Course Information Sheet for entry in 2016-17

Partial Differential Equations (EPSRC Centre for Doctoral Training)

About the course

The central aim of the CDT is to educate cohorts of highly trained, outstanding mathematicians with deep expertise and interdisciplinary skills in the analysis and applications of PDEs, to help drive scientific advances over the next fifty years.

Partial differential equations (PDEs) are at the heart of many scientific advances. The behaviour of every material object in nature, with time scales ranging from picoseconds to millennia and length scales ranging from sub-atomic to astronomical, can be modelled by deterministic and stochastic PDEs or by equations with similar features. Indeed, many subjects revolve entirely around underlying PDEs, including:

Fluid dynamics: the Euler equations and the Navier-Stokes equations

Electrodynamics, optics and electric circuits: Maxwell's equations

Non-equilibrium statistical mechanics: the Boltzmann equation

Quantum mechanics: the Schrödinger equation

Cosmology: the Einstein equations of general relativity

The role of PDEs within mathematics, especially non-linear analysis, geometry, topology, stochastic analysis, numerical analysis, and applied mathematics, and in other sciences (such as physics, chemistry, life sciences, climate modelling/prediction, materials science, engineering, and finance) is thus fundamental and is becoming increasingly significant.

At the same time, the demands of applications have led to important developments in the analysis of PDEs, which have in turn proved valuable for further different applications.

A sizeable yearly cohort will allow the CDT to create new training mechanisms, so that you will learn theory, analysis, and applications in a variety of fields in a coherent manner with a natural progression, by-passing a traditionally separate 'pure' or 'applied' approach to learning.

You will undertake a four-year programme with the first year consisting of a set of intensive courses focusing on the analysis and applications of PDEs. The first year also includes two 10-week mini-projects, a spring retreat and a summer school. There will be annual review of your progress drawing on indicators such as attendance, mini-project and course results at the end of your first year; by submission of a written report and oral examination at the end of your second and third years.

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

Annual fees for entry in 2016-2017

Fee Status	Tuition fee	College fee	Total annual fees
Home/EU (including islands)	c. £4,200	£2,933	c. £7,133
Overseas	£16,280	£2,933	£19,213

The fees shown above are the annual tuition and college fees for this course for entry in the 2016-17 academic year; for courses lasting longer than one year, please be aware that fees will usually increase annually. For details, please see our guidance on likely increases to fees and charges.

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).

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 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 2016-17 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	£265	£298	£2,384	£2,673	£3,177	£3,565
Accommodation	£469	£667	£4,221	£6,002	£5,627	£8,006
Personal items	£119	£244	£1,073	£2,187	£1,429	£2,915
Social activities	£60	£107	£539	£960	£718	£1,280
Study costs	£36	£73	£314	£661	£418	£880
Other	£19	£44	£197	£410	£265	£547
Total	£970	£1,433	£8,727	£12,894	£11,636	£17,191

When planning your finances for any future years of study in Oxford beyond 2016-17, you should allow for an estimated increase in living expenses of 2% each year.

More information about how these figures have been calculated is available at www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs.

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