



**Swansea University
Prifysgol Abertawe**

**FACULTY OF SCIENCE AND
ENGINEERING**

**POSTGRADUATE STUDENT
HANDBOOK**

MSC (FHEQ LEVEL 7)

**ADVANCED COMPUTER
SCIENCE**

(JANUARY INTAKE)

DEGREE PROGRAMMES

SUBJECT SPECIFIC

PART TWO OF TWO

MODULE AND COURSE STRUCTURE

2023-24

Welcome to the Faculty of Science and Engineering!

Whether you are a new or a returning student, we could not be happier to be on this journey with you.

At Swansea University and in the Faculty of Science and Engineering, we believe in working in partnership with students. We work hard to break down barriers and value the contribution of everyone.

Our goal is an inclusive community where everyone is respected, and everyone's contributions are valued. Always feel free to talk to academic, technical and administrative staff, administrators - I'm sure you will find many friendly helping hands ready to assist you. And make the most of living and working alongside your fellow students.

During your time with us, please learn, create, collaborate, and most of all – enjoy yourself!

Professor David Smith
Pro-Vice-Chancellor and Executive Dean
Faculty of Science and Engineering



Faculty of Science and Engineering	
Pro-Vice-Chancellor and Executive Dean	Professor David Smith
Director of Faculty Operations	Mrs Ruth Bunting
Associate Dean – Student Learning and Experience (SLE)	Professor Laura Roberts
School of Mathematics and Computer Science	
Head of School	Professor Elaine Crooks
School Education Lead	Dr Neal Harman
Head of Computer Science	Professor Xianghua Xie
Computer Science Programme Director	Postgraduate Taught – Dr Bertie Müller
Year Coordinators	Advanced Computer Science – Dr Anton Setzer Advanced Software Technology – Dr Anton Setzer Computer Science (MSc) – Dr Oliver Kullmann Cyber Security – Dr Pardeep Kumar Data Science – Dr Alma Rahat

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.

The 24-25 academic year begins on 23 September 2024

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

DATES OF 24-25 TERMS

23 September 2024 – 13 December 2024

06 January 2025 – 11 April 2025

06 May 2025 – 06 June 2025

SEMESTER 1

23 September 2024 – 27 January 2025

SEMESTER 2

27 January 2025 – 06 June 2025

SUMMER

09 June 2025 – 19 September 2025

IMPORTANT INFORMATION ON 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.

STUDENT SUPPORT

The **Student Experience and Information Team** are here to support you through your studies and to provide non-judgemental advice and guidance. If you have any questions relating to your academic or personal life you can contact the Team and chat through your support options.

The Team is available for in-person support meetings and can also be contacted via email (studentsupport-scienceengineering@swansea.ac.uk) or phone (**+44 (0) 1792 295514**). You can access their full contact details [here](#).

To visit the Team you can attend either of the following Receptions:

- Reception in the Foyer of Engineering Central, [Bay Campus](#)
- Reception on the first-floor landing of the Wallace Building, [Singleton Park Campus](#)

Standard Reception opening hours are Monday to Friday from 9am to 5pm however, this may vary outside of term time.

The current [FSE Student webpages](#) also contain useful information and links to additional resources:



READING LISTS

Reading lists for each module are available on the course Canvas page and are also accessible via <http://ifindreading.swan.ac.uk/>.

We do not expect you to purchase textbooks, unless it is a specified key text for the course.

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/>

MSc (FHEQ Level 7) 2024/25
Advanced Computer Science- January
MSc Advanced Computer Science

Compulsory Modules

Semester 1 Modules	Semester 2 Modules
	CSCM10J Computer Science Project Research Methods 15 Credits Dr MJ Roach
Dissertation	
CS-M20 MSc Project 60 Credits Dr U Berger CORE	
Total 240 Credits	

Optional Modules

Choose a maximum of 60 credits

Choose a maximum of 4 modules in the Spring semester. Optional modules have capacity limits so may not be available at time of enrolment.

CSCM29	Blockchain, Cryptocurrencies and Smart Contracts	Dr AG Setzer	TB2	15
CSCM35	Big Data and Data Mining	Dr S Yang	TB2	15
CSCM37	Data Visualisation	Dr B Mora/Dr JF Maestre Avila	TB2	15
CSCM38	Unknown	<Unknown>	TB1	0
CSCM39	Human Computer Interaction	Dr MI Ahmad	TB2	15
CSCM64	Unknown	<Unknown>	TB1	0
CSCM68B	Unknown	<Unknown>	TB1	0
CSCM75	Unknown	<Unknown>	TB1	0
CSCM79	Unknown	<Unknown>	TB1	0

And

Choose a maximum of 15 credits

You may choose to make no selection in this section. Please note that CSCM18J, CSCM45J and CSCM48B also run in the Autumn semester. You cannot select both versions.

CSCM18J	Unknown	<Unknown>	TB1	0
CSCM45J	Unknown	<Unknown>	TB1	0
CSCM48B	Unknown	<Unknown>	TB1	0

And

Choose a maximum of 45 credits

Choose a maximum of 3 modules in the Autumn Semester (due to dissertation work). Optional modules have capacity limits so may not be available at time of enrolment.

<u>CSCM08</u>	Information Security Management	Dr B Muller	TB1	15
<u>CSCM13</u>	Critical Systems	Dr AG Setzer	TB1	15
<u>CSCM68</u>	Embedded Systems Security	Dr H Nguyen/Prof SA Shaikh	TB1	15
<u>CSCM72</u>	Optimisation	Dr AAM Rahat	TB1	15
<u>CSCM85</u>	Modelling and Verification Techniques	Dr U Berger	TB1	15
<u>CSCM98</u>	Operating Systems and Architectures	Dr B Mora	TB1	15

And
Choose a maximum of 15 credits
You may choose to make no selection in this section. CSCM18, CSCM45 and CSCM48 run in both semesters. You cannot select both versions.

<u>CSCM18</u>	IT-Security: Cryptography and Network Security	Dr M Tiwari/Dr E Neumann	TB1	15
<u>CSCM45</u>	Big Data and Machine Learning	Dr S Sharifzadeh	TB1	15
<u>CSCM48</u>	Web Application Development	Dr SP Walton/Dr J Hough	TB1	15