CAREERS INFORMATION

careers scotland

Career Areas

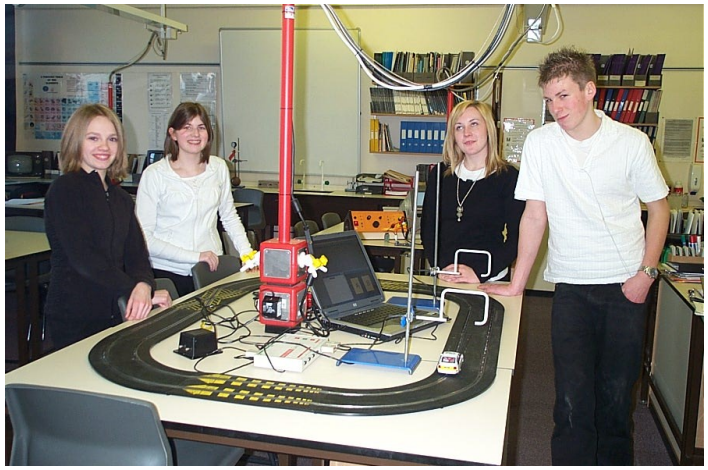
- Armed Services
- Construction
- Engineering
- Garage Services
- Health & Medicine
- Libraries, Museums & Archaeology
- Manufacturing Industries
- Science and Mathematics
- Security & Protective Services

Further advice and information on these options is available from your subject teacher, guidance teacher and careers adviser.

OTHER INFORMATION

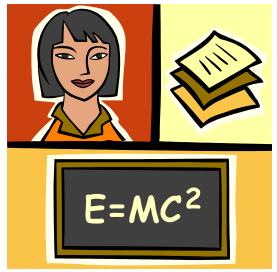
STAFF

Mr McHugh and Miss E Marshall



Science

Physics Higher



TURRIFF ACADEMY
Email: turriff.aca@aberdeenshire.gov.uk

COURSE INFORMATION

Why Physics?

Physics is the study of the universe, from the largest galaxies to the smallest subatomic particles. Physicists play a key role in meeting society's needs in areas such as medicine, energy, industry, material development, the environment and sustainability.

Course outline

From the sources of the energy we use, to the exploration of space, Physics covers a range of applications that affect our lives. Studying Physics allows you to gain an insight into the underlying nature of our world and its place in the universe. It will help you to develop your logical and critical thinking, solve problems and make decisions.

The course has **three** compulsory units, plus a **re-searching Physics** unit that assesses your practical skills.

Physics: Our Dynamic Universe

In this unit you will develop an understanding of:

- Equations of motion and graphs
- Forces, energy and power
- Collisions, explosions and impulse
- Gravity and mass
- Special relativity
- The expanding Universe

Physics: Electricity

In this unit you will develop an understanding of:

- Monitoring and measuring a.c.
- Current, potential difference, power and resistance
- Electrical sources and internal resistance
- Capacitors
- Conductors, semiconductors and insulators

Physics: Particles and Waves

In this unit you will develop an understanding of:

- The standard model
- Forces on charged particles
- Nuclear reactions
- Wave particle duality
- Interference and diffraction
- Refraction of light
- Spectra

ASSESSMENT

Your work will be assessed by your teacher on an ongoing basis and by the SQA at the end of the course

- Experimental write-up (Outcome 1)
- Assessments covering knowledge and skills (Outcome 2)
- Research assignment marked by the SQA (30 marks)
- Question paper set by the SQA (100 marks)

PROGRESSION

Successful completion of this course may lead to:

Advanced Higher Physics

FURTHER COURSES IN TURRIFF ACADEMY

In S6:
Physics Advanced Higher