MSci and BSc in Physics with Science Education (PSE) Degree

You are applying to study physics at Imperial, one of the world’s top institutions, and probably have several possible career paths in mind. Thinking about the next generation of physicists may not be something that will have occurred to you, but one of the most rewarding career options to consider is Science Teaching. Many schools do not have a specialist physics teacher, so your skills as a physicist will certainly be in great demand.

Since 2012/13 the Physics department at Imperial College has offered a degree option called Physics with Science Education (PSE). There are two versions: the three year BSc and the four year MSci. These cover nearly 90% of the regular physics BSc (F300) and MSci (F303) programmes and provide training in secondary education (provided at Imperial by Canterbury Christ Church University). On successfully completing the PSE degree, students graduate with a physics degree that is fully accredited by the Institute of Physics, and has Qualified Teacher Status (QTS). Whereas the typical route for physics graduates who decide to pursue a career in teaching involves studying a one year Post Graduate Certificate in Education (PGCE) after their BSc degree, graduates from PSE are immediately qualified to teach science at a school in England and Wales. Of course, other career options for physics graduates also remain available.

Our partners, Canterbury Christ Church University, are one of the top providers of Initial Teacher Training. As well as providing the formal training in pedagogy, they assess your performance on the teaching practice placements.

Registering for PSE

There is no direct entry into PSE. Students on most of the current degree programmes can transfer into PSE at the end of their second year. Students interested in transferring onto the PSE degree must complete a second year prerequisite course Communicating Physics. Students applying to take the PSE degree must pass an interview that assesses their motivation for making the transfer.

Teaching Content of the PSE degree

Students on PSE are required to take the Level 3 option Communicating Physics in year 2, in which they spend about 10 half days in a London school assisting with Physics teaching. After the exams in June, they spend five weeks full time on their first teaching practice. Pedagogical instruction and the second (11 week) teaching practice take place in the first term of Year 3. The third (six week) teaching practice takes place after the exams finish at the beginning of June. BSc students graduate at the end of July and MSci students then complete the full fourth year of their physics degree programme and graduate one year later.

Physics Content of the PSE degree

PSE students take the same core subjects in years 1 and 2 as students on F300. In year 3 there is a slight reduction in the core material, and while students on F300 take four options in Year 3, PSE students take only two. Students on the MSci option take the full fourth year.

Bursaries Available for PSE students

We are delighted to confirm that we have secured a £9,000 government bursary for each student registered on the PSE degree.

Further information can be obtained from Kayleigh Murphy (kayleigh.murphy@imperial.ac.uk) or Dr Vijay Tymms (v.tymms@imperial.ac.uk)