Course Information Sheet for entry in 2016-17

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 eight universities – Warwick, Aberystwyth, Bristol, 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 material 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-sessional week at Warwick during which social and networking sessions are organised for the cohort. The formal focus will also be to help chemists, physicists, material 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 will be varied from module to 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 will also be 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 will be by a mixture of continuous assessment of practical and class work, and written examinations which will 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 each course in accordance with the descriptions 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

Estimated annual fees for the 2017-18 academic year at the University of Oxford

Fee Status	Tuition fee	College fee	Total annual fees
Home/EU (including islands)	c. £4,370	c. £3,050	c. £7,420
Overseas	c. £19,525	c. £3,050	c. £22,575

Tuition and college 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 tuition and college fees).

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.

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

The University continuation charge, per term for entry in 2016/17, is currently £440, 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 to 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

There are no compulsory elements of this programme that entail additional costs beyond fees 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.

For the 2017-18 academic year, the range of likely living costs is estimated to be between £989 and £1462 for each month spent in Oxford. Further information, including a breakdown of likely living costs in Oxford for the 2016-17 academic year, is available on our Living costs page.

24 October 2015