

FACULTY OF SCIENCE AND ENGINEERING

POSTGRADUATE STUDENT HANDBOOK

MSC (FHEQ LEVEL 7)

ADVANCED COMPUTER 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 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

Postgraduate Programme Director
Dr Trang Doan

MSc (FHEQ Level 7) 2025/26 Advanced Computer Science

MSc Advanced Computer Science

Compulsory Modules

Semester 1 Modules	Semester 2 Modules		
	CSCM010		
	Research Methods		
	20 Credits		
	Dr MJ Roach/Prof JV Tucker		
CSPM20			
MSc Project 60 Credits			
			Dr B Muller
Total 180 Credits			

Optional Modules

Choose exactly 20 credits

	Operating Systems and Architectures	Dr B Mora/Dr T Reitmaier	TB1	20
CSCM985	Logic, Modelling and Verification	Dr M Seisenberger/Prof M Roggenbach	TB1	20

And

Choose exactly 20 credits

CSCM445 is a prerequisite for CSCM477

CSCM437	Data Visualisation & Visual Analytics	Dr JF Maestre Avila/Dr B Mora	TB1	20
CSCM445	Machine Learning	Dr S Sharifzadeh	TB1	20

And

Choose exactly 20 credits

CSCM072	Optimisation Techniques	Dr AAM Rahat/Dr S Qiu	TB1	20
	IT-Security, Forensics & Cryptography	Dr M Tiwari/Dr S Adepu	TB1	20

And

Choose exactly 20 credits

CSCM445 is a prerequisite for CSCM477

CSCM422	Symbolic AI and Natural Language Processing	Dr J Hough/Dr M Valenti	TB2	20
CSCM477	Advanced Machine Learning: Computer Vision and Deep Learning	Prof X Xie/Dr CA Clarkson	TB2	20
CSCM639	Hardware & Software Aspects of Human Computer Interaction	Dr MI Ahmad/Dr DR Sahoo	TB2	20

And

Choose exactly 20 credits

CSCM029	Blockchain Cryptocurrencies and Smart Contracts	Dr AG Setzer/Prof A Beckmann	TB2	20
<u>CSCM888</u>	Network, Wireless & Cloud Security	Dr Y Liu/Dr M Tiwari	TB2	20