

# GCSE PHYSICS SNAPSHOT

## OVERVIEW

The following are important features of this specification.

- It offers opportunities to build on the skills and capabilities developed through the delivery of the Northern Ireland Curriculum at Key Stage 3.
- The GCSE Physics specification is divided into three units.
- Units 1 and 2 will each contain prescribed practicals, with a total of nine practicals to be carried out over the two years of this course. Students must carry out these investigations to develop their skills and knowledge of practical science.
- Units 1 and 2 are each assessed by a written examination either at Foundation Tier (grades C–G) or Higher Tier (grades A\*–D/E).
- Unit 3 is a practical skills unit that is externally assessed. It is divided into two parts: Booklet A and Booklet B.

## SPECIFICATION SUMMARY

This CCEA specification in GCSE Physics provides a broad, coherent and practical course that develops confidence in physics and offers students a positive view of science. It encourages students to appreciate the value of physics in their lives and in the wider world around them.

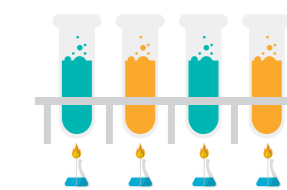
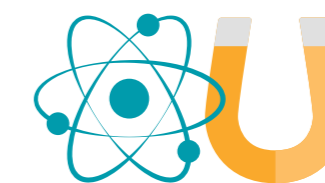
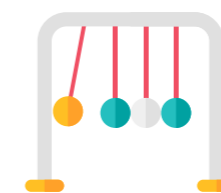
## BENEFITS TO STUDENTS

This specification aims to encourage students to:

- develop their knowledge and understanding of physics;
- develop their understanding of the effects of physics on society;
- develop an understanding of the importance of scale in physics;
- develop and apply their knowledge and understanding of the nature of physics and of the scientific process;
- develop their understanding of the relationships between hypotheses, evidence, theories and explanations;
- develop their awareness of risk and the ability to assess potential risk in the context of potential benefits;
- develop and apply their observational, practical, modelling, enquiry and problem-solving skills; and
- develop their ability to evaluate claims based on science through critical analysis of the methodology, evidence and conclusions both qualitatively and quantitatively.

## CROSS-CURRICULAR SKILLS, THINKING SKILLS AND PERSONAL CAPABILITIES THAT WILL BE DEVELOPED

This specification builds on the learning experiences from Key Stage 3 as required for the statutory Northern Ireland Curriculum. It also offers opportunities for students to contribute to the aim and objectives of the Curriculum at Key Stage 4, and to continue to develop the Cross-Curricular Skills and the Thinking Skills and Personal Capabilities. The extent of the development of these skills and capabilities will be dependent on the teaching and learning methodology used. Please see the specification for more details.



## UNIQUE FEATURES OF THIS SPECIFICATION/ IMPROVEMENTS MADE

Unit 3 is a practical skills unit that will be externally assessed. It is divided into two parts: Booklet A and Booklet B. Booklet A will consist of two practicals based on two from the specification's prescribed practical list. Centres will be sent a Materials and Apparatus list in December. A Booklet A for each student will be sent to centres in January, and all students will be required to complete their booklet by May. It will then be externally marked. Booklet B will be a written, externally assessed exam taken at the end of the final year of study. It will consist of questions about planning and carrying out any of the prescribed practical activities, together with more general questions about any practical situation that arises from within the specification.

## CONTENT AND ASSESSMENT\*

CONTENT	ASSESSMENT	WEIGHTING	AVAILABILITY
<b>Unit 1:</b> <b>Motion, Force, Moments, Energy, Density, Kinetic Theory, Radioactivity, Nuclear Fission and Fusion</b>	External written examination  Students answer compulsory structured questions that include short responses, extended writing and calculations.  Foundation Tier: 1 hour 15 mins Higher Tier: 1 hour 30 mins	37.5%	Summer from 2018
<b>Unit 2:</b> <b>Waves, Light, Electricity, Magnetism, Electromagnetism and Space Physics</b>	External written examination  Students answer compulsory structured questions that include short responses, extended writing and calculations.  Foundation Tier: 1 hour 15 mins Higher Tier: 1 hour 30 mins	37.5%	Summer from 2019
<b>Unit 3:</b> <b>Practical Skills</b>	<b>Booklet A</b> Externally marked  Students carry out two pre-release practicals in their final year of study. Foundation and Higher Tiers: 2 hours  <b>Booklet B</b> External written examination  Students answer compulsory structured questions that include short responses, extended writing and calculations, all set in a practical context. Foundation Tier: 1 hour Higher Tier: 1 hour 15 minutes	7.5%   17.5%	Between 1 January and 1 May from 2019   Summer from 2019

## SUPPORTING YOU

### In person

As your local awarding organisation, we can provide personalised support and visits to you and your centre upon request. Contact the Specification Support Officer if you would like to arrange for us to visit you and your department.

### At teacher-focused events

We provide a comprehensive programme of events to support the specification, which includes:

- FREE launch events to introduce you to the revised specification; and
- FREE seminars to support its teaching and assessment and to assist you with subject-specific issues.

We will issue invitations to heads of departments at least three weeks in advance of each event.

Regularly check our full list of support events online at [www.ccea.org.uk](http://www.ccea.org.uk)

### Online

Most of the support we provide will be available on our subject microsite. The site will contain:

- the latest version of the GCSE Physics specification;
- planning frameworks;
- Chief Examiner's reports, with top tips for improving examination performance;
- exemplar papers and mark schemes; and
- exemplification of standards (available after the first examination series).

### We also intend to provide:

- past papers;
- mark schemes;
- Chief Examiner's reports;
- guidance on progression from Key Stage 3;
- planning frameworks;
- centre support visits; and
- support days for teachers.

## CONTACT US

If you have a query or require advice or guidance, please contact:

Subject Officer with overall responsibility

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# SPECIFICATION SNAPSHOT



For first teaching from September 2017

For first assessment in Summer 2018

For first award in Summer 2019