

Foundation Year Physics 23/24

Modules & Assessment

Trimesters 1 & 2

Foundation Physics A [*mechanics.matter.waves*]

Material will be selected from Sections of the main course book: A-Level Physics for AQA: Year 1 & 2 Student Book with Online Edition (2018).

- Section 4 – Mechanics, • Section 5 – Materials, • Section 8 – Thermal Physics
- Section 3 – Waves

Coursework: Core Physics A skills 1, 50%

Coursework: Core Physics A skills 2, 50%

Foundation Physics B [*electricity.fields.atoms*]

Material will be selected from Sections of the main course book: A-Level Physics for AQA: Year 1 & 2 Student Book with Online Edition (2018).

- Section 1 – Particles and Radiation, • Section 6 – Electricity, • Section 10 – Capacitors, • Section 2 – Electromagnetic Radiation and Quantum Phenomena,
- Section 9 – Gravitational and Electric Fields, • Section 12 – Nuclear Physics

Coursework: Core Physics B skills 1, 50%

Coursework: Core Physics B skills 2, 50%

Foundation Physics Laboratory † [*design.analysis.experiments*]

- Experimental Design
- Methods of Scientific Measurement
- Data Analysis and Errors
- Experiments covering: Mechanics, Thermal Physics, Electricity, and Waves

Coursework: Core Laboratory skills, 50%

Coursework: Laboratory Journal, 50%

Foundation IT and Study Skills [*careers.skills.exercises*]

- Seminar Series - Careers in Physics and Engineering
- IT Skills
- Presentation Skills
- Problem-based Learning Exercises

Coursework: Core Physics skills, 50%

Coursework: IT skills, 50%

† **For Mathematics with Foundation Year students only, the following module replaces Foundation Physics Laboratory:**

Introduction to Probability and Statistics [*probability.statistics.properties*]

- **Outline contents:** basic statistics and using “R programming language”
- Statistical graphs, confidence intervals. Probability properties, functions and graphs
- Combinatorics. Expectation and variance
- Hypothesis testing and comparisons of populations
- Central limit theorem. Nonparametric statistics

Coursework: Core skills 1, 50%

Coursework: Core skills 2, 50%

Trimester 1

Foundation Mathematics 1 [*algebra.geometry.matrices*]

- **Outline contents:** algebra, formulae and manipulation
- Functions, graphs and properties
- Trigonometry
- Co-ordinate systems, geometry and matrices

Coursework: Core Maths skills 1, 50%

Coursework: Core Maths skills 2, 50%

Trimester 2

Foundation Mathematics 2 [*vectors.calculus.series*]

- **Outline contents:** Vectors and complex numbers
- Introduction to calculus
- Differentiation of functions and rules of differentiation
- Integration of functions and rules of integration
- Sequences and series

Coursework: Core Maths skills 3, 50%

Coursework: Core Maths skills 4, 50%

Note on week numbers. Week numbering starts with Induction Week as week 0, and then Trimester 1 (T1) *teaching weeks* start with week 01. The *timetabling week* numbers then continue throughout the year, up to week 51 (including vacation weeks) – shown in brackets on next page. It is useful to list timetabling and teaching weeks – the latter such as in Trimester 2: T2-01 being the first teaching week of Trimester 2. *See the next pages for detailed breakdowns of dates and week numbering.*



Academic Year by Week 2023/24 - with Foundation Year Assessments

week begins (Monday)	Trimesters	timetable wk no	pool rooms bookable for teaching and revision	
11 September 2023	<i>Welcome/Induction</i>	0		
18 September 2023	Trimester 1	1	1	
25 September 2023	Trimester 1	2	2	✓
2 October 2023	Trimester 1	3	3	✓
9 October 2023	Trimester 1	4	4	✓
16 October 2023	Trimester 1	5	5	✓
23 October 2023	Trimester 1	6	6	✓
30 October 2023	Trimester 1	7	7	✓
6 November 2023	Trimester 1	8	8	✓
13 November 2023	Trimester 1	9	9	✓
20 November 2023	Trimester 1	10	10	✓
27 November 2023	Trimester 1	11	11	✓
4 December 2023	Trimester 1	12	12	✓
11 December 2023	Trimester 1	13	13	✓
18 December 2023	<i>Christmas Vacation</i>	14		
25 December 2023	<i>Christmas Vacation</i>	15		
1 January 2024	<i>Christmas Vacation</i>	16		
8 January 2024	<i>Welcome/Induction</i>	17		✓
15 January 2024	Trimester 2	1	18	✓
22 January 2024	Trimester 2	2	19	✓
29 January 2024	Trimester 2	3	20	✓
5 February 2024	Trimester 2	4	21	✓
12 February 2024	Trimester 2	5	22	✓
19 February 2024	Trimester 2	6	23	✓
26 February 2024	Trimester 2	7	24	✓
4 March 2024	Trimester 2	8	25	✓
11 March 2024	Trimester 2	9	26	✓
18 March 2024	Trimester 2	10	27	✓
25 March 2024	<i>Easter Vacation</i>	28		<i>(Bank Holiday Friday)</i>
1 April 2024	<i>Easter Vacation</i>	29		<i>(Bank Holiday Monday)</i>
8 April 2024	<i>Easter Vacation</i>	30		
15 April 2024	Trimester 2	11	31	✓
22 April 2024	Trimester 2	12	32	✓
29 April 2024	Trimester 2	13	33	✓
6 May 2024	Inter-Trimester Break	34		✓ <i>(Bank Holiday Monday)</i>
13 May 2024	Inter-Trimester Break	35		✓
20 May 2024	Inter-Trimester Break	36		✓
27 May 2024	<i>Welcome/Induction</i>	37		✓ <i>(Bank Holiday Monday)</i>
3 June 2024	Trimester 3	1	38	✓
10 June 2024	Trimester 3	2	39	✓
17 June 2024	Trimester 3	3	40	✓
24 June 2024	Trimester 3	4	41	✓
1 July 2024	Trimester 3	5	42	✓
8 July 2024	Trimester 3	6	43	✓ Graduation Celebrations
15 July 2024	Trimester 3	7	44	✓
22 July 2024	Trimester 3	8	45	✓
29 July 2024	Trimester 3	9	46	✓
5 August 2024	Trimester 3	10	47	✓
12 August 2024	Trimester 3	11	48	✓
19 August 2024	Trimester 3	12	49	✓
26 August 2024	Trimester 3	13	50	✓ <i>(Bank Holiday Monday)</i>
2 September 2024	Inter-Trimester Break	51		✓
9 September 2024	<i>Welcome/Induction 2024/25</i>			

ASSESSMENTS

MATHS 1

LAB or P&STATS, SKILLS, FPA
FPB, MATHS 2

MATHS 3

LAB or P&S

SKILLS, MATHS 4

FPB, FPA

All events are subject to change

All teaching, revision and assessment shall take place within modules during the designated trimester periods. (Academic Regulations for Taught Programmes)