Course Information Sheet for entry in 2020-21

Autonomous Intelligent Machines and Systems (EPSRC Centre for Doctoral Training)

About the course

The DPhil offered by the CDT provides graduates with the opportunity to develop in-depth knowledge, understanding and expertise in autonomous intelligent systems.

The programme provides a comprehensive, state-of-the-art view of autonomous intelligent systems, combining theoretical foundations, systems research, academic training and industry-initiated projects and thus mixing both practical and theoretical aspects of intelligent machines and systems.

The first year is oriented towards developing your knowledge base. You will need to take a number of courses during your first year. Your day will comprise lectures each morning with laboratory sessions each afternoon. You will undertake two eight- to ten-week mini-projects, precursors to your DPhil study, to hone your research skills and shape your main research area. You will meet your supervisor regularly to assess progress and discuss academic issues.

Years two to four see an increasing emphasis on individual research. A summary of projects is produced each year by supervisors, but you will be encouraged to develop projects based on your own research ideas within the four key research themes of robotics, vision and perception, machine intelligence and multi-agent systems, control and verification, and M2M (or the 'Internet of Things'), and secure sensing and actuation. Training will continue in academic reading, writing and presentation skills, business and commerce (to include innovation and IP curatorship and entrepreneurship), career development and planning, and ethics and law, where the societal implications of autonomous systems will be considered.

Research seminars are used to discuss papers, for rehearsing conference talks and for building links between groups. An annual workshop gives the opportunity to present research to students, industrial partners and invited researchers from other universities. Industrial collaborators are invited to share their latest problems and market trends and to discuss opportunities for future collaboration.

You will spend one or two months over the second or third summer in an industrial lab to gain experience in industry-led projects and expanding your horizons by engaging in an AIMS topic that is not your main one. After the end of the internship, further interaction will be encouraged by inviting your industrial supervisors to join your group in Oxford for short periods.

You will also be encouraged to take demonstrations of your systems to companies, government departments, as well as schools. In the fourth year, the cohort help organise the annual workshop, inviting keynote speakers, participating in the program committee, reviewing papers submitted by second and third year students, and publicising the workshop to universities and industrial partners beyond those directly involved in the CDT.

You will be assessed continually throughout the first year during courses and projects and at its end the CDT supervisors will assess whether sufficient progress has been made to continue to the research phase. At the end of the second year, you will be required to write a report and give a presentation on your research, and to present a detailed and coherent plan for the research-intensive phase in the third and fourth years of your doctoral studies. Progress towards completion is again formally assessed some way into the final year of study.

For the DPhil you will be required to submit a substantial thesis which is read and examined by experts in the field, one from the department and one from elsewhere. Often the thesis will result in the publication of several journal and conference papers.

Supervision

For this course, the allocation of graduate supervision is the responsibility of the Department of Engineering Science and/or Department of Computer 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 and Department of Computer Science.

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

Mode of study	Full Time Only
Expected length	4 years

Costs

Annual fees for entry in 2020-21

Fee status	Annual Course fees
Home/EU (including Islands)	£7,970
Overseas	£26,405

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 2020-21 is £508, 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

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 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 2020-21 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
Food	£270	£385	£2,430	£3,465	£3,240	£4,620
Accommodation	£630	£760	£5,670	£6,840	£7,560	£9,120
Personal items	£130	£245	£1,170	£2,205	£1,560	£2,940
Social activities	£45	£110	£405	£990	£540	£1,320
Study costs	£40	£95	£360	£855	£480	£1,140
Other	£20	£55	£180	£495	£240	£660
Total	£1,135	£1,650	£10,215	£14,850	£13,620	£19,800

When planning your finances for any future years of study at Oxford beyond 2020-21, 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.