



VCE Physics Units 1&2 Study Design Changes

Please note, this is based on our analysis of the new Study Design - we encourage you to also review the changes for yourself.

Summary

Around 80% of the content is the same. VCAA has made minimal changes to the study design, most changes having occurred at a Key Knowledge and Key Skill level, rather than changes to assessment or purpose of units.

Aims of the Study Design 2023-2027

This study enables students to:

- apply physics models, theories and concepts to describe, explain, analyse and make predictions about diverse physical phenomena
- understand and use the language and methodologies of physics to solve qualitative and quantitative problems in familiar and unfamiliar contexts

Assessment

Student Assessed Coursework (SAC's) are now worth 50% (up 10%) and the Examination is now worth 50% (down 10%). The written examination will still be 2 1/2 hours and 130 marks.

Year 11

Suitable tasks for assessment of Outcomes 1, 2 and 3 may be selected from the following:

- a report of a laboratory or fieldwork activity including the generation of primary data
- reflective annotations related to one or more practical activities from a logbook
- an analysis and evaluation of generated primary and/or collated secondary data
- a critique of an experimental design, process or apparatus
- a modelling or simulation activity
- a report of the design, building, testing and evaluation of a device
- an explanation of a selected physics device, design or innovation
- a physics-referenced response to an issue or innovation
- a report of a selected physics phenomenon
- a media analysis/response
- an infographic
- problem-solving involving physics concepts and/or skills
- a report of an application of physics concepts to a real-world context
- an analysis, including calculations, of physics concepts applied to real-world contexts
- comparison and evaluation of two solutions to a problem, two explanations of a physics phenomenon or concept, or two methods and/or findings from practical activities
- a scientific poster.

Main structural changes to the study design

Unit 1 AOS 1 has some content (Waves) taken from year 12. The number of options for Unit 2 AOS has increased in options from 15 to 18.

Changes we've made to address the new study design and improve our resource

- Key science skills embedded throughout every lesson
- Make all questions more specific and connected to the study design requirements for investigations and SAC's
- Increase the number of downloadable and editable activities (practicals, simulations, modelling, lab tech notes and risk assessments - at least one per lesson)
- Add essential prior knowledge dot points and questions to prevent barriers for students to learn new material
- Assign all questions a spiciness (difficulty) rating that is visible and scaffold all questions in order of increasing spiciness
- Incorporate a broader range of graphics to support learning of content (flow charts, diagrams, models, examples, tables, images)
- Emphasise real-world extension learning opportunities in a 'keen to investigate' box
- More real-life applications
- More visible misconceptions, strategy and useful tips boxes