



# Course Choice Information – Physics Higher

## Course Information & Content

The Higher Physics course is comprised of the following areas:

- **Our Dynamic Universe**
  - The topics covered are: ♦ motion — equations and graphs ♦ forces, energy and power ♦ collisions, explosions, and impulse ♦ gravitation ♦ special relativity ♦ the expanding Universe
- **Particles and Waves**
  - The topics covered are: ♦ forces on charged particles ♦ the Standard Model ♦ nuclear reactions ♦ inverse square law ♦ wave-particle duality ♦ interference ♦ spectra ♦ refraction of light
- **Electricity**
  - The topics covered are: ♦ monitoring and measuring AC ♦ current, potential difference, power, and resistance ♦ electrical sources and internal resistance ♦ capacitors ♦ semiconductors and p-n junctions

## Assessment

SQA assessment:

A final exam of a question paper worth 80% of the final grade. This takes 3 hours.

An assignment which is worth 20% of the final grade. This requires around 8 hours of work and is sent away to be marked externally by the SQA.

In class assessment:

Pupils will be assessed on each unit with end of unit written assessments which will measure their progress throughout the course.

## Homework

Pupils will be provided with a variety of weekly homework exercises. These will include past paper questions, revision tasks etc.

## Progression

Advanced Higher.

## Career Options

Aeronautical design | Astronomy | Computer industries | Electrician | Electronics | Engineering | Environmental Science | Geophysics | Nanotechnology | Nuclear Science | Photonics | Telecommunications

[Further Information - SQA](#)

