



## Find out about

# Physics AS/A level

This guide will help you decide whether Physics A level is right for you – it gives you all the essential information you need about the course and studying with NEC. You can also speak to our friendly team (details at the end of this guide) who can advise you.

## About this course

Physics is a fundamental science that can give you access to a wide range of opportunities in higher education or vocational training. Together with other science subjects it gives you a gateway to a career in diverse fields like engineering, medicine, technology and computing, architecture, astronomy.

Physics is the study of how things work, from the smallest subatomic particles to incomprehensibly large galaxies. With an ambitious aim to understand – or better understand – nature and the universe, it involves thinking logically and critically and solving problems. In this course you'll learn about mechanics, electricity, waves and light, gravitational fields and thermodynamics, developing valuable analytical and practical investigative skills.

## The qualification

The A level award is recognised by employers and educational institutions as a mark of significant educational achievement and is important for many careers and for vocational training and higher education. This A level is a linear qualification which means you will take exams at the end of the course

The AS award is separate from the A level and is made up of Part 1 – about half – of the A level course, with a value to higher education providers and employers of about 40% of an A level.

## What's included with the course?

When you enrol you will receive the following:

- access to *learn@nec* website
- online access to course materials which you can download and print or study on screen
- tuition from your personal tutor for up to 24 months
- a free e-book version of the essential textbook(s) where possible
- supporting materials including a including a Time Planner to help you plan your study timetable and information which explains how to enter for exams
- NEC's guide to study skills: *How to Succeed as an Independent Learner* plus guidance on spelling, punctuation and grammar
- details of how to contact your personal tutor and an NEC course coordinator.

## What's not included?

- exam fees where exam(s) or assessed coursework are necessary
- additional textbooks for some courses.

## Your goals and this course

Before deciding to enrol on this course, think about what you want to achieve. For example, you may want to:

- develop your skills in the subject or learn more about it for your own satisfaction and interest
- gain the qualifications in order to improve job prospects or go on to further study such as a degree programme.

It's important to check that this course will help you to achieve your goals. One way is to contact a college or university where you'd like to study in future to find out if this course is part of the entry requirements. Or speak to the Human Resources department in an organisation where you may like to work to find out what qualifications they require.

*'I chose to study A level biology because I fancied a career change. I gave up my study of science at GCSE, went to university to study English literature and have been working in publishing for the last few years. Having my baby made me think about where I wanted to go with my career and I decided that I would be interested in physiotherapy.'*

*'An A level in biology will give me the opportunity to return to university or make me a more desirable candidate for an assistant therapist role.'*

**Emma Hollindrake**

*'I had a look at attending a local college, but this was the best option for me because of its flexibility. If you know you can motivate yourself, and you don't have problems working on your own, I would absolutely recommend it.'*

*'It allows me to choose when I do my assignments, so whilst my children might be busy doing something else I can do some study; or, if my husband's working late and they're in bed, I can sit down and attack a few questions.'*

*'I didn't want it to encroach on family life, so I've been doing it in the odd hours I get to myself, which are not many when you've got three children!'* **Sarah Yewman**

## Learning with NEC

As a student with NEC you're in charge: you can enrol any time and you choose where and when to study and set your own deadlines. This means that you can fit the time you spend studying around work and family commitments. Such independence can be very attractive, but it can also be demanding. This is why NEC's courses are designed to support and guide you every step of the way.

NEC has been delivering home study or distance learning courses for over 50 years and, with an average of over 7000 students each year, is a leader in providing courses for GCSE, A level and vocational courses. Drawing on our experience and on research findings into the way adults learn, we develop enjoyable courses that include:

- carefully designed course materials
- individual support from an expert tutor
- access to our virtual learning environment, *learn@nec*
- thorough induction to the course and systems.

### learn@nec

The *learn@nec* website is our virtual learning environment and the gateway to your course and the NEC community. Its flexible design means you can study whenever you want and wherever you want. *learn@nec* is where you'll be able to discuss your course with your peers, your tutor and the team at NEC. It's also where you'll access your course materials.

You can also save and print our materials at home if you want to so you can work offline.

### Course materials

All of our course materials are written and selected by subject matter experts, including experienced teachers, examiners and authors. The content is closely matched to the specification, so you can be confident that the course covers what you need to learn to prepare for the qualification.

The course materials are designed to provide a clear guide to your work through the course. The text is easy to follow,

*'It has now been over six months since I began my courses with you, and I am extremely impressed by the standard of tutoring and the resources available for students to succeed. Thank you!'* **NEC Biology student**

*'I like the forums on the course. I'm having a gap year to get some extra UCAS points and to decide what I want to do at uni and it's nice to know there are other people in the same situation as me.'* **NEC Sociology student**

*'I really like using the site as it is easy to navigate and is well structured. Furthermore, everything is nicely organised and so allows me to remain organised when studying.'* **NEC History and English student**

*'I thought the videos were very good and easy to follow. They really encouraged me to try out the features on the site as well as making an appropriate start to the course. In addition, I thought the use of an introductory assignment was very beneficial for everyone and an excellent idea. It allows the tutor to get to know the student and the student to get to know the system.'* **NEC English Language student**

with lots of examples, illustrations, activities, additional reading where appropriate, revision points and helpful suggestions that bring each subject to life. It is organised into topics and sections to give a clear path through the course. And it is structured to build your knowledge, skills and understanding step by step.

At the end of each section there is an assignment to help you to check your learning and practise answering the type of questions you will meet in the examinations. You submit this to your tutor for marking, feedback and advice.

In addition to the written course materials, you will be directed to other resources such as useful videos, interactive quizzes and a free e-book of the essential course textbook, where applicable.

To check out the course materials you can download a sample from the course description page on the website.

### Practical work

Practical work is part of the study of physics so you will also be encouraged to carry out practical activities and investigations as part of the course. This course includes core practical activities (8 at AS level/Part 1 A level and another 8 at Part 2 A level). We have modified these activities where possible so that you can do these investigations at home using equipment that is readily available.

If you would like to check out the course materials you can download a sample from the course description page on the website.

## Tutor support

As a student with NEC you'll have a personal tutor who will support you while you work through the course. NEC tutors are subject experts who understand distance learning.

The course is comprehensive, so you'll find that you don't need your tutor to be a 'teacher': your tutor is there to mark and comment on your assignment work and to answer any queries you have about the subject to help you get the most from the course.

Your tutor will give you helpful and encouraging feedback, so that you know what you're doing well and where you can make improvements. He or she will also help you prepare for the examination in order to achieve the qualification.

Above all, your tutor is on your side and will want to see you succeed.

### Tracey is a tutor for NEC's Psychology, and Sociology courses

She is a qualified teacher and social worker and has completed postgraduate training in Learning Disability Studies.

The best thing about being a tutor for NEC, Tracey says, is 'NEC students. They never fail to inspire and motivate me. Many of our students work in their own homes and have to be disciplined to study like this, so it is always great to have enthusiastic students who work hard to complete their courses.'

## Exam support

We can offer our students a guaranteed exam place at one of our partnership exam centres. They deal with all types of examination – exams, oral exams and non-exam assessments (NEAs) – and provide a professional and friendly service, which is valued highly by our students. By choosing one of our partnership exam centres you can be confident that the application process will be seamless.

## Course overview

### Specification

This course is designed to meet the specifications for GCE AS and A level Physics from the awarding body Edexcel, specification code: AS Physics 8PH0; A level Physics 9PH0. It uses the concept-led approach.

### Entry requirements

An A level is a level 3 course and builds on the skills and knowledge of level 2 or GCSE. GCSE Science (double award) or GCSE Physics (minimum grade C) or Intermediate GNVQ Science or a BTEC First in Science, and GCSE Maths or equivalent, is strongly recommended for this course.

### Completion time

It's really up to you but, as a guide, an AS level takes about 120–150 hours and an A level course takes about 250–300 hours plus extra time for assignment work you submit to your tutor. Many students allow 18–24 months to complete an A level, but some complete the course within a year.

### Essential textbooks

**AS and Part 1 A level:** Benn, M and George, G (2015) *Edexcel A level Physics Student Book 1*, Hodder Education ISBN 978-1471807527

**Part 2 A level:** Akrill, T and George, G (2015) *Edexcel A level Physics Student Book 2*, Hodder Education ISBN 978-1471807558

These books will be provided free as e-books as part of the course.

Tear, C (2013) *Maths Skills for A Level Physics*, Oxford University Press

You will need to buy this book; it is not available as an ebook.

## Assessment

Assessment for AS and A level Physics is by examination only. There is no examined coursework.

**AS Physics:** two exam papers, each 1 1/2 hours

**A level Physics:** three exam papers two 1 3/4 hours and one 2 1/2 hours

There is a separate Practical Endorsement which is a non-exam assessment (NEA). See below.

## Experiments

The physics specification contains recommended practical activities, which are assessed in exams and in a separate Practical Endorsement. To do many of the experiments you can set up a 'lab' in your kitchen at home using equipment and materials (from our detailed equipment list) that you can buy easily. Occasionally an experiment requires the use of a scientific laboratory. You may be able to get permission to use one in your local school for this. In recognition that it is not always feasible the course provides detailed case studies of experiments and the resulting data, and you can use these instead of your own practical experiments as the basis for writing assignment and practical tasks.

## The Practical Endorsement

The science Practical Endorsement is in addition to the A level and is achieved by carrying out certain practical skills (see the A level specification for details) in the presence of a qualified assessor (teacher or tutor).

You do not need the Practical Endorsement to be awarded the A level Physics. However, some universities may insist on it or give priority to entrants who have it (more likely for science degrees). Therefore, you are advised to check in good time with any universities you wish to apply to.

We ensure that NEC learners have the opportunity to take the Practical Endorsement and, crucially, we can enter students for the exams if they choose not to take the Endorsement. We are working with some of our partnership exam centres and the Open Science Laboratory at the Open University to deliver this.

## When to enrol

You can enrol at any time. If you plan to sit the exams at a specific time, you may need to enrol by a certain date so that you have enough time to complete the course first. Exams take place every year in May–June.

## What next?

We hope this guide has answered any questions you may have and helped you to decide whether this course is right for you.

Remember you can download a sample of the course from the course information page on our website.

If you have any further questions, please do not hesitate to contact us using the details below.

### **If you are ready to enrol, you have different options:**

- **enrol online** – for many courses you can enrol online through our website. Just choose your course, click ‘enrol now’ and then checkout
- **enrol by telephone** – just call our course advice team free on 0800 389 2839 and we can take your details over the telephone
- **pay in full** – you can pay in full with a credit or debit card
- **pay in instalments** – if spreading the cost would be useful, we can arrange that for you. Just call our course advice team to organise this.

## Contact us

There are many ways to get in touch if you have any more questions.

**Freephone:** 0800 389 2839

**Email us:** [info@nec.ac.uk](mailto:info@nec.ac.uk)

**Website:** [www.nec.ac.uk](http://www.nec.ac.uk)

You can also find us [Facebook](#), [Twitter](#) and [LinkedIn](#)