# Sixth Form Induction Evening

Pool Hayes Academy

Academy Transformation Trust

## Physics

# Course content

Content is in six modules, each divided into key topics:

**Module 1 – Development of practical skills in physics**

**Module 2 – Foundations of physics**

**Module 3 – Forces and motion**

**Module 4 – Electrons, waves and photons**

**Module 5 – Newtonian world and astrophysics**

**Module 6 – Particles and medical physics**

# Course Two Year Plan

- Year 12
- **Module 2 – Foundations of physics**
- Physical quantities and units
- Making measurements and analysing data
- Nature of quantities
- **Module 3 – Forces and motion**
- Motion
- Forces in action
- Work, energy and power
- Materials
- Newton's laws of motion and momentum
- **Module 4 – Electrons, waves and photons**
- Charge and current
- Energy, power and resistance
- Electrical circuits
- Waves
- Quantum physics

- Year 13
- **Module 5 – Newtonian world and astrophysics**
- Thermal physics
- Circular motion
- Oscillations
- Gravitational fields
- Astrophysics and cosmology

- **Module 6 – Particles and medical physics**
- Capacitors
- Electric fields
- Electromagnetism
- Nuclear and particle physics
- Medical imaging

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# Future Prospects

**Aerospace industry**
Aerospace engineer, airline pilot

**Space industry**
Astrophysicist, astronomer, astronaut

**Acoustic engineer**

**Radiographer**

**Research and development**

**Oceanographer**

**Meteorologist**

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**+ many non-science careers**

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Tough, but rewarding

Intuitive and intriguing

Maths would support Physics

Have enjoyed myself for two years

Practical work is interesting and allows you to understand the topics more