

# MODULE LECTURERS (2022/2023)

## Physics Foundation Year (level 3)

### **Semesters 1 & 2 (S1 & S2)**

Foundation Physics A [S1 Heather M Yates + S2 Graham S McDonald]

Foundation Physics B [S1 Mark A Hughes + S2 Marina Leontiadou]

Foundation Physics Laboratory [S1 Marina Leontiadou + S2 Tiehan Shen]

Foundation IT and Study Skills [S1 Marina Leontiadou + S2 James M Christian]

### **Semester 1**

Foundation Mathematics 1 [Salem Ameen]

### **Semester 2**

Foundation Mathematics 2 [Graham S McDonald]

Mathematics only: Intro to Probability & Stats [S1 + S2 Hamid A Adamu]

## Physics First Year (level 4)

### **Semesters 1 & 2 (S1 & S2)**

Mechanics, Relativity and Quantum Physics [S1 Ian Morrison + S2 Marina Leontiadou]

Electricity, Magnetism and Light [S1 + S2 Mark A Hughes + S2 Tiehan Shen]

Physics Laboratory 1 [S1 Mark A Hughes, Heather M Yates + S2 Heather M Yates, John E Proctor]

Physics in Context [S1 + S2 Ian Morrison]

Modelling of Physical Systems [S1 + S2 Dan J Bull]

Mathematics [S1 + S2 Graham S McDonald]

Physics Seminars [Marina Leontiadou]

Electronic Engineers only: Mathematics [S1 Graham S McDonald] and Maths & Computing [S2 Graham S McDonald (theory), Salem Ameen (computing)]

## Physics Second Year (level 5)

### **Semesters 1 & 2 (S1 & S2)**

Electromagnetism [John E Proctor]

Thermal Physics [Dan J Bull]

Quantum Physics [Ian Morrison]

Waves and Optics [James M Christian and Tiehan Shen]

### **Semester 1**

Physics Laboratory 2 [Heather M Yates (Practical) and Dan J Bull (Computing)]

### **Semester 2**

Group Project [Mark A Hughes] †

† Physics options: Educational Principles and Practice in STEM [S2 Claire M Ellison], Foreign Language [S1+S2 Languages]

† Acoustics: Principles of Acoustics [S1+S2 Olga Umnova]

## **Physics Third Year (level 6)**

### **Semesters 1 & 2**

Physics Project - 40 Credits [*Heather M Yates*]

### **Semester 1**

Nuclear and Particle Physics [*John E Proctor* (Nuclear) and *Ian Morrison* (Particle)]  
Physics Laboratory 3 [*Ian Morrison* (Practical) and *James M Christian* (Computing)]

### **Semester 2**

Condensed Matter Physics [*Dan J Bull* and *Tiehan Shen*]

### **Semester 2 option:**

Astrophysics & Planetary Physics [*Ian Morrison* (Astro) and *John E Proctor* (Planetary)]

or

Photonics and Nanotechnology [*James M Christian* (Photonics) and *Heather M Yates* and *Mark A Hughes* (Nanotechnology)]

## **Physics MPhys Fourth Year (level 7)**

### **Semesters 1 & 2**

Research Project [*Heather M Yates*]  
60 credits

### **Semester 1**

Advanced Quantum Mechanics [*Ian Morrison*, *Tiehan Shen* and *James M Christian*]  
30 credits

### **Semester 2**

Thin Films and Materials Characterisation [*John E Proctor*, *Heather M Yates*, *Tiehan Shen* and *Mark A Hughes* (labs)]  
30 credits