

Is this the right subject for you?

Do you enjoy Maths, particularly algebra? (the language of Physics).

Do you like working independently during practical work?

Are you prepared to spend 3 hours a week to complete regular homework?

So why study this subject?

Physics is the study of the fundamental laws of nature.

Physics is at the heart of:

- the beginning of the universe
- black holes & neutron stars
- scanning the brain
- aerodynamics of aircraft
- earthquakes
- satellite images
- machines smaller than a pinhead
- and much, much more

It is also an exciting and challenging experience.

Physics A Level is a very useful qualification and can lead to a very wide range of careers. This includes Applied Physics, Astrophysics, Geophysics, Material technology, Forensic science, Engineering, Meteorology and Medical Physics. Physics A Level is also complementary with intended careers in Medicine, Mathematics, Computing, Finance, Law, Accountancy and many more areas.

Why study Physics at BHASVIC?

We have new lab facilities with excellent equipment that will enable you to actively engage with the problems of Physics and develop both your practical and analytical skills. All your classes take place in the stimulating environment of a Physics lab, enabling you to fully integrate your practical work with theoretical concepts. We have dedicated, highly skilled and imaginative Physics teachers who will enable you to reach your potential in a caring, stimulating and supportive environment. We have a strong student support system within the department which enables us to individually help and support your development throughout the course. In addition to this, we provide you with up-to-date technological support systems through

the College computer network which will enable you to monitor your progress and extend your work base at your convenience.

What is the subject content?

We will be offering the Edexcel Advanced Subsidiary GCE (8PH01) and the Advanced GCE (9PH01) in Physics.

The course starts with an induction programme which helps you to settle down into your studies. You will be carrying out weekly practicals in order to develop your confidence and support your understanding of the new concepts. There are regular progress tests which enable both you and staff to monitor your progress throughout the course. If you find a topic difficult you can book a subject extension where extra help is available for you on an individual and/or small group basis. You are also encouraged to use the support materials available on the Physics Virtual Learning Environment (VLE) such as tutorial lessons on each topic, virtual labs, tests and quizzes.

AS Level (Year 1)

During this course you will be studying:

- Unit 1: Physics on the go (Mechanics and Materials)
- Unit 2: Physics at work (Waves and Electricity)
- Unit 3: Exploring Physics (Internally assessed experiment that is related to a physics-based visit or a case study of the application of physics)

There are two written exams: Unit 1 in January and Unit 2 in June

A Level (Year 2)

If you chose to continue with Physics to complete the full A Level, you will be studying:

- Unit 4: Physics on the move (Electric and magnetic fields, Particle Physics)
- Unit 5: Physics from creation to collapse (Astrophysics, Cosmology, Thermal Physics and Nuclear decay)
- Unit 6: Experimental Physics (Internal assessment of an experiment)

There are two written exams: Unit 4 in January and Unit 5 in June.

How is the course assessed?

Physics

AS and A Level

AS Level: There are three theory papers (80%) and one practical paper (20%)

A Level: There are three theory papers (85%) and one practical paper (15%)

What are the entry requirements?

The general entry requirements for studying at Advanced level apply, and must include a minimum of grade C in Double Science or Physics GCSE *plus* a minimum of grade B in Maths (higher tier preferred).

Other information

We strongly advise that in order to gain high grades you study a parallel Maths course, although this is not an essential requirement. A good level of understanding of the first year work will be required in order to go on to the full A Level in the second year.