



# COURSE DESCRIPTOR

## UFP PHYSICS

### SUBJECT OVERVIEW

CATS UFP Physics is a Level 3 course designed to assist international students in transitioning successfully from high school to a UK university. The course has been designed to tackle the challenges that international students may encounter when pursuing a British qualification. UFP Physics not only covers fundamental physics topics, including Mechanics, Waves, Electricity and Magnetism, Nuclear, and Quantum Physics but also enhances students' other academic skills, such as research skills, practical analysis skills, presentation skills, and the ability to create academic posters.

### PRIOR LEARNING REQUIRED

This course is suitable for anyone with a curiosity about how the world works. There is no formal requirement for studying UFP physics, however students who have studied an equivalent national science qualification (for example a Level 1 or 2 qualification, such as GCSE) would be well prepared for UFP Physics.

IELTS 5.5 or equivalent

### EXAM BOARD

CATS

### COURSE CONTENT

Module 1 – Reporting & Mechanics

Module 2 – Energy & Power

Module 3 – Waves & Electromagnetism

Module 4 – Circular Motion, Gravity & Space

Module 5 – Quantum Physics

## ASSESSMENT

Formal internal assessments take place regularly about once every half term and homework is set on a regular basis.

Grades are determined by final examinations, which take place in May/June at the end of the 2-year course.

Practical work is assessed within the school for the practical endorsement, which is a pass or fail.

An end of year exam must be passed for entry to year 2 and a mock exam must be passed for entry into the public exams.

Paper	Length of paper	Weighting
Exam Paper 1 – Basics of Physics	20 marks 30 minutes	7% of the final grade
Exam Paper 2 – Beyond the Basics of Physics	30 marks 45 minutes	13% of the final grade
Exam Paper 3 – Written Paper	100 marks 2 hour 30 minutes	40% of the final grade
Coursework	Marks	Weighting
Coursework 1 Poster	36	15% of the final grade
Coursework 2 Presentation	24	10% of the final grade
Controlled Assessment Practical Writeup	36	15% of the final grade



### TEXTBOOKS/REVISION GUIDES

Title	ISBN	Author
Advanced Physics For You	978-1408527375	Keith Johnson, Simmone Hewett, Sue Holt, John Miller
A Level Physics for OCR A Student Book	978-0198352181	Graham Bone, Nigel Saunders, Gurinder Chadha

### HIGHER EDUCATION PATHWAYS

Physics will enhance your skills in analysis, critical thinking, problem-solving skills and provide a base of theoretical knowledge which is applicable to areas of biology and Chemistry as well. These skills are highly valued by universities and employers. Physics is essential with students who wish to study Physics, Aeronautical Engineering, Chemical Engineering, Electrical Engineering, Mechanical Engineering and Environmental Science. The analytical skills and attention to detail are also valued in professions such as Finance.

Previous students have studied:

University of Bath – Integrated Engineering

University of Durham – Computer Science

University of Leicester – Aerospace Engineering

### COMPLEMENTARY SUBJECTS OF STUDY

Maths, Chemistry, Biology.

### CURRICULUM DIRECTOR

Ms. Sue Chubb

