aura Doctoral Training

# The EPSRC Centre for Doctoral Training in Offshore Wind Energy Sustainability and Resilience

## Industry Research Prospectus 2025

***Research, innovation and a talent pipeline for the Offshore Wind Sector***

Funded by

UKRI Engineering and Physical Sciences Research Council

A partnership between

Durham University

University of Hull

Loughborough University

University of Sheffield

# Match funding for your Research and Innovation needs

**Work with us to develop bespoke research projects, providing solutions to your specific organisational challenge:**

- Over £63k match funding from EPSRC to support your company's research and innovation needs
- Research, development and innovation built around our four-year doctoral research programme
- Co-create research project(s) or adapt existing Aura CDT research proposals to meet your needs
- Research may be based out of university or partner settings, with full- and part-time modes available
- Start dates available across five cohorts beginning 2024 through to 2028.

Costs to your company are based on 50% of the overall research costs, starting at **£63,170** per project based on a **2026** enrolment for the postgraduate researcher.

Please note, these estimates are based on current EPSRC stipulated student stipends, which are subject to inflationary and discretionary rises. Final price may be adjusted until contracted.

**Research Themes to address industry need**


***Want to start the conversation about our bespoke research solutions?***
*Contact **auracdt@hull.ac.uk** to book an exploratory meeting today.*

# The Aura CDT in Offshore Wind Energy

**Centres for Doctoral Training are platform government funding for research, innovation and skills training, underpinning core components of the UK economy**

**The Aura CDT integrates £17m of UKRI, university and sector investment.**
**Research and innovation is co-created with over 40 stakeholders to address industry and policy needs.**


### Push the frontiers of offshore wind technology

Understanding the engineering and environmental challenges around OW expansion into new, more challenging environments further from shore in deeper water.


### Accelerate consent and support environmental sustainability

Speeding up the typical consent process requires integrated use of diverse models and data sources to advance understanding of OW environments.


### Achieve a sustainable wind farm lifecycle

Increasing sustainability and efficiency while promoting rapid innovation is critical for keeping the UK at the forefront of the industry.


### Build and support a sustainable workforce

A thriving industry must be diverse, providing a safe, fulfilling and equitable environment for all staff; an understanding of human factors and humans-technology interaction is key.


### Develop a resilient net-zero energy system

The UK transition to net-zero by 2050 requires a resilient and integrated energy system. OW will form the backbone of the future energy system but must adapt to enable increased integration.

**The Aura CDT provides a 4-year taught and research programme to grow future leaders:**

- **A high intensity 6-month training programme to embed cross-disciplinary thinking**
- **Rapid start on cutting-edge research and innovation within 6 months of enrolment**
- **Focused Continuing Professional Development programme to build business skills.**

# Developing solutions to evolving challenges

**The rapid expansion of offshore wind energy is generating new challenges, and the transdisciplinary Offshore Wind CDT is uniquely placed to develop the solutions.**

**Lisa Somerville:**

Virtual reality based study of solutions to sea-sickness, improving the efficiency of the offshore workforce.

Funded by Offshore Renewable Energy Catapult

**Siti Khadijah Hamzah:**

Modelling and optimising DC transmission infrastructure for the integration of offshore wind energy.

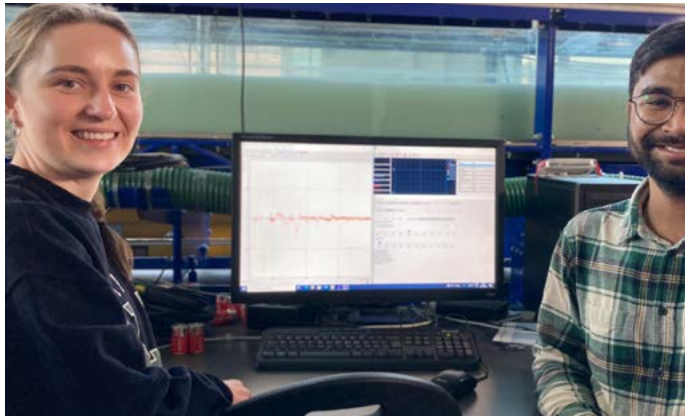
Funded by UKRI

***"The Aura CDT is a really powerful quartet of universities.. There's this real buzz of industrial universities coming through with some great thinking and I think it's a very powerful combination"***

**Jane Cooper**
**Deputy CEO, Renewable UK**

*"What struck me is the multidisciplinary nature of the research projects and how all of those disciplines work together to solve a problem"*

**David Bould, Head of UK&IE Ventures & Open Innovation, Ørsted**




**Oliver Morgan-Clague:**

Developing new numerical models to optimise resin injection and reduce cost of the blade manufacture process.

Funded by Siemens Gamesa Renewable Energy

**Maisy Bradbury:**

Physical and numerical tests of the efficiency of scour mitigation methods to reduce turbine foundation costs.

Funded by HR Wallingford

**To meet sector targets, the industry is moving beyond existing development zones into more challenging, less well-understood environments. Sustainability is a key challenge, in terms of environmental impact, resource requirements and workforce; as well as improved integration into wider energy systems.**

**The Offshore Wind CDT recruits exceptional researchers from diverse backgrounds.**

**Under the guidance of academic and industry mentors, they are uniquely placed to meet these intersecting industry challenges.**

Find out more about Aura Research and Innovation

# Partner Opportunities

## Leading academic and industry collaboration for a sustainable sector

### Work with us to:

- Access the best talent with holistic skills and expertise in offshore wind
- Engage with world-leading experts and access state-of-the-art facilities
- Help steer our programme and shape the future leaders of the offshore wind sector

### Partner benefits:

- Access our world leading cluster of experts to address your challenges in offshore wind energy
- Network with sector businesses through the Aura CDT
- Stay up to date with our annual showcase of Research, Development and Innovation
- Access to the best students for placements or internships
- Engage with future leaders via on-site visits or CPD
- Lead innovation by sharing expertise, resources or data
- Develop ideas via small research projects
- Raise company profile through guest lectures

Contact ***auracdt@hull.ac.uk*** and book an exploratory meeting to build your bespoke partnership

***Help us to shape the development of offshore wind sector future leaders***