

Swansea University Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 4 (FHEQ LEVEL 7)

MEDICAL ENGINEERING 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 Engineering and Applied Sciences		
Head of School	Professor Serena Margadonna	
School Education Lead	Professor Simon Bott	
Head of Biomedical Engineering	Professor Huw Summers	
Biomedical Engineering Programme Directors	Dr Adesola Ademiloye – <u>a.s.ademiloye@swansea.ac.uk</u> Professor Paul Rees – <u>p.rees@swansea.ac.uk</u>	
Year Coordinator	Dr Rowan Brown – <u>m.r.brown@swansea.ac.uk</u>	

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 <u>here</u> and further information <u>here</u>. 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 <u>here</u>.

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>

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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 - <u>https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/</u>

Year 4 (FHEQ Level 7) 2024/25

Medical Engineering MEng Medical Engineering[HB1V] MEng Medical Engineering with a Year Abroad MEng Medical Engineering with a Year in Industry

Semester 1 Modules	Semester 2 Modules	
EGIM02	EG-M160	
Advanced Computational Methods for Engineers	Advanced Microfluidics	
10 Credits	10 Credits	
Dr F Zhao	Dr F Del Giudice	
CORE	CORE	
EGM402	EG-M83	
Fracture and Fatigue	Simulation Based Product Design	
10 Credits	10 Credits	
Prof RE Johnston	Dr AJ Williams/Dr AC Tappenden	
CORE	CORE	
EGNM07	EGM403	
Principles of Nanomedicine	Implant Engineering 2	
10 Credits	10 Credits	
Prof HD Summers	Dr CJ Wright/Dr F Zhao	
CORE	CORE	
EGTM79		
Sustainability and Environmental Assessment		
10 Credits		
Prof GTM Bunting/Mr MH Green		
CORE		
PMPM05		
Research Methods in Medical Physics and Clinical		
Engineering		
20 Credits		
Dr R Townsend/Dr RP Hugtenburg/Prof P Rees/Ms M		
Storey/		
EGDM03		
Individual Research Design Project		
30 Credits		
Dr MR Brown		
CORE		
Total 120 Credits		

Year 4 (FHEQ Level 7) 2024/25

Medical Engineering MEng Medical Engineering with a Year in Industry[HB1W]

Semester 1 Modules	Semester 2 Modules		
EGIM02	EG-M160		
Advanced Computational Methods for Engineers	Advanced Microfluidics		
10 Credits	10 Credits		
Dr F Zhao	Dr F Del Giudice		
CORE	CORE		
EGM402	EG-M83		
Fracture and Fatigue	Simulation Based Product Design		
10 Credits	10 Credits		
Prof RE Johnston	Dr AJ Williams/Dr AC Tappenden		
CORE	CORE		
EGNM07	EGM403		
Principles of Nanomedicine	Implant Engineering 2		
10 Credits	10 Credits		
Prof HD Summers	Dr CJ Wright/Dr F Zhao		
CORE	CORE		
EGTM79			
Sustainability and Environmental Assessment			
10 Credits			
Prof GTM Bunting/Mr MH Green			
CORE			
PMPM05			
Research Methods in Medical Physics and Clinical			
Engineering			
20 Credits			
Dr R Townsend/Dr RP Hugtenburg/Prof P Rees/Ms M			
Storey/			
CORE			
-	EGDM03		
Individual Research Design Project			
30 Credits			
Dr MR Brown			
Total 120 Credits			