

**Pre-Honours Optional Courses 2008/9**

Students are eligible to select courses from all around the University, provided that they satisfy any pre-requisite requirements of that course, and that course does not have timetable clashes with any of their compulsory courses.

One factor that students may wish to consider when choosing courses is the opportunity to keep open the option of degree transfers at the end of 1st or 2nd year, either to a different flavour of physics, or a completely different degree. To assist with this, summarised below are the outside course options that would need to be chosen to satisfy the DPTs of different degrees within the University.

Following this is a listing of outside options which are commonly chosen by Physics students, along with details of any timetable clashes or pre-requisites. This can be used as a guide, but is far from a complete listing of options. For a complete course catalogue and details of Degree Programme Tables, see: [www.drps.ed.ac.uk](http://www.drps.ed.ac.uk). For timetable data see: [www.timetab.ed.ac.uk](http://www.timetab.ed.ac.uk)

<b>Degree</b>	<b>Required Courses</b>	<b>Code</b>	<b>Credits</b>	<b>Year</b>	<b>Sem.</b>	<b>Pre-requisites / comments</b>
Computational Physics	Informatics 1: Computation & Logic	U04323	10	1	S1	Must take U04324 in parallel
	Informatics 1: Functions & Programming	U04324	10	1	S1	Must take U04323 in parallel
	Computer Simulation	U00549	20	2	S2	Physics 2A
Physics with Meteorology	Meteorology: Atmosphere and Env.	U01598	20	2	S1	
	Meteorology: Weather and Climate	U01602	20	2	S2	
Physics with Music	Musical Acoustics	U00541	20	1	S1	
	Music 1C (or A-level or Higher)	U00776	20	1	S2	
	2 of Music 2A	U02745	20	2	S1	
	Music 2B	U02746	20	2	S2	
	Music 2C	U03991	20	2	Y	
Maths & Physics or Mathematics	Differential Eq Mod Sol	U01462	10	1	S2	
	Lin Prog Graph Theory	U01461	10	1	S2	
Geophysics	Earth Dynamics	U01208	20	1	S1	
	Intro to Geophysics	U02089	20	2	S1	
	Sedimentology A	U01850	20	2	S1	Earth Dyn
Chemical Physics	Chemistry 1A	U00963	20	1	S1	
	Chemistry 1B	U00964	20	1	S2	Chem 1A
	Either Chemistry 2	U00968	40	2	Y	Chem 1A and 1B
	or Physical Chemistry 2	U01725	20	2	Y	Chem 1A and 1B
Chemistry	Chemistry 1A	U00963	20	1	S1	
	Chemistry 1B	U00964	20	1	S2	Chem 1A
	Chemistry 2	U00968	40	2	Y	Chem 1A and 1B
Civil Engineering	Engineering 1	CE0021	20	1	S1	
	Civil Engineering 1	CV0001	20	1	S2	Eng 1
Mechanical Engineering	Engineering 1	CE0021	20	1	S1	
	Mechanical Engineering 1	ME0001	20	1	S2	Eng 1
Electrical Eng Or Electronics	Engineering 1	CE0021	20	1	S1	
	Electrical Engineering 1	EE0001	20	1	S2	
Computer Sci or Informatics	Informatics 1: Computation & Logic	U04323	10	1	S1	Must take U04324 at same time
	Informatics 1: Functions & Programming	U04324	10	1	S1	Must take U04323 at same time
	Informatics 1: Object Oriented Program.	U04326	10	1	S2	U04323,U04324; U04325 at same time
	Informatics 1: Data and Analysis	U04325	10	1	S2	U04323,U04324; U04326 at same time
<b>Commonly Chosen Outside Option Courses:</b>						
<b>Area</b>	<b>Course</b>	<b>Code</b>	<b>Points</b>	<b>Year</b>	<b>Sem.</b>	<b>Pre-requisites / comments</b>
Physics	Astronomy 1S: Stellar & Planetary Sci.	U03371	20	1	S2	Alternate years; runs 2008-09
	Discover Astronomy G: Gals & Cosmo	U03375	20	1	S1	Mainly for non-scientists; runs 2008-09
	Astronomy 1G: Galactic & Cosmo. Sci.	U03373	20	2	S2	Alternate years; runs 2009-10
	Discover Astronomy S: Stars & Planets	U03374	20	2	S1	Mainly for non-scientists; runs 2009-10
	Introductory Musical Acoustics	U01667	20	1	S1	
	Musical Acoustics	U00541	20	1	S1	
	Computer Simulation	U00549	20	2	S2	Physics 2A
	Problem Solving in Physics, Sem 1	U03739	20	2	S1	Physics 1A and Physics 1B
	Problem Solving in Physics, Sem 2		20	1 or 2	S2	Phys 1A & 1B (1B at same time is OK).
Mathematics	Maths support for Direct Entry	U04306	0	2	S1	Compulsary for fast-track entrants
	Differential Eqns, Modelling & Solution	U01462	10	1	S2	Common for MP; Clashes in Yr 2
	Linear Prog and Numerical Analysis	U03826	10	1	S2	Common for MP; Clashes in Yr 2
	Numerical Differential Equations	U03663	10	2	S1	Pass Specialist Yr1 Maths; Clash MM3
	Probability (Year 2)	U01480	10	2	S1	Passes in Year 1 mathematics

	Statistical methods	U01481	10	2	S1	Passes in Year 1 mathematics
	Statistical models	U01483	10	2	S2	Prior attendance at U01480, U01481
Informatics	Computer Literacy 1	CS0001	20	1	S1	
	Comp Prog Skills & Concepts 1	CS0004	20	1	S1	
	Comp Foundation of Cognitive Sci	U03859	20	1	S2	
	Human communication 1	CG0001	20	1	S2	
	Informatics 1: Computation & Logic	U04323	10	1	S1	Must take U04324 at same time
	Informatics 1: Functions & Programming	U04324	10	1	S1	Must take U04323 at same time
	Informatics 1: Object Oriented Program.	U04326	10	1	S2	U04323&4; U04325 co-req. Clash FoMP
	Informatics 1: Data and Analysis	U04325	10	1	S2	U04323&4; U04326 co-req; Clash FoMP
	Informatics 2A	U02599	20	2	S1	All 4 Info-1 courses are pre-requisites
	Informatics 2B	U02600	20	2	S2	All 4 Info-1 courses are pre-requisites
	Informatics 2C	U02601	20	2	S1	All 4 Info-1 courses are pre-requisites
	Informatics 2D	U02602	20	2	S2	All 4 Info-1 courses are pre-requisites
Chemistry	Chemistry 1A	U00963	20	1	S1	Higher B or equivalent; clashes Yr 2
	Chemistry 1B	U00964	20	1	S2	Chem 1A; clashes Yr 2
	Chemistry 2	U00968	40	2	Y	Chem 1A and 1B
	Environmental Chemistry 2	U00969	20	2	S2	Chem 1A and 1B
	Physical Chemistry 2	U01725	20	2	Y	Chem 1A and 1B
	Materials Chemistry	U02663	20	2	S1	Chem 1A & 1B, or grade B at A-level/AH
Earth Science	Earth Dynamics	U01208	20	1	S1	Timetable problem in Yr2
	Earth surface systems	U03237	20	1	S2	Timetable problem in Yr2
	History of Life	U02516	20	1	S2	
	Sedimentology A	U01850	20	2	S1	Earth Dyn
	Mineralogy and Petrology	U01918	20	2	S2	Earth Dyn
	Intro to Geophysics	U02089	20	2	S2	Timetable problem in Yr2
	Geomorphology	GG0004	20	2	S2	Earth Dyn
	Natural Hazards	U02515	20	2	S1	Clash in Yr-1
Meteorology	Meteorology: Atmosphere and Environ	U01598	20	2	S1	Timetable problem in Yr1
	Meteorology: Weather and Climate	U01602	20	2	S2	Timetable problem in Yr1
Ecological and biological science	Sustainability, Society and Env.	U02841	20	1	S2	
	Soil, Water and Atmospheric Processes	U01806	20	2	S2	
	Origin and Diversity of Life 1	BI0001	20	1	S1	
Engineering	Engineering 1	CE0021	20	1	S1	Clash Yr 2
	Mechanical Engineering 1	ME0001	20	1	S2	Eng 1; Clash yr 2
	Chemical Engineering 1	CE0001	20	1	S2	Eng 1; Clash yr 2
	Civil Engineering 1	CV0001	20	1	S2	Eng 1; Clash yr 2
	Electrical Engineering 1	EE0001	20	1	S2	Eng 1; Clash yr 2
	Electronics 1	U01655	20	1	S2	
	Fluid Mechanics 2	U00469	10	2	S1	Clash Yr 1
	Geotechnical Engineering 2	CV0008	20	2	S1	Eng 1, Physics 1
	Electronics 2	U00478	20	2	S1	MM2 or Eng 1
	Electronic Curcuits and devices	U00480	10	2	S2	EE1 or Eng 1
	Mechanical Engineering Design 2B	U01293	10	2	S2	Physics 1
Management and enterprise	Innovation and Enterprise for Sci & Eng	U01858	20	1	S2	
	Industrial management 1	BS0002	20	1	S1	Clash Yr 2
	Career Development Planning	U02812	0	2	S2	
Social Science	History of Medicine	SU0005	20	1	S2	
	Science and Society	SU0001	20	1	S1	
	Technology and Society 2h	SY0071	20	2	S1	
Philosophy	Logic 1	PP9976	20	1	S1	
	Philosophy of Science 1h	PP9977	20	1	S2	
	Philosophy 2A	PP0033	40	2	Y	Logic 1h and Phil of Sci 1h
Language	Linguistics 1Ah	U00555	20	1	S1	Clash yr 2
	Introductory French Language	FR0002/3	20	1	S1/S2	Standard Grade or GCSE
	Intermediate French Language	FR0007/9	20	1	S1/S2	Level 1 or Weak A level
	Introductory German Language	GE0003	20	1	S1	None
	Intermediate German Language	GE0019	20	2	S2	Level 1 or Standard
	Introductory Spanish Language	HS0003/4	20	1	S1/S2	None
	Intermediate Spanish Language	HS0008/9	20	2	S1/S2	55% in Level 1 or Standard Grade
	Introductory Italian Language	IT0002/3	20	1	S1/S2	None
	Intermediate Italian Language	IT0004/5	20	2	S1/S2	Level 1 or Standard Grade