

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 3 (FHEQ LEVEL 6)

APPLIED MATHEMATICS

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

Mathematics Programme Director	Year 3 Coordinator
Dr Kristian Evans	Professor Grigory Garkusha

Year 3 (FHEQ Level 6) 2025/26 Applied Mathematics

BSc Applied Mathematics[G120]
BSc Applied Mathematics with a Year Abroad[G121]
BSc Applied Mathematics with a Year in Industry[G122]

Compulsory Modules

Semester 1 Modules	Semester 2 Modules	
	MA-312	
	Higher Algebra	
	15 Credits	
	Dr NY Villamizar	
	MA-371	
	Biomathematics	
	15 Credits	
	Dr V Giunta	
Total 120 Credits		

Optional Modules

Choose exactly 15 credits

MAWXXX modules are for students who wish to study part of their course through the medium of Welsh.

MA-301	Complex Analysis	Dr K Evans	TB1	15
MAW301	Dadansoddi Cymhlyg	Dr K Evans	TB1	15

And

Choose exactly 30 credits

MAWXXX modules are for students who wish to study part of their course through the medium of Welsh.

MA-30	Project	Prof G Garkusha	TB1+2	30
MAW30	Prosiect	Prof G Garkusha	TB1+2	30

And

Choose a maximum of 30 credits

Subject to pre-requisite requirements.

MA-324	Differential Geometry	Dr I Rodionova	TB2	15
MA-325	Applied Algebra: Coding Theory	Prof T Brzezinski	TB1	15
MA-358	Financial Mathematics in Discrete Time	Dr I Rodionova	TB1	15
MA-395	Teaching Mathematics via a School Placement	Dr S Lyakhova	TB2	15

And

Choose a minimum of 15 credits

Students must take at least 15 credits from the following Applied Mathematics modules. Subject to prerequisite requirements.

MA-308	Machine Learning	Dr AY Pachon	TB2	15
MA-311	Partial Differential Equations	Prof E Lytvynov	TB1	15
MA-345	Cashflows and Interest Rates	Dr Z Sobol	TB1	15
MA-346	Assurance and annuity	Dr Z Sobol	TB2	15
MA-359	Financial Mathematics in Continuous Time	Prof E Lytvynov	TB2	15
MA-364	Markov Processes and Applications	Prof C Yuan	TB1	15
MA-365	Risk and Survival Models	Prof DL Finkelshtein	TB2	15