Energy Management at **Bip consulting** (based in Palermo), it will be possible to deepen the learning experience through active involvement of the participating students.

Upon completion of **MODULE 1** and as **MODULE 2** commences, project work will be assigned. These are research and analysis projects aimed at addressing some of the **current challenges** in the relevant **offshore wind market**.

The **topic problems** given to students will be prepared in collaboration with all the technical and scientific partners of the program. With the assistance of these partners, **Bip consulting will provide resources** and **office space** during **four dedicated sessions** to support the student teams in working on the project work. Besides gaining deeper insights into the topics discussed (**hard skills**), this experience will also strengthen their valuable **soft skills** – such as organizational capability, planning, leadership, teamwork, communication skills, and a multidisciplinary approach to energy challenges.

The research outcomes will be presented by the groups at the end of the project work activities and then be evaluated by a **jury**, consisting of the partners involved in **MODULE 1**. The technical-scientific quality of the work carried out, the methods of execution, and the presentation of the project work will help partners select top-performing students for a long-term **internship** (3-6 months, paid). The final proposal will be discussed in one-to-one meetings with the participants to confirm their interest in the presented internship opportunity.

Organizational notes:

- **MODULE 2** will take place over **4 sessions**, each lasting **4 hours** (held weekly) at the Bip Palermo headquarters (Via Ammiraglio Gravina 2a);
- The project work results will be presented at a **concluding event at the Bip headquarters** (by December 15th, 2023);
- At the end of the module, top-performing students will be offered an internship opportunity by the partners.

COURSE SCHEDULE AND DATES

Date	Title
OCTOBER 16	Cocktail/networking event for the official launch of the initiative at the Bip headquarters
OCTOBER 17	Seminar 1 (MODULE 1)
OCTOBER 18	Seminar 2 (MODULE 1)
NOVEMBER 8	Seminar 3 (MODULE 1)
NOVEMBER 9	Seminar 4 (MODULE 1)
NOVEMBER 23	Project work session 1 (MODULE 2)
NOVEMBER 30	Project work session 2 (MODULE 2)
DECEMBER 7	Project work session 3 (MODULE 2)
DECEMBER 14	Project work session 4 (MODULE 2)
DECEMBER 15	Concluding event at Bip headquarters and presentation of the project work results and cocktail/networking event

Course overview

Duration	Lecturer	Title
Seminar 1 (17/10/2023) – 3,5 h		
0,5 h	Enrico Carloni (Royal Danish Embassy in Italy) Eleonora Riva Sanverino (UNIPA) <i>The Heads of Engineering Departments and Geology will join the session</i>	Introduction to the Seminar: Why Offshore Wind Technologies are relevant for the Italian Energy Plan
0,5 h	Davide De Lorenzo (Bip consulting)	Sustainability in renewable projects: framework, scope, and elements of analysis.
2,5 h	Alessandro Corsini (OWEMES)	Offshore wind technology: introductory aspects.
Seminar 2 (18/10/2023) – 3,5 h		
1,5 h	Claudio Lugni (CNR)	Research and Development - the academic and professional skills required in the offshore renewable technology sector (including the technology of materials)
1,5 h	Alessandro Severini (iLStudio Engineering & Consulting Studio srl)	Design, Engineering & Construction in Floating Offshore Wind Projects
1 h	Antonio Nastri (Studio Nastri) and Alessandra Pirrera (Solaning)	The Impacts of Offshore Wind Projects to the Sicilian Transmission Grid

Course overview

Duration	Lecturer	Title
Seminar 3 (08/11/2023) – 3,5 h		
1,5 h	Alessandro Concialini (Fincantieri)	The naval infrastructure sector and opportunities for the industrial sector
1 h	Marzia Mangoni (Prysmian Group)	Connections in offshore wind projects for bottom-fixed and floating applications
1 h	Alessandro Monti (University of Copenhagen)	Comparative analysis Italy-Denmark: Lessons learned, risks, and opportunities to forge a competitive, robust, and attractive Regulatory and Market Landscape for Developers.
Seminar 4 (09/11/2023) – 3,5 h		
1,5 h	Michele Schiavone (Copenhagen Offshore Partners)	Economics: Crafting a sustainable business plan for a floating offshore wind project, considering all phases from construction to project financing
1 h	Vincenzo di Pisa (Copenhagen Offshore Partners)	Development: Assets Competencies, and Skills Needed for Local Construction and O&M Activities in Offshore Wind (Floating) Projects
1 h	Angela Ariatti (Renantis)	Implications for a developer in adhering to constraints imposed by current regulations: best practices in engaging with local stakeholders