Swansea University
Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

UNDERGRADUATE STUDENT HANDBOOK

YEAR 1 (FHEQ LEVEL 4)

MECHANICAL 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

Mechanical Engineering Programme Director	Mechanical Engineering Year 1 Coordinator
Dr Will Newton	Dr Alberto Coccarelli

Year 1 (FHEQ Level 4) 2025/26
Mechanical Engineering
BEng Mechanical Engineering[H300,H307]
BEng Mechanical Engineering with a Year Abroad[H308]
MEng Mechanical Engineering[H304]

Semester 1 Modules	Semester 2 Modules
EG-133 Engineering for People Hackathon 10 Credits Prof JC Arnold/Dr WG Bennett/Prof D Deganello/Prof DJ Penney/... CORE	EG-182 Manufacturing Technology I 10 Credits Prof HM Davies CORE
EG-137 Data analysis and simulation 10 Credits Mr AJ Morgan CORE	EGA130 Thermofluids (Mechanical & General) 20 Credits Dr JS Thompson/Dr A Celik/Dr A Coccarelli CORE
EG-180 Introduction to Materials Engineering 10 Credits Prof JH Sullivan/Prof RJ Lancaster CORE	
EGA127 Engineering Mathematics (EEE, General and Mech) 20 Credits Dr MR Brown/Dr AA Fahmy Abdo/Prof K Kalna CORE	
EGA129 Applied Mechanics (Mechanical and General) 20 Credits Dr S Potts CORE	
EGA132 Engineering Design 1 20 Credits Dr WH Newton/Prof JC Arnold/Dr PJ Dorrington/Dr B Morgan CORE	
EGT102 Engineering Tutorials: Year 1 0 Credits Prof JC Arnold	
Total 120 Credits	

Year 1 (FHEQ Level 4) 2025/26
Mechanical Engineering
MEng Mechanical Engineering with a Year Abroad[H309]

Semester 1 Modules	Semester 2 Modules
EG-133 Engineering for People Hackathon 10 Credits Prof JC Arnold/Dr WG Bennett/Prof D Deganello/Prof DJ Penney/... CORE	EG-182 Manufacturing Technology I 10 Credits Prof HM Davies CORE
EG-137 Data analysis and simulation 10 Credits Mr AJ Morgan CORE	EGA130 Thermofluids (Mechanical & General) 20 Credits Dr JS Thompson/Dr A Celik/Dr A Coccarelli CORE
EG-180 Introduction to Materials Engineering 10 Credits Prof JH Sullivan/Prof RJ Lancaster CORE	
EGA127 Engineering Mathematics (EEE, General and Mech) 20 Credits Dr MR Brown/Dr AA Fahmy Abdo/Prof K Kalna CORE	
EGA129 Applied Mechanics (Mechanical and General) 20 Credits Dr S Potts CORE	
EGA132 Engineering Design 1 20 Credits Dr WH Newton/Prof JC Arnold/Dr PJ Dorrington/Dr B Morgan CORE	
EGT102 Engineering Tutorials: Year 1 0 Credits Prof JC Arnold CORE	
Total 120 Credits	

Year 1 (FHEQ Level 4) 2025/26
Mechanical Engineering
BEng Mechanical Engineering with a Year in Industry[H305]

Semester 1 Modules	Semester 2 Modules
EG-133 Engineering for People Hackathon 10 Credits Prof JC Arnold/Dr WG Bennett/Prof D Deganello/Prof DJ Penney/... CORE	EG-135 Placement Preparation: Science and Engineering Year in Industry 0 Credits Dr SA Rolland/Dr V Samaras CORE
EG-137 Data analysis and simulation 10 Credits Mr AJ Morgan CORE	EG-182 Manufacturing Technology I 10 Credits Prof HM Davies CORE
EG-180 Introduction to Materials Engineering 10 Credits Prof JH Sullivan/Prof RJ Lancaster CORE	EGA130 Thermofluids (Mechanical & General) 20 Credits Dr JS Thompson/Dr A Celik/Dr A Coccarelli CORE
EGA127 Engineering Mathematics (EEE, General and Mech) 20 Credits Dr MR Brown/Dr AA Fahmy Abdo/Prof K Kalna CORE	
EGA129 Applied Mechanics (Mechanical and General) 20 Credits Dr S Potts CORE	
EGA132 Engineering Design 1 20 Credits Dr WH Newton/Prof JC Arnold/Dr PJ Dorrington/Dr B Morgan CORE	
EGT102 Engineering Tutorials: Year 1 0 Credits Prof JC Arnold CORE	
Total 120 Credits	

Year 1 (FHEQ Level 4) 2025/26
Mechanical Engineering
MEng Mechanical Engineering with a Year in Industry

Semester 1 Modules	Semester 2 Modules
EG-110 Engineering Skills & Applications 10 Credits Prof D Deganello/Prof JC Arnold/Mr D Butcher/Dr N Jamia/... CORE	EG-135 Placement Preparation: Science and Engineering Year in Industry 0 Credits Dr SA Rolland/Dr V Samaras CORE
EG-133 Engineering for People Hackathon 10 Credits Prof JC Arnold/Dr WG Bennett/Prof D Deganello/Prof DJ Penney/... CORE	EG-156 Engineering Design Principles 1 10 Credits Dr WH Newton/Mr AJ Morgan/Mr R Rees CORE
EG-137 Data analysis and simulation 10 Credits Mr AJ Morgan CORE	EG-182 Manufacturing Technology I 10 Credits Prof HM Davies CORE
EG-180 Introduction to Materials Engineering 10 Credits Prof JH Sullivan/Prof RJ Lancaster CORE	EGA130 Thermofluids (Mechanical & General) 20 Credits Dr JS Thompson/Dr A Celik/Dr A Coccarelli CORE
EGA127 Engineering Mathematics (EEE, General and Mech) 20 Credits Dr MR Brown/Dr AA Fahmy Abdo/Prof K Kalna CORE	
EGA129 Applied Mechanics (Mechanical and General) 20 Credits Dr S Potts CORE	
EGT102 Engineering Tutorials: Year 1 0 Credits Prof JC Arnold CORE	
Total 120 Credits	

Year 1 (FHEQ Level 4) 2025/26
Mechanical Engineering
MEng Mechanical Engineering with a Year in Industry[H306]

Semester 1 Modules	Semester 2 Modules
EG-133 Engineering for People Hackathon 10 Credits Prof JC Arnold/Dr WG Bennett/Prof D Deganello/Prof DJ Penney/... CORE	**EG-135** Placement Preparation: Science and Engineering Year in Industry 0 Credits Dr SA Rolland/Dr V Samaras
EG-137 Data analysis and simulation 10 Credits Mr AJ Morgan CORE	**EG-182** Manufacturing Technology I 10 Credits Prof HM Davies CORE
EG-180 Introduction to Materials Engineering 10 Credits Prof JH Sullivan/Prof RJ Lancaster CORE	**EGA130** Thermofluids (Mechanical & General) 20 Credits Dr JS Thompson/Dr A Celik/Dr A Coccarelli CORE
EGA127 Engineering Mathematics (EEE, General and Mech) 20 Credits Dr MR Brown/Dr AA Fahmy Abdo/Prof K Kalna CORE	
EGA129 Applied Mechanics (Mechanical and General) 20 Credits Dr S Potts CORE	
EGA132 Engineering Design 1 20 Credits Dr WH Newton/Prof JC Arnold/Dr PJ Dorrington/Dr B Morgan CORE	
EGT102 Engineering Tutorials: Year 1 0 Credits Prof JC Arnold	
Total 120 Credits	