

# Physics

Appreciate the workings of the Universe through studying the smallest to the largest phenomena

Aim for top grades and top universities through our Physics High Achievers+ Programme

Build model telescopes, engines, bridges, rockets and robotic arms in our 'Tomorrow's Engineers' Programme

## YOU WILL STUDY

- Measurements and their errors
- Particle Physics
- Quantum Physics
- Waves
- Mechanics and materials
- Electricity
- Further mechanics and thermal physics
- Magnetic Fields
- Electric Fields
- Gravitational Fields
- Nuclear Physics
- Astrophysics

## ASSESSMENTS

Three exam papers (scientific theory, applied mathematics, practical skills and data analysis)

Practical Element – a minimum of 12 practical tasks over two years

## SUPPORTING YOU

- Full set of resources including practice questions to consolidate learning and knowledge
- Lab sessions to develop practical and data analysis skills
- Weekly tutorials
- Regular assignments and progress monitoring

## PROGRESSION

Physics graduates are in demand because of their analytical and problem-solving skills. Students develop skills that can be transferred to the world of work; from setting up a business to dealing with climate change.

**Imagine** a career in

Physics → Astrophysics → Mathematics

Nuclear and Particle Physics → Robotics

Aerospace Engineering (Aerospace, Mechanical

Environmental, etc) → Computer Science

Architecture → Finance → Banking



# Super-curricular

Physics High Achievers+ Programme

Competitions including the Physics Olympiad

Tomorrow's Engineers Enrichment Programme

Talks on cutting edge research from University of Liverpool

Trips and visits e.g. to London, Jodrell Bank, Daresbury Laboratories and CERN in Geneva



## 2023 RESULTS

A\*- B 36.6% / A\*- C 58.5% / Overall 100%

SCAN HERE



FOR FULL COURSE DETAILS

EXAM BOARD

AQA

# “

## My Experience

“Physics at Carmel really challenges your ability and knowledge. It also strengthens your study skills and academic integrity. The course helps you to mature so you are ready for university or an apprenticeship.

There are also amazing opportunities such as the trips to CERN and Jodrell Bank as well as many visits to universities and lectures. The department is very open and the tutors will always give up their time to help you.”



*Katie Worrell*

ARCHBISHOP BECK  
PHYSICS, MATHS, CHEMISTRY (AAB)  
NOW STUDYING SCIENCE AT THE  
UNIVERSITY OF MANCHESTER

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Be sociable.

