



Swansea University
Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

POSTGRADUATE STUDENT HANDBOOK

MPHYS (FHEQ LEVEL 7)

MPHYS THEORETICAL PHYSICS DEGREE PROGRAMMES

SUBJECT SPECIFIC PART TWO OF TWO MODULE AND COURSE STRUCTURE 2025-26

DISCLAIMER

The Faculty of Science and Engineering has made all reasonable efforts to ensure that the information contained within this publication is accurate and up-to-date when published but can accept no responsibility for any errors or omissions.

The Faculty of Science and Engineering reserves the right to revise, alter or discontinue degree programmes or modules and to amend regulations and procedures at any time, but every effort will be made to notify interested parties.

It should be noted that not every module listed in this handbook may be available every year, and changes may be made to the details of the modules. You are advised to contact the Faculty of Science and Engineering directly if you require further information.

IMPORTANT

Term Dates

The 25-26 academic year begins on 29 September 2025

Full term dates can be found [here](#)

Academic Integrity

Swansea University and the Faculty of Science of Engineering takes any form of **academic misconduct** very seriously. In order to maintain academic integrity and ensure that the quality of an Award from Swansea University is not diminished, it is important to ensure that all students are judged on their ability. No student should have an unfair advantage over another as a result of academic misconduct - whether this is in the form of **Plagiarism**, **Collusion** or **Commissioning**.

It is important that you are aware of the **guidelines** governing Academic Misconduct within the University/Faculty of Science and Engineering and the possible implications. The Faculty of Science and Engineering will not take intent into consideration and in relation to an allegation of academic misconduct - there can be no defence that the offence was committed unintentionally or accidentally.

Please ensure that you read the University webpages covering the topic – procedural guidance [here](#) and further information [here](#). You should also read the Faculty Part One handbook fully, in particular the pages that concern Academic Misconduct/Academic Integrity.

The difference between compulsory and core modules

Compulsory modules must be **pursued** by a student.

Core modules must not only be **pursued**, but also **passed** before a student can proceed to the next level of study or qualify for an award. Failures in core modules must be redeemed.

Further information can be found under “Modular Terminology” on the following link - <https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/>

Key Programme Staff

Physics Programme Director	Physics Year 4 / Level M Coordinator
Dr Timothy Burns	Dr Kevin O'Keeffe

Year 4 (FHEQ Level 7) 2025/26

Theoretical Physics

MPhys Theoretical Physics[F340]

Total 120 Credits

Optional Modules

Choose exactly 60 credits

PH-M03	Quantum Field Theory	Prof DC Dunbar	TB1	10
PH-M04	Advanced Particle Physics	Prof A Armoni	TB2	10
PH-M08	Modern Laser Systems	Dr K O'Keeffe	TB2	10
PH-M10	Atomic and Quantum Optics III	Prof SJ Eriksson	TB1	10
PH-M28	Machine Learning for Physicists	Dr F Woods	TB1	10
PH-M29	Quantum Gravity	Prof SP Kumar	TB2	10
PH-M32	Quantum Information Processing	Dr JE Bateman	TB2	10
PH-M35	Medical Imaging and Spectroscopy: From MRI to photonics	Dr SM Shermer	TB1	10

And

Choose exactly 60 credits

PH-M24	Research Project	Dr K O'Keeffe	TB1+2	60 (CORE)
PH-M24C	Prosiect Ymchwil	Dr K O'Keeffe	TB1+2	60 (CORE)