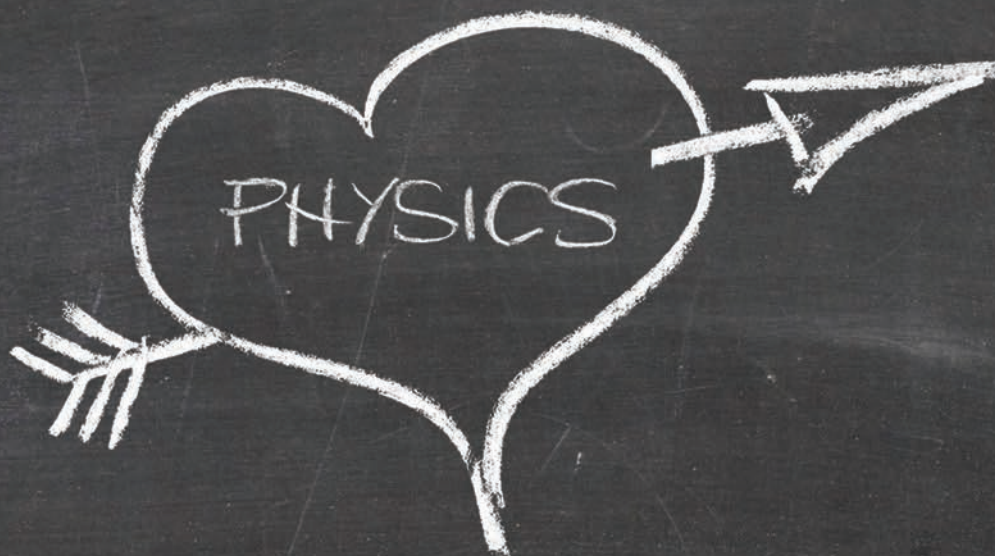
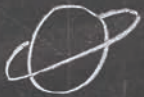


LOVE
PHYSICS?



Pass on the passion. *Teach.*



foreword

$$E=mc^2$$



My early experience of science in school was not happy. I remember saying, “If this is science then I don’t want to do it.” It was all facts and no explanations.

Then, when I was about 15, a wonderful physics teacher joined and all my ‘whys’ met answers. It was exhilarating. I became a polymer scientist and went on to lead a university department of engineering as well as working to influence science policy nationally.

Thank you Mrs Nancy Edwards!

But I am not alone – Mrs Edwards must have led dozens of girls into physics and science careers. So she also taught me how important it is to support teachers because of the impact they will have on their students’ futures.

At the IOP, we want to ensure that all students have access to a high-quality physics education, and the opportunity to pursue physics further. As a physics teacher, you will help your students to discover their own passion for the subject, while developing their essential skills and confidence.

This booklet will take you through some of the rewards of the career, many of which are unique to being a physics teacher. It also explains the routes into teaching, ways to gain important school experience, and the funding options available to you.

If you have any questions, don’t hesitate to get in touch with us using the contact details on the back of this brochure.

With best wishes for the future,

Professor Dame Julia Higgins
President, Institute of Physics



Teaching physics is doing physics



Imagine a job where you are able to use your physics knowledge in an inspiring and thought provoking way. Or one where you play a crucial role in shaping the next generation of physicists and engineers.

Teaching takes you back to where it all started – where you first discovered your passion for physics. We guarantee that you will make new discoveries and develop a deeper understanding of physics that you never thought possible, simply by expressing and communicating the subject in new ways.

Career opportunities

Once you are a qualified teacher, your career options remain varied. As a physics teacher you could move up to gain responsibility for the physics department, become a head of year, or focus on special needs or pastoral care.

There are also many opportunities beyond the classroom, from coaching a sports team to running an astronomy or STEM club.

Starting salaries

Starting salaries for teachers match what you would receive in many other professions, and in some cases can even be higher. You can expect to start as a newly qualified teacher in England on a minimum of £22,917 a year (getintoteaching.education.gov.uk, October 2017).

Schools have been given more freedom over how they pay their teachers, linking teachers' pay more closely to their performance, with scope for higher rewards and more rapid progression for the most successful teachers.



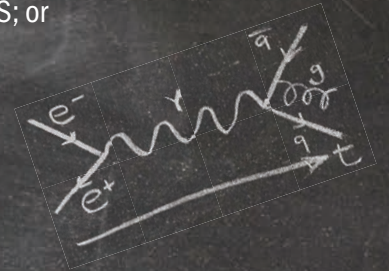
Step 1: Choose a suitable training route

Whether you are just starting out, or looking for a new career, there is a training course for you. You can study full- or part-time and can start as an undergraduate or a graduate. An Initial Teacher Education (ITE) accredited course will lead to qualified teacher status (QTS), which enables you to teach in state-funded schools.

Undergraduate route

If you don't have a degree, you can:

- Start a degree course that also gives you QTS; this takes four years, full-time. In the end, you'll receive a Bachelor of Education (BEd) or Bachelor of Science (BSc) with QTS; or
- Start a non-teaching degree and then enrol on a postgraduate ITE course



Postgraduate route

University-led training

University-led ITE typically takes one year of full-time study and leads to a Postgraduate Certificate in Education / Professional Graduate Certificate in Education (PGCE) qualification. It is based at a higher-education institution (HEI) and includes around 24 weeks of placements in schools. The course mainly focuses on developing your teaching skills and understanding of the theory of education.

School Direct

Training will take place in a school that will deliver specific training tailored to your requirements and the school's needs. There is an expectation that you will be offered a job once you are qualified. School Direct ITE leads to QTS and often a PGCE qualification, depending on the school.

School Direct (salaried)

School Direct (salaried) is for graduates with three or more years of work experience¹ who want to move into the classroom. You will be paid a salary as an unqualified teacher, trained “on the job” and will be employed by the school once qualified.

School-centred initial teacher training (SCITT)

The SCITT route provides practical, hands-on teacher training delivered by experienced, practising teachers based in their own school or at a school in their network.

Other routes

Subject Knowledge Enhancement courses

If your degree didn't include sufficient physics to enrol on an ITE course straight away, you can take a Subject Knowledge Enhancement (SKE) course to bring your physics up to scratch. You will need some experience of physics though, usually to A-level standard. These courses vary in length, depending on your needs, and are offered by many HEIs. Talk to your prospective provider for more information. SKE courses are only available in England.

Researchers in Schools

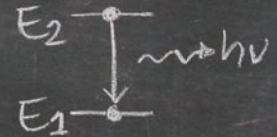
This is a unique teacher-training programme tailored for PhD researchers. Maths and physics applicants are eligible for a salary uplift and off-timetable day, including opportunities to continue researching.

Find out more at researchersinschools.org.

Teach first

This charity recruits high-calibre individuals and matches them with schools in challenging circumstances where they teach for a minimum of two years. Trainees join a Leadership Development Programme.

Find out more at teachfirst.org.uk.



¹ Schools can decide to accept applications from candidates with less work experience in hard-to-fill subjects such as physics

Step 2: Choose a training programme

Once you have chosen your preferred training route, you'll need to select a training programme. Not all providers offer these programmes, so visit ucas.com and click on teacher training to find out which providers offer your preferred training programme.

Physics with Science

This is the most common training programme, which enables you to focus mainly on teaching physics but also combines some biology and chemistry content.

Physics with Mathematics

The biology and chemistry content that would be included in a Physics with Science programme is replaced with maths.

Step 3: Get some school experience

Whichever training route you opt for, your ITE provider will expect you to have some recent school experience. This not only shows them that you are familiar with the current school environment, but should also help you confirm that you are making the right career decision.

Our School Experience Programme can put you in touch with schools in your area that are willing to offer short-term observational experience. Register at iop.org/sep.

You can also arrange a school-experience placement through Get into Teaching. To find out more, visit getintoteaching.education.gov.uk/getting-school-experience.

Step 4: Explore your funding options

Fees for ITE programmes are approximately £9,000 per year. However, if you are a UK or EU resident and choose a postgraduate ITE programme leading to QTS, you may be eligible for a tax-free bursary of up to £26,000.

IOP Teacher Training Scholarships worth £28,000 are also available. These are exceptional awards available to outstanding applicants. For full details, visit iop.org/scholarships.

Step 5: Apply

Applications for university-led and school-led teacher training in England and Wales are submitted through UCAS Teacher Training. Applications to study Teacher Education in Scotland are made through the UCAS Undergraduate scheme.

There are two application windows – Apply 1 and Apply 2. In Apply 1, you can select up to three programme choices when you make your application. If you're unsuccessful at this stage, you can move to Apply 2, where you make one choice at a time that will be considered by providers sequentially. Visit ucas.com/teacher-training for more information.

Even though physics teachers are in demand, it still pays to apply early. We urge applicants to take advantage of the UCAS combined-application system and, if applying for school-led training, to consider applying for the university-led route as well.

Further help

IOP support for early career teachers

We have nationwide networks of teacher supporters in UK and Ireland, offering workshops and advice for all teachers of physics. Sign up to our early career teacher programme to receive information about resources, e-newsletters and events tailored especially for your training year and your first years in the classroom. To find out more, visit iop.org/education/itp.

Premier Plus

We recommend that you register with Get into Teaching, which offers a "Premier Plus" service. This includes one-to-one advice on becoming a teacher and support with submitting your application. For full details, visit getintoteaching.education.gov.uk/premier-plus.

Teachers' student loan reimbursement

In specific areas of England, physics teachers starting teacher training and those who are in years 1–5 of teaching from September 2018 will be eligible for the Teachers' Student Loan Reimbursement. Find out more getintoteaching.education.gov.uk

Contact us

Do you still have unanswered questions about physics teacher training? Get in touch.

Email teach@iop.org

Tel 020 7470 4959

Web iop.org/teach

Twitter [@PhysicsNews](https://twitter.com/PhysicsNews)

Facebook facebook.com/instituteofphysics

Useful links

The government's teacher-training website
getintoteaching.education.gov.uk

The Universities and Colleges Admissions Service (UCAS) for teacher training
ucas.com/teacher-training

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This information is correct at the time of print and applies to England. For teaching advice for Northern Ireland, Wales and Scotland, refer to the General Teaching Council for Northern Ireland, the General Teaching Council for Wales and the General Teaching Council for Scotland.

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