



IDCORE

Industrial Doctoral Centre in Offshore Renewable Energy



Vision

To attract the very best EngD students into a vibrant learning environment and, in partnership with industry, train them to deliver world-class industrially-focussed research outcomes that will accelerate the deployment of offshore wind, wave and tidal-current technologies, positioning the UK to meet its 2020 & 2050 targets for renewable energy generating capacity, and expanding and sustaining a community of high-quality post-doctoral staff for the UK offshore renewable energy industry.



IDCORE

Consortium which includes the
Universities
of
Edinburgh, Exeter and Strathclyde

together with HR-Wallingford and the
Scottish Association for Marine Sciences.



IDCORE

- IDCORE will recruit 10 EngD students per year for five years with the first intake in January 2012
 - Subsequent intakes will be in October 2012, 2013, 2014 and 2015.
- These are Industry based, sponsored studentships, funded by the RCUK Energy Programme and the ETI.



Engineering Doctorate

- Whilst requiring the same level of academic rigour as a PhD, EngD programmes provide an alternative, vocationally-oriented, professional, doctorate designed to:
 - Meet the needs of industry and enhance its knowledge base.
 - Provide graduates with challenging research in an industrial context.
 - Prepare graduates for leadership positions in industry.
 - Produce exploitable outcomes from research.
 - Generate partnerships between academia and industry.



IDCORE

- As the students will be based in Industry for 75% of their project.
- IP arising from their work will normally be shared between the student and the sponsor
 - except in cases where significant background IP has been licensed from the University.



IDCORE

Sponsoring companies

- contribute £10,000 per year for four years for their student,
- provide workplace accommodation and supervision,
- assist in the student recruitment process, and
- Can contribute guest lectures and real world exercises to the taught programme.



IDCORE

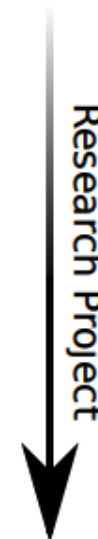
IDCORE Students

- Receive a bursary of approximately £15,000 per year
- undertake a bespoke taught programme to support their development and receive academic supervision,
- have access (if needed) to state of the art experimental facilities across the consortium,
- Will be issued with a high specification laptop computer with industry standard modelling software installed.



Programme

Term 1	<p>Introduction to Offshore Renewable Technologies Cross-disciplinary Engineering Science Foundations Hydrodynamics of Offshore Renewable Energy Devices Electromechanical & Electronic Energy Conversion Systems Marine Renewable Resource Assessment Economics Tools for Offshore Renewables</p>
Term 2	<p>Marine Operations, Condition Monitoring and Reliability Physical Model Testing for Offshore Renewables Structural Behavior of Offshore Renewable Energy Devices Electricity Network Interaction, Integration and Control Marine Energy Systems Design Interdisciplinary Group Project Marine Renewables and the Environment</p>
Summer Schools	<p>Marine Renewables and Society Offshore and Near-shore Renewables - the Maritime Realities Moorings and Reliability</p>
Distance Learning	<p>Innovation Design and Manufacturing Management Management of the Project Life-cycle Regulation in the Offshore Renewable Sector</p>



IDCORE

- Project areas will be agreed between the sponsoring companies and IDCORE to ensure that the students work meets the standards needed for the award of an EngD and a NDA will need to be set up between the Centre and the sponsoring company.
- Applicant students must be either UK citizens, EU students who have studied or been employed in the UK for at least the past three years, or overseas (non-UK, non-EU) applicants who have been employed in the UK for at least the past three years.
- Other *self funded* students may be admitted



IDCORE

- Additional places on the taught programme will also be available for company employees wishing to undertake continuing professional development in offshore renewable energy.





Industrial Doctoral Centre for Offshore Renewable Energy

www.idcore.ac.uk