



## Course Information Sheet for entry in 2018-19

### Diamond Science and Technology (EPSRC Centre for Doctoral Training)

#### About the course

This EPSRC-funded CDT brings together for the first time the range of UK expertise in diamond science and technology (DST) to train the next generation of researchers, industrialists and entrepreneurs enabling them to play important roles in the emergence of diamond as a high-tech material for a range of applications.

You will benefit from a multidisciplinary training programme aimed at providing a solid and comprehensive platform for a career in DST.

The CDT brings together a consortium of ten universities – Warwick, Aberystwyth, Bath, Bristol, Cambridge, Cardiff, Imperial, Newcastle, Oxford and Strathclyde – and forty academic partners who provide the necessary complementary research excellence and breadth to enable transformative breakthroughs in DST. Over thirty companies and many international partners are also involved, advising and supporting the CDT and its students in a wide variety of ways. Oxford is offering PhD projects for this course based in four different departments - Materials, Physics, Chemistry and Engineering Science.

In the first year you will undertake a purpose-designed MSc in Diamond Science and Technology at the University of Warwick. The course will be taught by academics from the partner universities and by industry experts. It will cover the fundamentals of the science and technological applications – present and future – of diamond and related materials, from its use in abrasives and cutting tools to biomedical sensors, high power lasers, and quantum information systems.

The course begins with a pre-session week at Warwick during which social and networking sessions are organised for the cohort. The formal focus will also be to help chemists, physicists, materials scientists, engineers and scientists from related disciplines, speak the same scientific language. This will be organised through workshops and small group interactions deliberately mixing different disciplines to discuss different basic concepts taught at undergraduate level.

During the two ten-week teaching terms (from the end of October to early December and then from mid-January to mid-March) the course is based around 11 two-week modules, nine of which are compulsory and two optional. Each module comprises a range of taught lectures, seminars, problems classes, workshops and laboratories. Teaching and assessment styles are tailored for each module to best deliver and examine the training content. Lectures, seminars and workshops will be reinforced with a substantial practical or laboratory component. This will make use of the instrumentation and computational resources at Warwick, for example, state-of-the-art suites in magnetic resonance, electrochemical analysis, spectroscopy, electron microscopy, dedicated clean-rooms for the growth, characterisation and processing of new materials and next generation power electronics etc.

The facilities are supplemented by the loan of specialised equipment from collaborators. The practical aspects of the modules will enable you to gain essential hands-on experience of a wide variety of techniques/instrumentation, eg CVD growth, laser processing, device fabrication, characterisation and instrumentation such as Raman, microscopy, XPS, data analysis and modelling.

Examination of the taught elements of the MSc is by a mixture of continuous assessment of practical and class work, and written examinations which take place in mid-April. From late April to early July and from mid-July to mid-September you will undertake two ten-week mini-projects at two different universities or industrial partners, which link to the theme of your chosen DPhil (PhD). The first mini-project will be examined by a poster presentation at the annual Diamond Conference, and the second by a written report. The chosen PhD programme will then commence in early October, subject to passing the MSc.

During the Oxford DPhil part of the CDT programme in years 2 to 4 there will be regular activities aimed at building the DST community, including seminars, away days and attendance at the annual Diamond Conference.

Other than these activities, the Oxford DPhil part of the CDT programme will primarily follow the standard three-year DPhil programme offered by the relevant department at Oxford. For further information on each course, please refer to the links in Group B (Non-CDT DPhils) under 'Multiple applications' below.

#### 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. For further information, please see the University's Terms and Conditions.

#### Expected length of course

4 years

## Costs

### Annual fees for entry in 2018-19

During the first year of the course you will be charged fees by the University of Warwick. Further information about fee rates can be found on the institution's website.

In each subsequent year of study at the University of Oxford, you will be charged tuition and college fees at Oxford's fee rate for that year of study. For an indication of costs, the table below shows the estimated annual tuition and college fees for the 2019-20 academic year at the University of Oxford. Please be aware that these fees will increase annually.

#### Estimated annual fees for the 2019-20 academic year at Oxford

Fee status	Estimated tuition fee	Estimated college fee	Total estimated annual fees
Home/EU (including Islands)	c. £4,495	c. £3,236	c. £7,731
Overseas	c. £20,715	c. £3,236	c. £23,951

Tuition and college fees are payable for the duration of your fee liability (your fee liability is the length of time for which you are required to pay tuition and college fees). 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.

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 2018-19 is £468, 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.

Students admitted by the University of Oxford are enrolled on the MSc in Diamond Science and Technology at the University of Warwick for one academic year and will be liable for fees at that University at their fee rates. Subject to meeting the progression criteria, students are then enrolled by the University of Oxford and are liable for a further 9 terms of fees at the University of Oxford.

### Additional cost information

There are no compulsory elements of this course that entail additional costs beyond fees (or, after fee liability ends, continuation charges) and living costs. However, please note that, depending on your choice of research topic and the research required to complete it, you may incur additional expenses, such as travel expenses, research expenses, and field trips. You will need to meet these additional costs, although you may be able to apply for small grants from your department and/or college to help you cover some of these expenses.

## Living costs

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

Please consult the University of Warwick website for further information about living costs while studying at that institution.

The likely living costs for 2018-19 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 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
<b>Food</b>	£258	£361	£2,318	£3,245	£3,090	£4,326
<b>Accommodation</b>	£536	£677	£4,824	£6,093	£6,432	£8,124
<b>Personal items</b>	£118	£263	£1,066	£2,364	£1,421	£3,152
<b>Social activities</b>	£41	£123	£369	£1,105	£492	£1,474
<b>Study costs</b>	£39	£85	£348	£765	£464	£1,020
<b>Other</b>	£22	£47	£202	£419	£269	£559
<b>Total</b>	£1,014	£1,556	£9,127	£13,991	£12,168	£18,655

When planning your finances for any future years of study at Oxford beyond 2018-19, 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](http://www.graduate.ox.ac.uk/livingcosts).