

# FACULTY OF SCIENCE AND ENGINEERING

STUDENT HANDBOOK

MSc MECHANICAL ENGINEERING (January)

(FHEQ LEVEL 7)

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

# **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**

06 January 2025 – 11 April 2025

06 May 2025 – 06 June 2025

22 September 2025 – 12 December 2025

#### **SEMESTER 1**

06 January 2025 - 11 April 2025

#### SUMMER

06 May 2025 – 19 September 2025

#### **SEMESTER 2**

22 September 2025 – 12 December 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 <a href="here">here</a> and further information <a href="here">here</a>. You should also read the Faculty Part One handbook fully, in particular the pages that concern Academic Misconduct/Academic Integrity.

# 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 Aerospace, Civil, Electrical, and Mechanical Engineering	
Head of School	Professor Antonio Gil
School Education Lead	Professor Cris Arnold
Head of Mechanical Engineering	Dr Eifion Jewell
Mechanical Engineering Programme Director	Professor Will Newton - w.newton@swansea.ac.uk
Year Coordinator	Dr Alison Williams - <u>alison.j.williams@swansea.ac.uk</u>

#### 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 - <a href="https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/">https://myuni.swansea.ac.uk/academic-life/academic-regulations/taught-guidance/essential-info-taught-students/your-programme-explained/</a>

# **MSc (FHEQ Level 7) 2024/25** Mechanical Engineering MSc - January start MSc Mechanical Engineering

September- December Modules	January- June Modules
EG-M103	EG-M190
Advanced Thermo Fluid Mechanics	Socio-Technical Engineering
10 Credits	10 Credits
Prof D Deganello	Dr SA Rolland/Prof JC Arnold
CORE	CORE
EG-M97	EG-M36
Advanced Solid Mechanics	Reliability and Maintenance Engineering
10 Credits	10 Credits
Dr C Wang	Dr AK Bastola
CORE	CORE
EGTM71	EG-M37
Power Generation Systems	Additive Manufacturing
10 Credits	10 Credits
Prof I Masters	Prof NPN Lavery
CORE	CORE
EGTM79	EG-M73
Sustainability and Environmental Assessment	Composite Materials
10 Credits	10 Credits
Prof GTM Bunting/Mr MH Green	Dr FA Korkees
CORE	CORE
	EG-M83
	Simulation Based Product Design
	10 Credits
	Dr AJ Williams/Dr B Morgan
	CORE
	EG-M93
	Metallurgy and Alloy Design
	10 Credits
	Dr RS Ransing
	CORE
EG-M336	
Sustainable Design	
20 Credits	
Dr WH Newton/Prof JC Arnold/Dr PJ Dorrington	
CORE	
Dissertation	
EG-D03	
MSc Dissertation - Mechanical Engineering	
60 Credits	
Dr AJ Williams	

CORE **Total 180 Credits**