



Swansea University
Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 2 (FHEQ LEVEL 4)

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 2 Coordinator
Dr Kristian Evans	Dr Nelly Villamizar

Year 2 (FHEQ Level 5) 2025/26
Applied Mathematics
 BSc Applied Mathematics with a Year in Industry[G122]

Compulsory Modules

Semester 1 Modules	Semester 2 Modules
MA-203 Professional Development and Career Planning 0 Credits Dr SA Rolland/Dr SA Rolland CORE	MA-243 Mathematical Modelling: Theory and Practice 15 Credits Prof GG Powathil
MA-241 Differential Equations 15 Credits Dr V Giunta	
MA-252 Probability Theory 15 Credits Prof C Yuan/Prof E Lytvynov	
MA-203 Professional Development and Career Planning 0 Credits Dr SA Rolland/Dr SA Rolland CORE	
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-201	Multi-variable analysis	Dr JB Macmillan	TB1	15 (CORE)
MAW201	Dadansoddi Aml-Newidyn	Prof V Moroz	TB1	15 (CORE)

And

Choose exactly 15 credits

MA-202	Metric spaces and measure theory	Dr JB Macmillan	TB2	15 (CORE)
MAW202	Gofodau Metrig a Theori Mesur	Prof V Moroz	TB2	15 (CORE)

And

Choose exactly 15 credits

MA-211	Vector Spaces	Prof G Garkusha	TB1	15 (CORE)
MAW211	Gofodau Fector	Prof G Garkusha	TB1	15 (CORE)

And

Choose exactly 15 credits

MA-212	Groups and Rings	Dr EJ Beggs	TB2	15 (CORE)
MAW212	Grwpiau a Chylchoedd	Dr EJ Beggs	TB2	15 (CORE)

And

Choose exactly 15 credits

Subject to pre-requisite requirements.

<u>MA-274</u>	Credibility, Liability and Ruin	Dr Z Sobol	TB2	15
<u>MA-282</u>	Game Theory and Optimization	Dr EJ Beggs	TB2	15
<u>MA-292</u>	Statistical Data Analysis	Dr K Evans	TB2	15

Year 2 (FHEQ Level 5) 2025/26
Applied Mathematics
 BSc Applied Mathematics[G120]
 BSc Applied Mathematics with a Year Abroad[G121]

Compulsory Modules

Semester 1 Modules	Semester 2 Modules
MA-241 Differential Equations 15 Credits Dr V Giunta	MA-243 Mathematical Modelling: Theory and Practice 15 Credits Prof GG Powathil
MA-252 Probability Theory 15 Credits Prof C Yuan/Prof E Lytvynov	
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-201	Multi-variable analysis	Dr JB Macmillan	TB1	15 (CORE)
MAW201	Dadansoddi Aml-Newidyn	Prof V Moroz	TB1	15 (CORE)

And

Choose exactly 15 credits

MA-202	Metric spaces and measure theory	Dr JB Macmillan	TB2	15 (CORE)
MAW202	Gofodau Metrig a Theori Mesur	Prof V Moroz	TB2	15 (CORE)

And

Choose exactly 15 credits

MA-211	Vector Spaces	Prof G Garkusha	TB1	15 (CORE)
MAW211	Gofodau Fector	Prof G Garkusha	TB1	15 (CORE)

And

Choose exactly 15 credits

MA-212	Groups and Rings	Dr EJ Beggs	TB2	15 (CORE)
MAW212	Grwpiau a Chylchoedd	Dr EJ Beggs	TB2	15 (CORE)

And

Choose exactly 15 credits

Subject to pre-requisite requirements.

MA-203	Professional Development and Career Planning	Dr SA Rolland/Dr SA Rolland	TB1+2	0
MA-274	Credibility, Liability and Ruin	Dr Z Sobol	TB2	15
MA-282	Game Theory and Optimization	Dr EJ Beggs	TB2	15
MA-292	Statistical Data Analysis	Dr K Evans	TB2	15