Physics Applicant Day





Professor Justin Read, Head of Department Dr Caroline Shenton-Taylor, Admissions Tutor

Firstly....

Section 2: Completion of application





Congratulations!

Universities and colleges will decide whether to make the applicant an offer. It'll be:

- unconditional if they've already met the entry requirements
- conditional if the offer's based on exam results

The Physics Department









National Physical Laboratory



Teaching Excellence Framework

Academic Staff





Physics Research Areas





Our Placement Programmes

Ranked

1st in the UK and 7th in the World

in the

2019 QS Employability Rankings

for

work placements and research

partnerships with employers





Our Placement Programmes

Leading in Graduate Employment

- BSc optional paid 1 year placements
- Unique MPhys Research Year
- Shorter summer placements
- Excellent graduate employment outcomes



Phillips Respironics





Rutherford Appleton Laboratory





physicsadmissions@surrey.ac.uk

The courses we offer



Physics

Physics with Astronomy

Physics with Nuclear Astrophysics

Physics with Quantum Technology



Mathematics and Physics



Your Placement Choice



How is it taught?







Year 1



Year 1

Parallax Angles	Fine Structure	Focal Points	Impulse	Molecular Orbitals
Special Relativity	Crystal Lattices	Interstellar Clouds	Harmonic Motion	Kepler's Laws
RC Circuits	Ideal Gas	Bohr model	Vector Manipulation	Equations of Motion
Carnot Engine	Surface Tension	Stern-Gerlach Expt.	Surface Tension	Rocket Equation
Planetary Motion	Beta Decay	Kinetic Energy	Bonding	Electrostatics
Colliding Bodies	General Relativity	Debye Temperature	Maxwell Relations	+ more!



Year 2

Electromagnetism, Scalar & Vector Fields

Energy, Entropy and Numerical Physics

Quantum Physics

Solid State Physics

Electromagnetic Waves

From Atoms to Laser

Nuclear and Particle Physics

Light Laboratory

Introduction to Astronomy

Groups and Rings

Ordinary Differential Equations

Analytical Mechanics and Modelling

Operations Research Optimisation

Numerical and Computational Methods

Numbers and Sets

Linear Partial Differential Equations

Applications of Differential Equations



Years 3 & 4

	Advanced Quantum Mechanics		General Relativity and Cosmology		Functions of a Complex Variable		
	Light and Matter		Modern Computational Techniques		Manifolds & Topology		
	Modern Analytical Techniques		Financial Derivatives		Quantum Magnetism & Superconductivity		
	Special Relativity		Medical Imaging		Explosive Stellar Phenomena		
	Cosmology and Galaxy Formation		Photonics and Nanotechnology		Astrophysical Dynamics		
	Research Techniques in Astronomy		Physics in Education				
	Semiconductor Physics & Technology Space Dynamics and Missions		Financial Risk Management		Final Year Project (BSc)		
			Advanced Algebra				
_	Financial Management		Non-linear Physics		Dissertation (MPhys)		
	Galois Theory		Topics in Theoretical Physics				
Lagrangian and Hamiltonian Dynamics			Space, Environment and Protection				



A typical 1st year timetable

Day	Monday	Tuesday	Wednesday	Thursday	Friday
9 am		Lecture	Lecture	Lecture	Labs
10 am		Tutorial	Lecture	Tutorial	Labs
11 am	Lecture	Lecture			Labs
12 pm	Lecture				Labs
1 pm			Private		
2 pm		Skills	Study	Lecture	Computing
3 pm	Lecture		or	Tutorial	Computing
4 pm	Tutorial	Lecture	Sports		

Typically ~20 contact hours per week



Physics Placement Opportunities

MAN FT

physicsadmissions@surrey.ac.uk

How do the BSc and MPhys programmes work?



BSc | Optional Summer Placements









BSc | Optional Professional Training Year





#universityofsurrey

MPhys | Research Year









physicsadmissions@surrey.ac.uk



Friendly and Inclusive Community



www.surrey.ac.uk/department-physics



@PhysicsatSurrey

@surreyastro





University of Surrey

Surrey Offer Holders (Physics Q&A)

Admissions Tutor: physicsadmissions@surrey.ac.uk

> Head of Department: physicshod@surrey.ac.uk