

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 3 (FHEQ LEVEL 6)

COMPUTING

DEGREE PROGRAMMES

SUBJECT SPECIFIC
PART TWO OF TWO
MODULE AND COURSE STRUCTURE
2024-25

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	
Head of Operations	Mrs Ruth Bunting	
Associate Dean – Education	Dr Laura Roberts	
School of Mathemat	ics and Computer Science	
Head of School	Professor Elaine Crooks <u>e.c.m.crooks@swansea.ac.uk</u>	
School Education Lead	Dr Neal Harman <u>n.a.harman@swansea.ac.uk</u>	
Head of Computer Science	Professor Jiaxiang Zhang jiaxiang.zhang@swansea.ac.uk	
Computer Science Programme Director	Undergraduate – Dr Liam O'Reilly l.p.oreilly@swansea.ac.uk	
Year Coordinators	Year 0 – Dr Deepak Sahoo d.r.sahoo@swansea.ac.uk Year 1 – Dr Trang Doan t.t.doan@swansea.ac.uk Year 2 – Dr Fabio Caraffini fabio.caraffini@swansea.ac.uk Year 3 – Dr Jens Blanck j.e.blanck@swansea.ac.uk Year 4 – Dr Tom Owen t.owen@swansea.ac.uk	

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 (<u>studentsupport-scienceengineering@swansea.ac.uk</u>) 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, <u>Bay Campus</u>
- Reception on the first-floor landing of the Wallace Building, <u>Singleton Park</u> <u>Campus</u>

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

The current <u>FSE Student webpages</u> 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/

Year 3 (FHEQ Level 6) 2024/25 Computing MEng Computing[G403]

Compulsory Modules

Semester 1 Modules	Semester 2 Modules		
CSC301 Software Engineering Project Planning and Management 15 Credits Ms CL Hopkins	CSC364 Software Testing 15 Credits Dr E Neumann		
Software Engineering Project II 15 Ci	2300 mplementation and Dissertation redits Blanck		
CSP301 Software Engineering Project Specification and Development 15 Credits Dr JE Blanck			
Total 120 Credits			

Optional Modules

Choose exactly 30 credits

CSC306	Writing Mobile Apps	Dr T Owen	TB1	15
CSC313	High Integrity Systems	Dr AG Setzer	TB1	15
CSC345	Big Data and Machine Learning	Dr L Zhang	TB1	15
CSC348	Web Application Development	Dr SP Walton	TB1	15
CSC368	Embedded Systems Design	Dr B Chaparro Rico	TB1	15
CSC390	Teaching Computing via a School Placement	Ms CL Hopkins	TB1	15

And

Choose exactly 30 credits

<u>CSC309</u>	Invention and Innovation in Computing	Prof JV Tucker	TB1+2	15
<u>CSC318</u>	Cryptography and IT-Security	Dr E Neumann/Dr M Tiwari	TB2	15
CSC349	User Experience	Dr MI Ahmad	TB2	15
<u>CSC357</u>	Brain-Inspired Artificial Intelligence	Dr W Macinnes/Prof J Zhang	TB2	15
<u>CSC371</u>	Advanced Object-Oriented Programming	Dr T Reitmaier	TB2	15
CSC375	Logic for Computer Science	Dr U Berger	TB2	15
<u>CSC384</u>	Introduction to Video Games Programming	Dr SP Walton	TB2	15

Year 3 (FHEQ Level 6) 2024/25 Computing

MEng Computing with a Year in Industry[G40B]

Compulsory Modules

Semester 1 Modules	Semester 2 Modules	
CSC301 Software Engineering Project Planning and Management 15 Credits Ms CL Hopkins	CSC364 Software Testing 15 Credits Dr E Neumann	
Software Engineering Project II 15 Ci	2300 mplementation and Dissertation redits Blanck	
CSP301 Software Engineering Project Specification and Development 15 Credits Dr JE Blanck		
Total 120 Credits		

Optional Modules

Choose a maximum of 30 credits

The maximum credit limit applies to the modules in this section and also the CSC306/CSC348 and CSC318/CSC345 sub-sections.

You cannot take both CSC306 and CSC306B in the same Academic Year. The same rule applies to CSC348/CSC348B, CSC318/CSC318B and CSC345/CSC345B.

CSC313	High Integrity Systems	Dr AG Setzer	TB1	15
CSC368	Embedded Systems Design	Dr B Chaparro Rico	TB1	15
CSC372	Optimisation	Dr AAM Rahat	TB1	15
CSC385	Modelling and Verification Techniques	Dr U Berger	TB1	15
<u>CSC390</u>	Teaching Computing via a School Placement	Ms CL Hopkins	TB1	15

And

Choose a maximum of 15 credits

You may choose to make no selection in this section.

<u>CSC306</u>	Writing Mobile Apps	Dr T Owen	TB1	15
CSC348	Web Application Development	Dr SP Walton	TB1	15

And

Choose a maximum of 15 credits

You may choose to make no selection in this section.

CSC318	Cryptography and IT-Security	Dr E Neumann/Dr M Tiwari	TB2	15
CSC345	Big Data and Machine Learning	Dr L Zhang	TB1	15

And

Choose a maximum of 30 credits

The maximum credit limit applies to the modules in this section and also the CSC306B/CSC348B and CSC318B/CSC345B sub-sections.

You cannot take both CSC306 and CSC306B in the same Academic Year. The same rule applies to CSC348/CSC348B, CSC318/CSC318B and CSC345/CSC345B.

<u>CSC309</u>	Invention and Innovation in Computing	Prof JV Tucker	TB1+2	15
CSC325	Artificial Intelligence	Dr AZ Wyner/Dr B Muller	TB2	15
CSC337	Data Visualisation	Dr B Mora/Dr JF Maestre Avila	TB2	15
CSC349	User Experience	Dr MI Ahmad	TB2	15
<u>CSC371</u>	Advanced Object-Oriented Programming	Dr T Reitmaier	TB2	15
CSC375	Logic for Computer Science	Dr U Berger	TB2	15
CSC384	Introduction to Video Games Programming	Dr SP Walton	TB2	15

And

Choose a maximum of 15 credits

You may choose to make no selection in this section.

CSC306B	Writing Mobile Apps	Dr TK Astarte	TB2	15
CSC348E	Web Application Development	Dr J Hough	TB2	15

And

Choose a maximum of 15 credits

You may choose to make no selection in this section.

CSC318B	Cryptography and IT-Security	Dr E Neumann/Dr P Kumar	TB2	15
CSC345B	Big Data and Machine Learning	Dr S Sharifzadeh	TB2	15