

FAQs

1. What is the relationship between departments and colleges?

The academic content for the course is determined and delivered by the department. The colleges provide the accommodation, day-to-day living environment for students and in the first two years small group subject specific supervision. <http://www.cam.ac.uk/admissions/undergraduate/colleges/>

2. How do I choose my college – do only some colleges take physics students?

Students will study Natural Sciences (Physics) at all colleges. The college that you choose will be your home for three or four years and therefore the most important consideration is whether you will find it a comfortable and appropriate environment for you personally. E.g. Large versus small, modern versus traditional. <http://www.cam.ac.uk/admissions/undergraduate/colleges/choosing.html>

3. What subjects and grades will I need to get a place?

Essential: A level (/Advanced Highers/Higher Level IB) in Physics and Mathematics, or Mathematics and Further Mathematics (with three units of Mechanics).

Useful: AS or A level(/Advanced Highers/Higher Level IB) Further Mathematics, Chemistry.

Typical offers are: A*A*A (A level), AAB/AAA (Advanced Highers), 40-42 pts with 776/777 (IB Higher Level).

<http://www.cam.ac.uk/admissions/undergraduate/courses/natsci/requirements.html>

4. Why shouldn't I just do physics on its own somewhere else?

Students studying physics as part of Natural Science will cover a similar amount if not more than studying just physics at other universities. The strength of the natural science course is that it provides a background in two other sciences and links to many other subjects enabling you to piece together a more complete understanding.

5. Is it more expensive to study at Cambridge?

Tuition fees at Cambridge are the same as almost every other university in the country and we also have one of the most extensive Bursary Schemes.

<http://www.cam.ac.uk/admissions/undergraduate/finance/>

6. How many hours a week will I do?

In the first year there will be approximately 22 hours of timetabled work which includes: lectures, practicals, and supervisions. This does not include your own supervision preparation and time spent reading around the subjects.



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Natural Sciences Tripos Physics

Come and study at the top[†] physics
department in the UK.

Cambridge's Physics department, the Cavendish Laboratory, has been instrumental in an impressive range of scientific discoveries over the past century. Today it provides world-class teaching and research in all aspects of physics.

Rank	Institution	Student Satisfaction	Research Assessment	Entry Standards	Graduate Prospects	Overall Score
1	Cambridge	4.1	2.85	578	82	100.0
2	Oxford	4.0	2.65	573	84	99.1
3	Imperial College	3.9	2.75	531	86	98.7
4	St Andrews	4.2	2.85	500	82	98.7
5	Durham	4.0	2.75	542	82	98.4

[†] 2011 data, <http://www.thecompleteuniversityguide.co.uk/league-tables/rankings?s=Physics+%26+Astronomy&y=2011>

Undergraduate study in Physics.

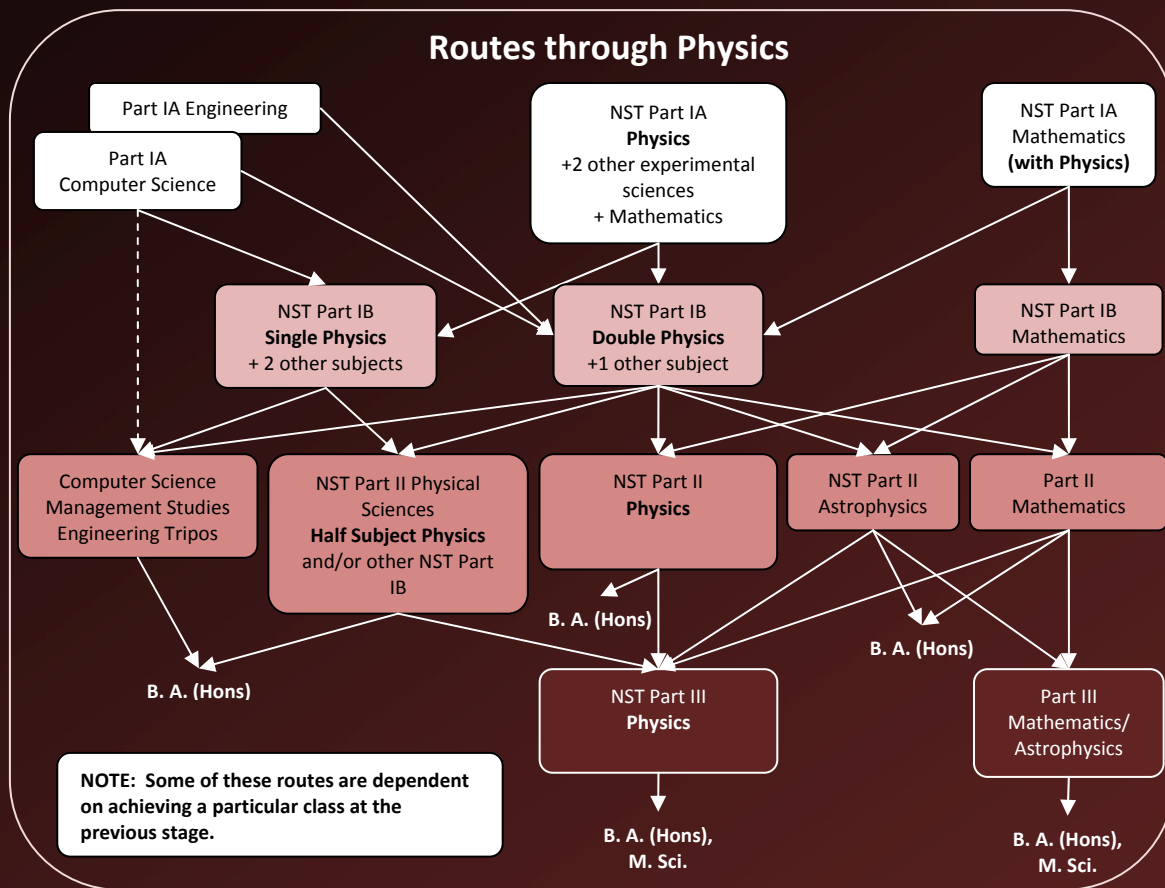
All science students in Cambridge read for the Natural Science Tripos, which covers all the Physical and Biological Sciences, but is separate from Medicine, Engineering, and Mathematics. The teaching term is short and intense (three terms of eight weeks) and in the first three years most of the assessment is by end of year examination.

First year (Part IA) physicists (around 400 in total) also take two other experimental sciences and mathematics. In the second year (Part IB) and third years (Part II) about 150 physicists concentrate solely on physics and mathematics and you can graduate at this point with a BA degree. Most of our students (around 120) choose to continue to a fourth year (Part III) where they take a range of masters level courses in physics and related disciplines, do an advanced project, and graduate with an MSci degree.

The First Year (part IA):

Students make a free choice of three experimental subjects from Physics, Chemistry, Materials Science, Earth Sciences, Biology of Cells, Evolution and Behaviour, and Physiology of Organisms. In addition, all NST students reading Physics will take the NST Mathematics

Routes through Physics



course. Paper 1 of Part IA of the Computer Science Tripos may be substituted for one of the three experimental subjects.

The Physics course assumes *either* previous experience at A2 level (or equivalent), or A2 level Further Maths (including the Mechanics modules). Ideally students would have done both Physics and Further Maths, but this is definitely not essential.

The Part IA Physics course is given in three lectures per week plus a four-hour experiment every two weeks. Scientific subjects studied include **Mechanics, Relativity, Fields, Oscillations and Waves, and Quantum Physics.**

Research at the Cavendish:

It is the policy of Cambridge University that lecturers are active researchers and as the largest physics department in the UK this enables us to utilise expertise from all areas of physics.

Our current research groups span the following fields: Astrophysics; Atomic, Mesoscopic & Optical Physics; Biological & Soft Systems; Detector Physics; High Energy Physics; Inference; Microelectronics; Nanophotonics; Optoelectronics; Quantum Matter; Surfaces, Microstructure & Fracture; Semiconductor Physics; Theoretical Condensed Matter Physics; Thin Film Magnetism.

