Swansea University
Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 2 (FHEQ LEVEL 5)

MATERIALS SCIENCE AND ENGINEERING

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

Materials Science and Engineering Programme Director	Materials Science and Engineering Year 2 Coordinator
Dr Amit Das	Professor Robert Lancaster

Year 2 (FHEQ Level 5) 2025/26
Materials Engineering

BEng Materials Science and Engineering[J500,J505]
BEng Materials Science and Engineering with a Year Abroad[J510]
MEng Materials Science and Engineering[J504]
MEng Materials Science and Engineering with a Year Abroad[J506]

Semester 1 Modules	Semester 2 Modules
EG-244 Software Engineering 10 Credits Dr A Ali CORE	EG-218 Materials for Energy 10 Credits Prof MJ Carnie CORE
EG-279 Functional and Smart Materials 10 Credits Prof TM Watson CORE	EG-281 Polymers: Structure and Processing 10 Credits Dr FA Korkees CORE
EG-280 Microstructure Evolution and Control in Metallic Materials 10 Credits Dr A Das/Prof C Pleydell-Pearce CORE	EG-282 Computational Materials 1 10 Credits Dr A Das CORE
EG-286 Materials Practicals 2a: Microstructure Development in Alloy Systems 10 Credits Dr A Das/Dr E Sackett CORE	EG-283 Mechanical Deformation in Structural Materials 10 Credits Prof MT Whittaker CORE
EG-290 Order and Disorder in Materials 10 Credits Prof PJ Holliman/Dr A Willow CORE	EG-287 Materials Practicals 2b: Applied examples in advanced metallic materials 10 Credits Prof RJ Lancaster CORE
EG-2004 AI, Machine Learning and Data Analysis 20 Credits Prof L Li/Miss CM Barnes/Dr A Das/Dr KM Ennser/Prof C Giannetti/Mr AJ Morgan/... CORE	
EG-277 Research Project Preparation 0 Credits Dr AC Tappenden/Dr M Fazeli/Mrs KM Thomas CORE	
EGT201 Engineering Tutorials: Year 2 0 Credits Prof JC Arnold CORE	
Total 120 Credits	

Year 2 (FHEQ Level 5) 2025/26
Materials Engineering
BEng Materials Science and Engineering with a Year in Industry[J502]
MEng Materials Science and Engineering with a Year in Industry[J503]

Semester 1 Modules	Semester 2 Modules
EG-244 Software Engineering 10 Credits Dr A Ali CORE	EG-218 Materials for Energy 10 Credits Prof MJ Carnie CORE
EG-279 Functional and Smart Materials 10 Credits Prof TM Watson CORE	EG-281 Polymers: Structure and Processing 10 Credits Dr FA Korkees CORE
EG-280 Microstructure Evolution and Control in Metallic Materials 10 Credits Dr A Das/Prof C Pleydell-Pearce CORE	EG-282 Computational Materials 1 10 Credits Dr A Das CORE
EG-286 Materials Practicals 2a: Microstructure Development in Alloy Systems 10 Credits Dr A Das/Dr E Sackett CORE	EG-283 Mechanical Deformation in Structural Materials 10 Credits Prof MT Whittaker CORE
EG-290 Order and Disorder in Materials 10 Credits Prof PJ Holliman/Dr A Willow CORE	EG-287 Materials Practicals 2b: Applied examples in advanced metallic materials 10 Credits Prof RJ Lancaster CORE
EG-2004 AI, Machine Learning and Data Analysis 20 Credits Prof L Li/Miss CM Barnes/Dr A Das/Dr KM Ennser/Prof C Giannetti/Mr AJ Morgan/... CORE	
EG-233 Placement Preparation: Engineering Industrial Year 0 Credits Dr SA Rolland/Dr V Samaras CORE	
EG-277 Research Project Preparation 0 Credits Dr AC Tappenden/Dr M Fazeli/Mrs KM Thomas CORE	
EGT201 Engineering Tutorials: Year 2 0 Credits Prof JC Arnold CORE	
Total 120 Credits	