



**Swansea University**  
**Prifysgol Abertawe**

# **FACULTY OF SCIENCE AND ENGINEERING**

## **UNDERGRADUATE STUDENT HANDBOOK**

**YEAR 2 (FHEQ LEVEL 5)**

## **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**

<b>Undergraduate Programme Director</b>	<b>Year 2 Coordinator</b>
Dr Liam O'Reilly	Dr Fabio Caraffini

**Year 2 (FHEQ Level 5) 2025/26**  
**Computer Science**  
 MSci Computer Science[G4G4]  
 MSci Computer Science with a Year Abroad[G4G2]

**Compulsory Modules**

Semester 1 Modules	Semester 2 Modules
<a href="#"><u>CS-205</u></a> Declarative Programming 15 Credits Dr M Seisenberger/Dr C Pradic	<a href="#"><u>CS-275</u></a> Automata and Formal Language Theory 15 Credits Dr M Valenti/Dr AM Pauly
<a href="#"><u>CS-230</u></a> Software Engineering 15 Credits Dr LP O'Reilly	
<a href="#"><u>CS-250</u></a> Database Systems 15 Credits Dr KL Tam	
<a href="#"><u>CS-270</u></a> Algorithms 15 Credits Dr O Kullmann	
<b>Total 120 Credits</b>	

**Optional Modules**

Choose a maximum of 45 credits

<a href="#"><u>CS-200</u></a>	Introduction to Human-Computer Interaction	Prof JS Pearson/Prof SNW Robinson	TB2	15
<a href="#"><u>CS-203</u></a>	Professional Development and Career Planning	Dr SA Rolland	TB1	0
<a href="#"><u>CS-210</u></a>	Concurrency	Dr F Caraffini	TB2	15
<a href="#"><u>CS-239</u></a>	Software Security Engineering	Prof SA Shaikh/Dr H Nguyen	TB2	15
<a href="#"><u>CS-253</u></a>	Web Service Development	Dr NA Harman	TB2	15
<a href="#"><u>CS-256</u></a>	Visual Computing	Prof MW Jones	TB2	15
<a href="#"><u>CS-265</u></a>	Artificial Intelligence	Dr AZ Wyner/Dr B Muller	TB2	15
<a href="#"><u>CS-279</u></a>	Intelligent Robotics	Dr D Cafolla	TB2	15

**Year 2 (FHEQ Level 5) 2025/26**  
**Computer Science**  
 BSc Computer Science[G400,G401]  
 BSc Computer Science with a Year Abroad[G40C]

**Compulsory Modules**

Semester 1 Modules	Semester 2 Modules
<a href="#"><u>CS-205</u></a> Declarative Programming 15 Credits Dr M Seisenberger/Dr C Pradic	<a href="#"><u>CS-275</u></a> Automata and Formal Language Theory 15 Credits Dr M Valenti/Dr AM Pauly
<a href="#"><u>CS-230</u></a> Software Engineering 15 Credits Dr LP O'Reilly	
<a href="#"><u>CS-250</u></a> Database Systems 15 Credits Dr KL Tam	
<a href="#"><u>CS-270</u></a> Algorithms 15 Credits Dr O Kullmann	
<b>Total 120 Credits</b>	

**Optional Modules**

Choose a maximum of 45 credits

The maximum credit limit applies to this section and to the CS-239/CS-279 sub-section.

<a href="#"><u>CS-200</u></a>	Introduction to Human-Computer Interaction	Prof JS Pearson/Prof SNW Robinson	TB2	15
<a href="#"><u>CS-203</u></a>	Professional Development and Career Planning	Dr SA Rolland	TB1	0
<a href="#"><u>CS-210</u></a>	Concurrency	Dr F Caraffini	TB2	15
<a href="#"><u>CS-239</u></a>	Software Security Engineering	Prof SA Shaikh/Dr H Nguyen	TB2	15
<a href="#"><u>CS-253</u></a>	Web Service Development	Dr NA Harman	TB2	15
<a href="#"><u>CS-256</u></a>	Visual Computing	Prof MW Jones	TB2	15
<a href="#"><u>CS-265</u></a>	Artificial Intelligence	Dr AZ Wyner/Dr B Muller	TB2	15
<a href="#"><u>CS-279</u></a>	Intelligent Robotics	Dr D Cafolla	TB2	15

**Year 2 (FHEQ Level 5) 2025/26**  
**Computer Science**  
 BSc Computer Science with a Year in Industry[G40A]

**Compulsory Modules**

Semester 1 Modules	Semester 2 Modules
<a href="#"><u>CS-205</u></a> Declarative Programming 15 Credits Dr M Seisenberger/Dr C Pradic	<a href="#"><u>CS-275</u></a> Automata and Formal Language Theory 15 Credits Dr M Valenti/Dr AM Pauly
<a href="#"><u>CS-230</u></a> Software Engineering 15 Credits Dr LP O'Reilly	
<a href="#"><u>CS-250</u></a> Database Systems 15 Credits Dr KL Tam	
<a href="#"><u>CS-270</u></a> Algorithms 15 Credits Dr O Kullmann	
<a href="#"><u>CS-201</u></a> Placement Preparation: Science Industrial Year 0 Credits Dr SA Rolland	
<b>Total 120 Credits</b>	

**Optional Modules**

Choose a maximum of 45 credits

<a href="#"><u>CS-200</u></a>	Introduction to Human-Computer Interaction	Prof JS Pearson/Prof SNW Robinson	TB2	15
<a href="#"><u>CS-203</u></a>	Professional Development and Career Planning	Dr SA Rolland	TB1	0
<a href="#"><u>CS-210</u></a>	Concurrency	Dr F Caraffini	TB2	15
<a href="#"><u>CS-239</u></a>	Software Security Engineering	Prof SA Shaikh/Dr H Nguyen	TB2	15
<a href="#"><u>CS-253</u></a>	Web Service Development	Dr NA Harman	TB2	15
<a href="#"><u>CS-256</u></a>	Visual Computing	Prof MW Jones	TB2	15
<a href="#"><u>CS-265</u></a>	Artificial Intelligence	Dr AZ Wyner/Dr B Muller	TB2	15
<a href="#"><u>CS-279</u></a>	Intelligent Robotics	Dr D Cafolla	TB2	15

**Year 2 (FHEQ Level 5) 2025/26**  
**Computer Science**  
MSci Computer Science with a Year in Industry[G847]

**Compulsory Modules**

Semester 1 Modules	Semester 2 Modules
<a href="#"><u>CS-205</u></a> Declarative Programming 15 Credits Dr M Seisenberger/Dr C Pradic	<a href="#"><u>CS-275</u></a> Automata and Formal Language Theory 15 Credits Dr M Valenti/Dr AM Pauly
<a href="#"><u>CS-230</u></a> Software Engineering 15 Credits Dr LP O'Reilly	
<a href="#"><u>CS-250</u></a> Database Systems 15 Credits Dr KL Tam	
<a href="#"><u>CS-270</u></a> Algorithms 15 Credits Dr O Kullmann	
<a href="#"><u>CS-201</u></a> Placement Preparation: Science Industrial Year 0 Credits Dr SA Rolland	
<b>Total 120 Credits</b>	

**Optional Modules**

Choose a maximum of 45 credits

The maximum credit limit applies to this section and to the CS-239/CS-279 sub-section.

<a href="#"><u>CS-200</u></a>	Introduction to Human-Computer Interaction	Prof JS Pearson/Prof SNW Robinson	TB2	15
<a href="#"><u>CS-210</u></a>	Concurrency	Dr F Caraffini	TB2	15
<a href="#"><u>CS-239</u></a>	Software Security Engineering	Prof SA Shaikh/Dr H Nguyen	TB2	15
<a href="#"><u>CS-253</u></a>	Web Service Development	Dr NA Harman	TB2	15
<a href="#"><u>CS-256</u></a>	Visual Computing	Prof MW Jones	TB2	15
<a href="#"><u>CS-265</u></a>	Artificial Intelligence	Dr AZ Wyner/Dr B Muller	TB2	15
<a href="#"><u>CS-279</u></a>	Intelligent Robotics	Dr D Cafolla	TB2	15