

## STUDY PHYSICS ABROAD

### JUNIOR YEAR AT THE UNIVERSITY OF EDINBURGH



Situated in a magnificent old city, the University of Edinburgh dates back to 1582. Home to an impressive castle, myriad bookstores and underground streets ('closes') well suited for exploring over the weekends, Edinburgh has the modern amenities of a big city like London, yet is compact enough to settle in and feel at home during a semester or year abroad.

The department of Physics is housed in the James Clerk Maxwell building – conveniently located inside the building, the “The Magnet café” with a surrounding study area naturally forms the center of undergraduate Physics student life. As part of a research university which counts Charles Darwin and James Clerk Maxwell among its notable alumni, and physicist Peter Higgs (of the Higgs boson fame) among its Emeritus faculty, the department also takes its teaching mission very seriously as evidenced by its up-to-date teaching labs, small group tutorial classes and ample study space for undergraduates.

The academic year at the University of Edinburgh consists of two semesters and there is very good overlap of core Physics courses with those offered at UCSB. For a semester abroad, it is recommended that you study abroad during the Fall quarter of the Junior year. This allows you to return for Winter quarter at UCSB to continue with the “B” part of multi-part core courses required for the B.S. degree such as Phys 115, and Phys 110.

It is also strongly recommended that you take certain Junior year courses during your Sophomore year, in preparation for Study Abroad at Edinburgh during Junior year. In particular, it is recommended that you complete Phys 103 during the Sophomore year or during the summer prior to departure for study abroad. . In addition, if you plan on taking the elective course Phys 102, as preparation for the study of Quantum Mechanics, it is recommended that you take this course during the Fall of Sophomore year.

If you plan to study abroad for the entire year, you may either take the Junior year course Phys 101 during the Winter of Sophomore year or plan to take it during your Senior year.

Below you will find the course equivalencies between University of Edinburgh Physics program and the UCSB Physics core courses. These are pre-approved and will be accepted by the department towards meeting Physics B.S. degree requirements.

## Approved course equivalencies

### SEMESTER 1 at University of Edinburgh (August - December)

Partner Institution/Country	Subject area	EAP course year	Semester	Partner University course title	UCSB units	Partner University course number	Pre-approved UCSB Equivalent
University of Edinburgh United Kingdom	CORE	3 <sup>rd</sup> year	Fall	Foundations of Quantum Mechanics	4	PHYS09051	Phys 115A***
	CORE	3 <sup>rd</sup> year	Fall	Thermodynamics	4	PHYS09021	Phys 119A
	CORE	3 <sup>rd</sup> year	Fall	Foundations of Electromagnetism	4	PHYS09050	Phys 110A
	CORE	3 <sup>rd</sup> year	Fall	Lagrangian Dynamics	4	PHYS10015	Phys 104

### SEMESTER 2 at University of Edinburgh (January – May)

Partner Institution/Country	Subject area	EAP course year	Semester	Partner University course title	UCSB units	Partner University course number	Pre-approved UCSB Equivalent
University of Edinburgh United Kingdom	CORE	4 <sup>th</sup> year	Spring	Quantum Physics	4	PHYS10043 <sup>†††</sup>	Phys 115C
	CORE	3 <sup>rd</sup> year	Spring	Statistical Mechanics	4	PHYS09019	Phys 119B
	CORE	4 <sup>th</sup> year	Spring	Classical Electrodynamics	4	PHYS11045 <sup>§§§</sup>	Phys 110B

\*\*\*If you study at Edinburgh for 1 semester and enroll in PHY09051, you will get credit towards UCSB Phys 115A. If on the other hand, you study abroad for the entire year and enroll in Edinburgh courses PHYS09051 and PHYS10043 or the full academic year version PHYS09053, you will get credit towards UCSB courses Phys 115A, B and C.

<sup>†††</sup> If you study at Edinburgh for a whole year, you are advised to take the full academic year version of the Edinburgh Foundations of Quantum Mechanics course (PHYS09053) for credit towards UCSB Phys 115A, B and C.

<sup>sss</sup> Note that this is an advanced course, offered for 4<sup>th</sup> year and 5<sup>th</sup> year (Masters) students at Edinburgh and is well above the level of UCSB Phys 110B. If you study at Edinburgh for a whole year, you may take instead the full year course Electromagnetism and Relativity (PHYS10093) for credit towards 110A and B.

## Course Catalog

The complete Physics course offerings, including many interesting electives, for academic year 2016-2017 is found here – [http://www.drps.ed.ac.uk/16-17/dpt/cx\\_sb\\_phys.htm](http://www.drps.ed.ac.uk/16-17/dpt/cx_sb_phys.htm)

Please note that the courses marked “SS” are not available for visiting students. For courses that are year-long, examinations will be conducted at the end of the academic year. Therefore, if you plan to only study abroad during the Fall semester, you must enroll in the version of the course marked “VV” in order to avail of early-exit exams.

## Class Timetable

Visit [https://www.ted.is.ed.ac.uk/UOE1617\\_SWS/default.aspx?context=modulebucket](https://www.ted.is.ed.ac.uk/UOE1617_SWS/default.aspx?context=modulebucket) to view course timetable. For example, from the pull down menu, “Select School: School of Physics and Astronomy”, select “Yes” for “Only show modules for visiting students” and then choose multiple courses under “Select courses”, select view week as “Semester I” and press “View Timetable” button to view the timetable and potential course conflicts for Semester I.