

POST-ACADEMIC COURSE

Offshore wind energy

Foundational track

16 NOVEMBER 2026 – 7 DECEMBER 2026



GHENT
UNIVERSITY

Offshore wind energy: Foundational track

Covering the basics of offshore wind energy

Offshore wind is a key technology in the transition towards a renewable, secure and resilient energy system and will remain central to Europe's long-term energy ambitions. Belgium is a clear example of this momentum. Today, Belgium's offshore wind farms represent an installed capacity of 2.26 GW, covering 10% of Belgium's total electricity demand. With the planned roll-out of the Princess Elisabeth Zone, divided into three blocks, an additional 3.15 GW to 3.5 GW of offshore wind capacity can be developed, corresponding roughly to the electricity consumption of all Belgian households.

At the European level, offshore wind energy plays a central role in the EU Green Deal and REPowerEU strategies. The European Union has set clear ambitions to massively scale up offshore renewable capacity in order to enhance energy security and accelerate defossilization. Belgium's rapid development aligns closely with these broader European priorities.

To support this rapidly developing 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.

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 aiming to work in the sector and researchers.

A bachelor's degree (or equivalent, through minimal 2 year relevant working experience) is obligatory.

SCIENTIFIC COORDINATION

dr. ir. Sue Taelman, Innovation officer for offshore wind energy, Ghent University

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

A complete list of teachers can be found online: www.UGain.UGent.be/windfoundation2026.htm

PROGRAMME

This foundational track provides participants with a broad introduction to the offshore wind energy sector. It covers the main concepts, terminology and processes throughout the offshore wind project life cycle, from tendering and financing to installation, grid integration, operations and maintenance, and decommissioning. Participants are also introduced to the main components of offshore wind farms, the organizational context of offshore wind projects, and the latest innovation drivers, technology developments and market trends.

- ⇒ Setting the Scene: The Offshore Wind Energy Sector
- ⇒ From Tender to Design: Basics of Offshore Wind Engineering
- ⇒ The ABC of Offshore Wind Financing
- ⇒ Offshore Wind Farm Building Blocks: Turbines, Generators, Foundations, Cables and Offshore Substations
- ⇒ Offshore Wind Installation Processes and Terminology
- ⇒ Powering the Grid: Introduction to Electrical Power Systems and Transmission
- ⇒ Integrating Offshore Wind into the Power System - the TSO perspective
- ⇒ Behind the Project: Corporate and Contractual Structures in Offshore Wind
- ⇒ Offshore Wind Operations and Maintenance: Lessons from the past, outlook for the future
- ⇒ End-of-Life for Offshore Wind Farms: Decommissioning and Beyond
- ⇒ Innovation drivers, technology and market trends overview
- ⇒ What's Next for Offshore Wind?

↖ Practical

Time & location: 16, 23 & 30 November and 7 December 2026- Technologiepark Zwijnaarde

Fee: € 1.020,-

↖ More info?

Ga naar www.UGain.UGent.be/windfoundation2026.htm