

# FACULTY OF SCIENCE AND ENGINEERING

## POSTGRADUATE STUDENT HANDBOOK

**MSC (FHEQ LEVEL 7)** 

### **ACTUARIAL SCIENCE**

**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 <a href="here">here</a> and further information <a href="here">here</a>. 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 - <a href="https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/">https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/</a>

#### **Key Programme Staff**

<b>Mathematics Programme Director</b>	MSc Coordinator
Dr Kristian Evans	Professor Chenggui Yaun

#### MSc (FHEQ Level 7) 2025/26 Actuarial Science

**MSc Actuarial Science** 

#### **Compulsory Modules**

Semester 1 Modules	Semester 2 Modules	
MA-M45	MA-M08	
Cashflows and Interest Rates	Machine Learning	
15 Credits	15 Credits	
Dr Z Sobol	Dr AY Pachon	
MA-M49	MA-M46	
Probability and Statistics for Finance	Assurance and Annuity	
15 Credits	15 Credits	
Dr Z Sobol	Dr Z Sobol	
MA-M64	MA-M65	
Markov Processes and Applications	Risk and Survival Models	
15 Credits	15 Credits	
Prof C Yuan	Prof DL Finkelshtein	
Dissertation		
MA-D01		
Actuarial Science Masters Dissertation		
60 Credits		
Dr G Liu		
Total 180 Credits		

#### **Optional Modules**

Choose exactly 30 credits

MA-M58	Financial Mathematics in Discrete Time	Dr I Rodionova	TB1	15
MA-M59	Financial Mathematics in Continuous Time	Prof E Lytvynov	TB2	15
MA-M73	Biomathematics	Dr V Giunta	TB2	15
MN-M002	Principles of International Finance	Prof HAA Hoque	TB1	15