

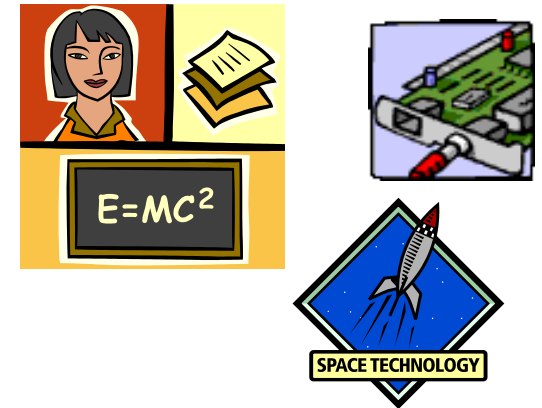


## Science

STAFF

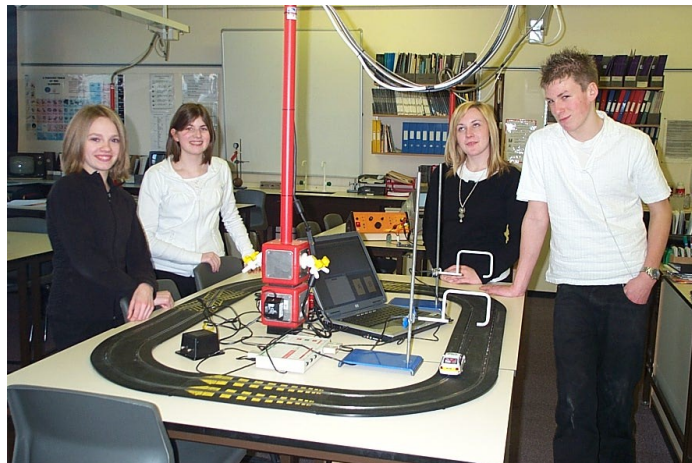
Mr McHugh and Miss E Marshall

# Physics Advanced Higher



### 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.



TURRIFF ACADEMY

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# 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 **four** compulsory units (2 full units and 2 half units)

- Rotational movement and astrophysics (full unit)
- Quanta and waves (full unit)
- Electromagnetism (half unit)
- Investigating physics (half unit)

### Rotational movement and astrophysics

- Kinematic relationships
- Angular motion
- Rotational dynamics
- Gravitation
- General relativity

### Quanta and waves

- Introduction to quantum theory
- Particles from space
- Simple harmonic motion
- Waves
- Interference
- Polarisation

### Electromagnetism

- Fields
- Circuits
- Electromagnetic radiation

# 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)
- Question paper set by the SQA
- Project marked by the SQA

# PROGRESSION

Successful completion of this course may lead to:

HND in a physics-related subject  
Degree in a physics-related subject

# FURTHER COURSES IN TURRIFF ACADEMY

**None**

