

POST-ACADEMIC COURSE

# OFFSHORE WIND ENERGY

## Foundational track: the basics

20 NOVEMBER 2024 – 11 DECEMBER 2024



GHENT  
UNIVERSITY

# OFFSHORE WIND ENERGY

Foundational track - Covering the basics of offshore wind energy

20 November 2024 – 11 December 2024

Offshore wind has a vital role to play in the global transition to green energy. As a rapidly growing energy technology, offshore wind has huge potential around the world. In the Belgian North Sea, offshore wind farms generate about 10% of Belgium's total electricity demand. By 2030, offshore wind capacity in the North Sea will continue to grow, generating about 30% of electricity demand of Belgium.

For this booming industrial sector, Ghent University provides three tracks of lifelong learning courses for those who want to expand their knowledge of all phases of offshore wind energy, with a mix of academic and industrial speakers:

- 🔗 Foundational track
- 🔗 Advanced track of technological aspects
- 🔗 Regulatory and economic track

## TARGET AUDIENCE

This course will present a general introduction and overview of the Offshore Wind Energy sector and is thus targeted towards a broad audience: people already working in this sector, people with the ambition to be working in the sector and researchers. A bachelor level (or equivalent through minimal 2 year relevant working experience) is obligatory.

## SCIENTIFIC COORDINATION

Prof. Lieven Vandevelde, Department of Electromechanical, Systems and Metal Engineering, Ghent University

## TEACHERS

Aymen Chaouachi (Elia), Carl Heiremans (Jan De Nul), Pieter Jan Jordaens (Sirris / OWI-lab), Filip Lahaye (Otary), Lieven Vandevelde (Ghent University), Raoul Van Lambalgen (Otary), Kristof Van Loon (DEME Concessions), Margot Van Nuffel (Otary) & Kristof Verlinden (Parkwind).

## PROGRAMME

This foundational track provides the terminology, phases and processes of offshore wind energy, and allows the students to get acquainted with the correct terminology. After the qualitative description of the components, the project life cycle (from tendering to decommissioning) is outlined. The procedures and terminology in offshore wind installation and financial aspects are described. Further, the in-service terminology (during the Operations & Maintenance) is provided. Finally, an overview of innovation and trends is given.

- Overview of offshore wind farms: from wind turbine systems to the electric grid connection
- Project life cycle (from tendering to decommissioning)
- Offshore wind farm installation (terminology & procedures)
- ABC of offshore wind financing
- Operational excellence in O&M
- Innovation drivers, technology & market trends overview

## PRACTICAL

Fee: 880 euro - visit our website for special pricing etc. (Ugent & multiple subscriptions)

Dates: 20 November 2024 – 11 December 2024

Location: Ghent University, UGain classroom, building 60, Technologiepark Zwijnaarde.