

Physics at Imperial College London + a year in Europe

WHY TAKE A 'YEAR IN EUROPE' DEGREE?

Physics is a universal subject, which underlies all our understanding of the natural world and technology. It recognises no frontiers and is international by nature. Prominent examples of international collaborations in physics research include organisations like CERN (the European particle physics laboratory in Geneva) and ESA (the European Space Agency).

Physicists from Imperial College play key roles in these and much other international collaboration. Given our very high international profile, it is natural that Imperial College should seek to train the next generation of international physicists. We therefore offer a degree programme which includes a year spent at a university in another European country. Indeed, this special European degree was inspired by a desire to extend to undergraduates the advantages enjoyed by our postgraduate students that come from participation in international research collaborations.

Students on our four-year MSci Physics with a Year in Europe degree programme spend a full academic year in one of a group of specially selected universities in France, Germany, Italy, Spain or Switzerland. The most important part of their work during their year abroad is to carry out a research project in a high prestige research group. They become, in effect, members of an international research team. This opportunity is very valuable and almost unique. Our students also take some lecture courses and exams while they are abroad. These are the same as the local students of the host university so our students are fully integrated.

IMPERIAL COLLEGE AND EUROPEAN EXCHANGE STUDENTS

Imperial College Physics Department has by far the largest and best established European student exchange programme of any university in the UK. Over 290 Imperial College Physics students have participated in the programme during the last 15 years and over 400 incoming students from Europe have been accepted in return. The record of the students who have participated is excellent with most going on to do a PhD. This is a high profile and high prestige course. The programme is well known in Europe and we receive applications each year from students from other European countries who wish to take the full MSci course here with a year spent either in another European country or back in their own home country. The excellence of our European programmes was recognised early-on by the award of the 1994 Partnership Award for Innovation in University Physics Teaching.

'YEAR IN EUROPE' AND INTERNATIONAL COMPANIES

Although most students who take this course are heading for research careers, it is also excellent preparation for careers in industry or business for it is not only physics research that is international. There is a very strong trend for industrial and commercial companies to operate globally, to set up operations and research facilities in the most suitable country and to recruit globally in ways that supersede national boundaries. There is a premium in such companies on those who have command of at least one other European language (preferably two others!) and, more importantly, who already have acquired a deep feeling and understanding of another country through the experience of living and studying there for an extended time. Contacts with employers reinforce this point. They are increasingly seeking to recruit students with international experience and this course will make you especially interesting to them.

WHERE CAN I GO?

We have established exchange agreements with the following universities. In all cases these are long-standing and very well established links with good personal contacts between our own staff (and students!) and those at the host universities. In all cases these are universities with high international reputations.

Germany

Friedrich Alexander Universität, Erlangen-Nurnberg

www.uni-erlangen.de

Albert Ludwigs Universität, Freiburg. www.uni-freiburg.de

Universität Hamburg. www.uni-hamburg.de

Ruprecht-Karls-Universität, Heidelberg. www.uni-heidelberg.de

France

ESPCI, Ecole Supérieure de Physique et de Chimie Industrielle, Paris.

www.espci.fr

Phelma (Physique, Electronique, et Matériaux) / Institut Polytechnique

de Grenoble. <http://phelma.grenoble-inp.fr/>

Université de Paris-Sud, Orsay. www.u-psud.fr

Italy

Università degli studi di Padova (University of Padua).

www.unipd.it

Università degli studi di Trento. www.unitn.it

Spain

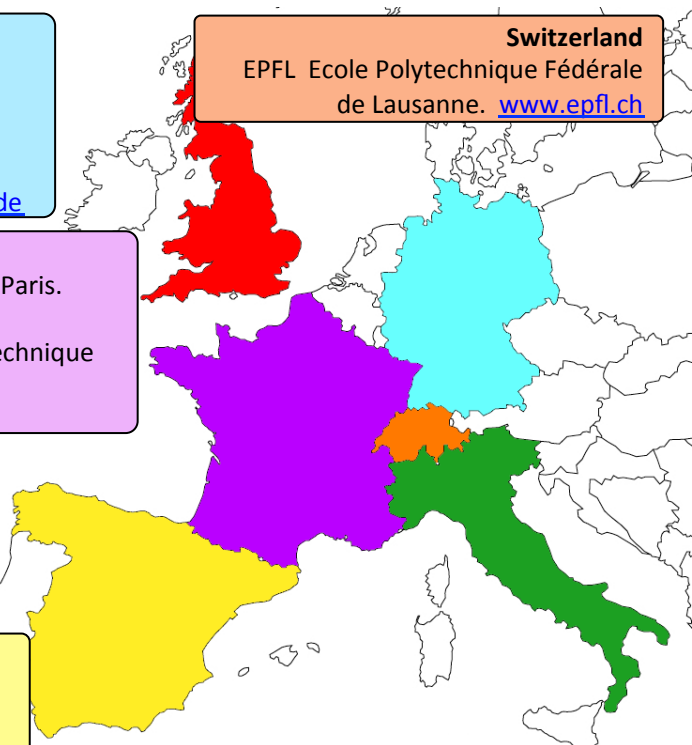
Universidad de La Laguna. www.ull.es

Universitat de Valencia. www.uv.es

Universidad Autónoma de Madrid. www.uam.es

Switzerland

EPFL Ecole Polytechnique Fédérale de Lausanne. www.epfl.ch



WHAT WILL IT BE LIKE?

During the first two years at Imperial College, students follow the normal physics course but have a reduction in physics laboratory hours in order to make room for special language classes. These are taught by specialist language teachers and count towards your degree. It is important that you have demonstrated ability in learning a relevant foreign language before admission. This normally is through having achieved a grade of at least a **B at GCSE** in a relevant West European language (Spanish, French, German or Italian). It is then expected that you will study two years of the same language with Imperial's Centre for Co-Curricular Studies (for credit) before going abroad. Occasionally students may be allowed to study another language (German, Spanish or Italian) from scratch, but in this case, the first year of study is in your own time (i.e. for non-credit). Experience has shown that students can learn sufficient in the language classes at Imperial during the first two years for them to have a successful year abroad. (If you have an A level, or are fluent or near-fluent in a relevant language, the rules allow more flexibility in the choice of language study and other options.) In addition to the formal language teaching, a language pair scheme is available (<http://www.imperial.ac.uk/humanities/languageservices/languagepairscheme>) and our **ERASMUS Club** (<http://www.union.ic.ac.uk/osc/erasmus/>) is a good way of meeting visiting exchange students in order to improve your conversational ability. Most of our partner universities provide language classes for our students after they arrive and most also provide short intensive courses during the two weeks before term starts at that university.

All the Physics Department's exchange links operate within the framework of the European Union's Erasmus scheme (<http://www.britishcouncil.org/erasmus>) which encourages the mobility of university-level students across Europe.

WHERE WILL I LIVE? WHAT WILL IT COST?

During your second year, decisions are made about which University you will go to. Obviously, we try to match all students with their first choice, but we cannot guarantee it. We give you lots of information about the universities to help you to decide and we also arrange several social events for you to meet exchange students at Imperial from those universities and our own students who have returned from them. The College's ERASMUS Club does the same. Accommodation at the host universities is arranged before you go and is mostly in University Halls of Residence or University owned flats. Accommodation costs at these universities are less than are typical in London and meals in the student refectories are often subsidised. So far, all students on these courses (regardless of nationality) have received an ERASMUS "study" grant which in 2013-14 is worth **375 Euros** per month of certified attendance. A student undertaking a 10 month placement would currently receive a grant of **3,750 Euros**. Grants can fluctuate from year to year and it is important to recognise that they are a "contribution towards the additional costs of studying abroad, most notably travel". Students do not pay tuition fees to the host university, while all students (Home/EU/Overseas) normally benefit from a reduction in tuition fees payable to Imperial College for the year spent abroad. Therefore, there are normally significant overall savings to be made by pursuing a year abroad.

While the College has yet to finalise the tuition fee reduction plan for 2016-17 (*the year when a 2014 entrant would ordinarily study abroad*) it has been confirmed that the tuition fee payable in 2014-15 by Home (UK) students (*who have been assessed as eligible to be considered for UK Student Support*) undertaking a year abroad (as part of a designated programme) will be 15% of £9000 and it is likely to remain the same in 2016-17. The full tuition fee reduction plan for 2014-15 will be known by the end of October 2013. Questions can be addressed to tuition.fees@imperial.ac.uk

YOUR YEAR ABROAD

You will spend your third year at the partner university in Europe undertaking a programme agreed with you before you go. The choice of the specific research project is however made after you have arrived and have had a chance to see the research groups for yourselves. The final choice of lecture courses may be delayed until you arrive as one course is usually chosen to support and integrate with your research project. We have very good personal links with the local coordinators and other staff at the host universities and they always look after our students very well. There is a designated staff member at the host university who will be responsible for giving you any help that you may need. In addition, a staff member from the Physics Department at Imperial College will visit you twice while you are out there and will stay in regular email contact with you throughout the year. We have found that this can be very helpful in giving academic advice as well as pastoral care.

Towards the end of your time there you will write a major report on your research project (in English but with a summary in the host language) and will also give a short seminar (in the host language) to the members of your research group. Both of these count towards your degree back at Imperial. Results of examinations taken will be converted to Imperial College marks through procedures that we have become expert in and which ensure fair treatment. In all these questions we maintain full consultation with the staff at the host university.

WHAT WILL IT FEEL LIKE?

Perhaps the most important question is “what will it feel like?” At first, you may feel a little homesick but this will soon pass as you start to settle in and meet other students and staff. The local students are usually very friendly and anxious to practice their English with you. In most of these universities there is an ERASMUS Club which puts on social events and outings for ERASMUS students. Most students find the whole atmosphere inspirational, e.g. at Padua, you will be walking in the footsteps of Galileo, quite a thought! Almost without realising it, you will absorb the way of life and thinking of your host country and start to ‘feel the pulse’ of the country. The whole experience gives a great boost to your self-confidence and the feeling that you can go on to greater things.

On return, many students tell us that it has been “the best year of their lives”, a “truly great life experience!” in their own words. Returning Physics undergraduates have contributed hugely to the College’s ERASMUS Club which helps promote the ideals behind year abroad courses and arranges social events for incoming students as well as our own students. In the final year back at Imperial, students follow a very similar programme to the normal final year except that they are required to take the Comprehensive papers (done in Year 3 for students not going abroad).

CAN I CHANGE MY MIND?

If you are made an offer for F303 (MSci Physics) or any other Physics programme and you would like instead to have an offer for F309 (MSci Physics with a Year in Europe) then you must tell us, ideally before you arrive, or as soon as possible afterwards. Assuming that you meet the language requirement and there is still time for you to follow language courses if you are not fluent (or nearly fluent), transfers can be possible.