



PHYSICS

Advanced General Certificate of Education A2

WHY PHYSICS?

The opportunities for students of Science, on completion of full-time education, are enormous. There are many possible careers within the scientific world and qualifications in Science subjects are acceptable as an entry into many other careers.

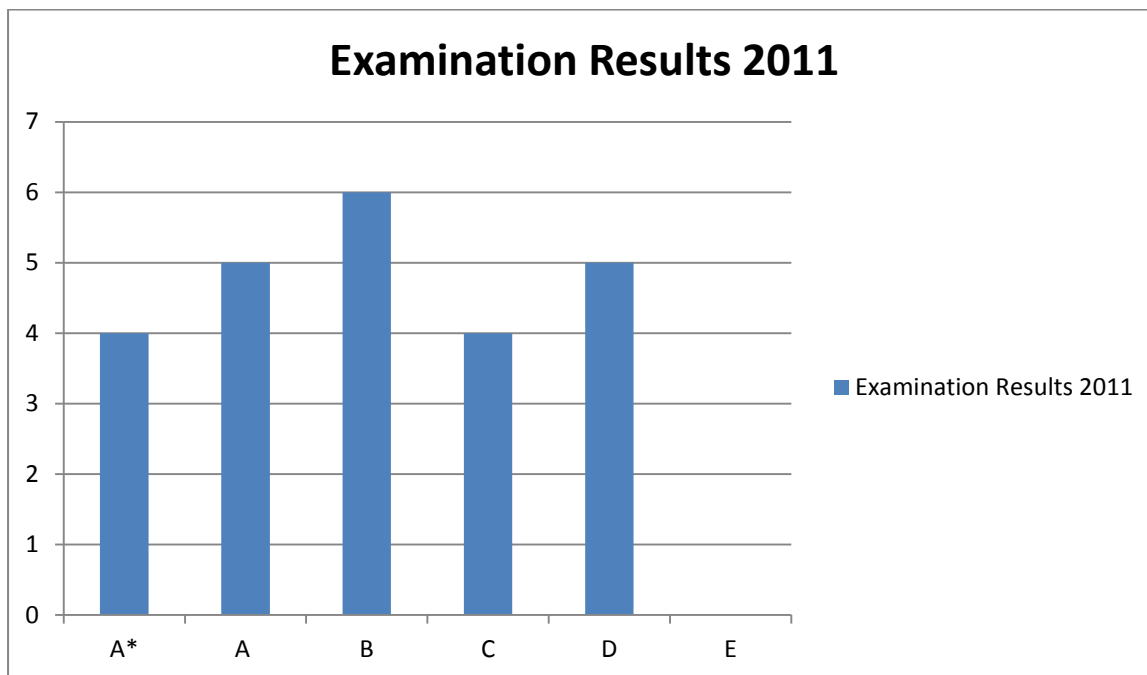
Science students at Thomas Telford School are currently preparing to move into Higher Education Courses and careers in the following fields.

Electronic Engineering	Forensic Science	Pharmacy
Mechanical Engineering	Medicine	Computing
Research Chemistry	Nursing	Aeronautics

The Science courses offered at Thomas Telford School are designed to provide academic and vocational experiences. They will prepare students for their choice in both the world of work and Higher Education.

SPECIFIC ENTRY REQUIREMENTS

- 6 GCSEs (Grades A* - C)
- Grade B (Higher Tier) in GCSE Physics or Grade B (Higher Tier) in Additional Science
- Satisfactory level of competence in English
- Grade B in GCSE Mathematics



COURSE DETAILS

OCR : H558

You will study six modules as follows:

Mechanics (*Examined unit Externally assessed*)

You will extend your KS4 understanding of velocity, acceleration, forces and energy. You will also study car safety and the behaviour of springs and materials.

Electrons, Waves and Photons (*Examined unit Externally assessed*)

You will extend your KS4 understanding of electrical circuits and waves. You will also study simple quantum physics and the wave nature of particle physics.

Practical Skills in Physics 1 (*Teacher assessed Externally moderated*)

You will be assessed on one task from each of the following categories: qualitative, quantitative and evaluative tasks. These will test your understanding and application of a wide range of practical and analytical techniques.

The Newtonian World (*Examined unit Externally assessed*)

You will learn about Newton's laws of motion, gravitational fields and oscillations. You will also study thermal physics and ideal gases.

Fields, Particles & Frontiers of Physics (*Examined unit Externally assessed*)

You will learn about electric and magnetic fields and nuclear physics. You will also study medical imaging and the structure of the universe.

Practical Skills in Physics2 (*Teacher assessed Externally moderated*)

You will be assessed on one task from each of the following categories: qualitative, quantitative and evaluative tasks. These will test your understanding and application of a wide range of practical and analytical techniques.

Further information can be found on the "Careers" section of the School website: www.thomastelford.com