

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 3 (FHEQ LEVEL 6)

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 Feihu Zhao – feihu.zhao@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 Medical Engineering MEng Medical Engineering[HB1V]

Semester 1 Modules	Semester 2 Modules	
EG-3055	EG-3070	
Tissue Engineering	Biomedical Instrumentation	
10 Credits	10 Credits	
Dr CJ Wright	Prof PM Holland	
CORE	CORE	
EG-318	EGA308	
Computer Aided Product Design	Implant and prosthetic Technology	
10 Credits	10 Credits	
Dr MJ Clee	Dr CJ Wright/Dr F Zhao	
CORE	CORE	
EG-323 Finite Element Method	EGA377 Medical Imaging & Informatics	
10 Credits	20 Credits	
Dr W Harrison	Prof P Rees	
CORE	11011 11000	
EGA336		
Biomedical Flows in Physiology and Medical Devices		
10 Credits		
Dr R Van Loon		
CORE		
EG-353		
Individual Engineering Project		
30 Credits		
Dr AC Tappenden/Dr M Fazeli/Prof PJ Holliman		
CORE		
EG-386		
Engineering Management		
10 Credits		
Dr JM Courtney/Dr M Evans		
CORE		
Total 120 Credits		

Year 3 (FHEQ Level 6) 2024/25

Medical Engineering

BEng Medical Engineering[HB18,HBC9]

BEng Medical Engineering with a Year in Industry[HB19]

Semester 1 Modules	Semester 2 Modules	
EG-3055	EG-3070	
Tissue Engineering	Biomedical Instrumentation	
10 Credits	10 Credits	
Dr CJ Wright	Prof PM Holland	
CORE	CORE	
EG-318	EGA308	
Computer Aided Product Design	Implant and prosthetic Technology	
10 Credits	10 Credits	
Dr MJ Clee	Dr CJ Wright/Dr F Zhao	
CORE	CORE	
EG-323	EGA377	
Finite Element Method	Medical Imaging & Informatics	
10 Credits	20 Credits	
Dr W Harrison	Prof P Rees	
CORE	CORE	
EGA336		
Biomedical Flows in Physiology and Medical Devices		
10 Credits		
Dr R Van Loon		
CORE		
EG-353		
Individual Engineering Project		
30 Credits		
Dr AC Tappenden/Dr M Fazeli/Prof PJ Holliman		
CORE		
EG-386		
Engineering Management		
10 Credits		
Dr JM Courtney/Dr M Evans		
CORE		
Total 120	0 Credits	

Year 3 (FHEQ Level 6) 2024/25 Medical Engineering MEng Medical Engineering with a Year in Industry[HB1W]

Semester 1 Modules	Semester 2 Modules		
EG-3055	EG-3070		
Tissue Engineering	Biomedical Instrumentation		
10 Credits	10 Credits		
Dr CJ Wright	Prof PM Holland		
CORE	CORE		
EG-318	EGA308		
Computer Aided Product Design	Implant and prosthetic Technology		
10 Credits	10 Credits		
Dr MJ Clee	Dr CJ Wright/Dr F Zhao		
CORE	CORE		
EG-323	EGA377		
Finite Element Method	Medical Imaging & Informatics		
10 Credits	20 Credits		
Dr W Harrison	Prof P Rees		
CORE	CORE		
EGA336			
Biomedical Flows in Physiology and Medical Devices			
10 Credits			
Dr R Van Loon			
CORE			
	233		
	ngineering Industrial Year		
0 Credits			
Dr SA Rolland/Dr V Samaras			
CORE			
EG-353			
Individual Engineering Project			
30 Credits			
Dr AC Tappenden/Dr M Fazeli/Prof PJ Holliman			
CORE			
EG-386			
Engineering Management			
10 Credits			
Dr JM Courtney/Dr M Evans			
CORE			
Total 120 Credits			