

Course Information Sheet for entry in 2021-22: DEng in Wind and Marine Energy Systems and Structures (EPSRC CDT)



About the course

The DEng in Wind and Marine Energy Systems and Structures will offer you the opportunity to develop in-depth knowledge, understanding and expertise in the design and development of offshore renewable energy systems (wind, wave and tidal).

The EPSRC Centre for Doctoral Training (CDT) in Wind and Marine Energy Systems and Structures is run by the University of Oxford in collaboration with the University of Strathclyde and the University of Edinburgh. All students on the CDT course undertake a comprehensive programme of taught modules, as well as an individual doctoral research project.

As an Oxford DEng student you will be based in your sponsoring company for the majority of your degree, while also spending a significant proportion of your time at the Department of Engineering Science in central Oxford. The main research interests for the Oxford stream of the CDT are in geotechnical engineering (notably foundations for offshore wind turbines) and environmental fluid mechanics (as applied to offshore wind and tidal turbines). Applications to work in other areas of civil engineering with relevance to offshore renewable energy (eg structural health monitoring) are also welcomed.

Please note that offers for the DEng in Wind and Marine Energy Systems and Structures will only be made if suitable arrangements can be, or are likely to be, made with a sponsoring company. These arrangements are coordinated by the University (not the applicant). You are advised to contact the Oxford CDT Director, Professor Chris Martin, to discuss arrangements at an early stage to ensure that your application is appropriate to this course. Alternatively, please consider the DPhil in Wind and Marine Energy Systems and Structures, which follows a similar programme of taught and research components but is university-based rather than company-based.

The first year of the course focuses on developing core skills through both taught courses and individual research work. From October to January you will complete an induction term at the University of Strathclyde in central Glasgow. There you will take introductory taught courses covering fundamental aspects of offshore renewable energy, and you will participate in a group design project. The induction term will establish a broad knowledge base on which to build your advanced research, and will allow you to develop links with students enrolled through the Strathclyde and Edinburgh streams of the CDT. From February of the first year you will be based in your sponsoring company to begin individual research work, as preparation for your main research project. You will have both an academic supervisor and an industrial supervisor, who will meet with you regularly to assess progress and discuss research matters. The topic(s) and main location of your project will be by agreement with your two supervisors and the sponsoring company. As your research work begins you will also continue with the group design project, which will normally be completed by the end of your second term.

Following the second term you will have access to a range of technical skills, transferable skills and management/leadership skills modules that will be taught at Strathclyde, Oxford or Edinburgh. These modules will be completed according to a flexible timetable, agreed with your supervisors, to complement your research activities. The technical skills modules will include relevant aspects of geotechnical engineering (three modules), fluid mechanics (two modules), structural dynamics, structural integrity, mechanical engineering and environmental impact assessment. Transferable skills will include academic writing and presentation, research ethics, intellectual property, teamwork and communication skills. Leadership skills will include aspects of management, strategy, operations and entrepreneurship. However, the main focus of activity following the second term will be your individual research project. You will continue to meet your supervisors on a regular basis.

In Oxford you will be a member of the civil engineering research group, where you will integrate with other students, attend research seminars, discuss papers, present your research, rehearse conference talks and build links between different research areas. You will also present your work within your sponsoring company as required. An annual CDT workshop will give you the opportunity to present your research to other CDT students, industrial partners and invited researchers from other universities. Industrial collaborators will be invited to discuss current challenges and to highlight market trends.

Supervision

The allocation of graduate supervision for this course is the responsibility of the Department of Engineering Science and it is not always possible to accommodate the preferences of incoming graduate students to work with a particular member of staff. Under exceptional circumstances a supervisor may be found outside the Department of Engineering Science.

You will have both an academic supervisor and an industrial supervisor, who will meet with you regularly to assess progress and discuss research matters.

You will join your supervisor's research group which normally has post- doctoral researchers and other research students working on broadly similar research themes. Typically you would interact daily with member of the group and have weekly contact with your supervisor. Many groups have weekly meetings where members discuss their research or perhaps present other published work.

Assessment

In the first year you will be assessed on the taught courses and the group project, as well as your individual research project. Early in your second year, there will be a formal assessment to decide whether you have made sufficient progress to continue working towards a DEng. You will be required to write a research report, give an oral presentation, and present a detailed and coherent plan for your future research. Progress towards completion will again be formally assessed during your third year of study. For the DEng you will be required to submit a substantial thesis or a coherent portfolio of research and development work, which will be examined by experts in the field (one from the department and one from elsewhere). The research will often result in the publication of several journal and conference papers, and these papers may form the basis for the submitted portfolio of work.

The final degree is awarded by the University of Oxford.

Changes to courses

The University will seek to deliver this course in accordance with the description set out above. However, there may be situations in which it is desirable or necessary for the University to make changes in course provision, either before or after registration. These may include significant changes made necessary by a pandemic (including Covid-19), epidemic or local health emergency. For further information, please see the University's Terms and Conditions (<http://www.graduate.ox.ac.uk/terms>) and our page on changes to courses (<http://www.graduate.ox.ac.uk/coursechanges>).

Expected length of course

	Full Time Only
Expected length	4 years

Costs

Annual fees for entry in 2021-22

Fee status	Annual Course fees
Home (UK, Republic of Ireland, Channel Islands & Isle of Man)	£8,290
Overseas (including EU)	£27,460

Course fees are payable each year, for the duration of your fee liability (your fee liability is the length of time for which you are required to pay course fees). For courses lasting longer than one year, please be aware that fees will usually increase annually. Information about how much fees and other costs may increase is set out in the University's Terms and Conditions.

Course fees cover your teaching as well as other academic services and facilities provided to support your studies. Unless specified in the additional cost information (below), course fees do not cover your accommodation, residential costs or other living costs. They also don't cover any additional costs and charges that are outlined in the additional cost information.

Graduate students who have reached the end of their standard period of fee liability may be required to pay a termly University and/or a college continuation charge.

The University continuation charge, per term for entry in 2021-22 is £528, please be aware that this will increase annually. For part-time students, the termly charge will be half of the termly rate payable by full-time students.

If a college continuation charge applies (not applicable for non-matriculated courses) it is likely to be in the region of £100 to £400 per term. Please contact your college for more details.

Additional cost information

Students enrolled on the Oxford stream of the CDT will spend a total of about 20 weeks (including the induction term) attending taught modules and other elements of the course that are hosted at the University of Strathclyde or the University of Edinburgh. You will need to pay your own accommodation and food costs throughout the course, including when you are studying at Strathclyde / Edinburgh. Over the duration of the course, the cost of single accommodation at Strathclyde / Edinburgh is expected to be around £5000 (weighted towards the first year) and the associated travel costs are expected to be around £1000. To avoid duplication of accommodation costs, you are advised not to take accommodation in Oxford during the induction term.

Living costs

In addition to your course fees, you will need to ensure that you have adequate funds to support your living costs for the duration of your course.

The likely living costs for 2021-22 are published below. These costs are based on a single, full-time graduate student, with no dependants, living in Oxford. We provide the cost per month so you can multiply up by the number of months you expect to live in Oxford.

Likely living costs for 2021-22

	Likely living costs for 1 month		Likely living costs for 9 months		Likely living costs for 12 months	
	Lower range	Upper range	Lower range	Upper range	Lower range	Upper range
Food	£280	£400	£2,520	£3,600	£3,360	£4,800
Accommodation	£655	£790	£5,895	£7,110	£7,860	£9,480
Personal items	£130	£250	£1,170	£2,250	£1,560	£3,000
Social activities	£45	£115	£405	£1,035	£540	£1,380
Study costs	£45	£100	£405	£900	£540	£1,200
Other	£20	£55	£180	£495	£240	£660
Total	£1,175	£1,710	£10,575	£15,390	£14,100	£20,520

When planning your finances for any future years of study at Oxford beyond 2021-22, you should allow for an estimated increase in living expenses of 3% each year.

More information about how these figures have been calculated is available at www.graduate.ox.ac.uk/livingcosts.

Document accessibility

If you require an accessible version of the document please contact Graduate Admissions and Recruitment by email (graduate.admissions@admin.ox.ac.uk) or via the online form (<http://www.graduate.ox.ac.uk/ask>).