

## Course Information Sheet for entry in 2017-18

### Theory and Modelling in Chemical Sciences (EPSRC Centre for Doctoral Training)



#### About the course

The three primary activities in theoretical and computational chemistry are the development of new theory, implementation of methods as reliable software, and application of such methods to a host of challenges in chemical and related sciences. The aim of this programme is to train new research students to deliver all these outcomes.

The first year is a set of training modules leading to an MSc, followed by a transfer to the DPhil or PhD programme for successful students in one of the participating universities (Oxford, Bristol or Southampton) or the candidate's home university as appropriate.

In the first year you will study eight compulsory core courses:

- Quantum Mechanics
- Statistical Mechanics
- Mathematics 1
- Statistics
- Computer Programming and Numerical Methods
- Methods of Computer Simulation
- Electronic Structure Theory
- Software Development Training.

You will also select five optional courses from a choice of:

- Applied Computational Chemistry
- Biomolecular Simulation
- Mathematics 2
- Quantum Mechanics in Condensed Phases
- Intermolecular Potentials
- Chemical Informatics
- Chemical Reaction Dynamics
- Advanced Statistical Mechanics
- Advanced Quantum Mechanics.

In addition, you will be required to undertake two six-week projects with an allocated supervisor, one at Oxford and one at either Bristol or Southampton University, and each project will be assessed based on a report that you will submit thereafter.

You will also be required to attend two transferable skills courses in the year, organised by the CDT administrator.

The compulsory and optional courses are assessed in various ways detailed on the course website. If you are successful in the first-year assessments, you will be awarded an MSc in Theoretical and Computational Chemistry, and you may transition to the DPhil or PhD in one of the three participating institutions. A termly report is submitted by your supervisor throughout the course. After seven terms you must pass Transfer of Status, which is to ensure that you do have the potential to gain a doctorate.

Research proceeds with termly reporting throughout the next two years, and there is the opportunity to follow further courses during this period. By the end of the third year you must pass Confirmation of Status, which is to ensure that you are on track to complete the thesis within a reasonable time.

The MSc degree is examined by assessment of set work for each of the modules offered and of the two six-week projects. A board of examiners will be appointed by the University. The DPhil degree is examined by thesis and oral examination by two examiners, one of whom is normally from Oxford and one from elsewhere.

### **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 2017-2018**

Fee Status	Tuition fee	College fee	Total annual fees
Home/EU (including islands)	£4,195	£3,021	£7,216
Overseas	£19,335	£3,021	£22,356

The fees shown above are the annual tuition and college fees for this course for entry in the stated academic year; 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.

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).

All students are enrolled on the MSc in Theoretical and Computational Chemistry for three terms, and are liable for three terms of fees. Following this, and subject to meeting the progression criteria, students remaining at Oxford are enrolled on the Theory and Modelling in Chemical Sciences programme and are liable for a further nine terms of fees. Those enrolled at the University of Southampton or the University of Bristol for years 2 to 4 of their programme will be liable for fees at those universities at their fee rates, and on successful completion of their programme will be awarded a PhD by the university where they have been enrolled.

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 2017/18, is currently £455, 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.

Please consult the University of Southampton (<http://www.southampton.ac.uk/uni-life/fees-funding/living-costs.page>) website or the University of Bristol (<http://www.bristol.ac.uk/fees-funding/advice/living-expenses/>) for further information about living costs while studying at these institutions.

### **Additional cost information**

There is a compulsory contribution of £3,000, consisting of £2,000 towards the cost of travel and accommodation associated with project work in year 1, and a further £1,000 towards training and conferences outside Oxford. If you are funded by EPSRC or one of the industrial partners in the CDT, your funding package will cover this cost.

## 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 2017-18 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>	£250	£350	£2,250	£3,150	£3,000	£4,000
<b>Accommodation</b>	£538	£619	£4,844	£5,569	£6,459	£7,425
<b>Personal items</b>	£115	£255	£1,035	£2,295	£1,380	£3,060
<b>Social activities</b>	£40	£119	£358	£1,073	£477	£1,431
<b>Study costs</b>	£38	£83	£338	£743	£451	£991
<b>Other</b>	£22	£45	£196	£407	£261	£543
<b>Total</b>	£1,002	£1,471	£9,021	£13,237	£12,028	£17,649

When planning your finances for any future years of study in Oxford beyond 2017-18, 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](http://www.ox.ac.uk/admissions/graduate/fees-and-funding/living-costs).

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