Swansea University
Prifysgol Abertawe

FACULTY OF SCIENCE AND ENGINEERING

POSTGRADUATE TAUGHT STUDENT HANDBOOK

MSC (FHEQ LEVEL 7)

MATERIALS 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 Engineering Programme Director	Materials Engineering MSc Coordinator
Dr Amit Das	Dr Amit Das

MSc (FHEQ Level 7) 2025/26
Materials Engineering
MSc Materials Engineering

Compulsory Modules

Semester 1 Modules	Semester 2 Modules
EGNM04 **Nanoscale Structures and Devices** **10 Credits** **Dr TGG Maffeis/Prof KS Teng** **CORE**	**EG-M37** **Additive Manufacturing** **10 Credits** **Prof NPN Lavery** **CORE**
EGSM00 **Structural Integrity of Aerospace Metals** **10 Credits** **Prof C Pleydell-Pearce** **CORE**	**EG-M83** **Simulation Based Product Design** **10 Credits** **Dr AJ Williams/Dr B Morgan** **CORE**
EGTM71 **Power Generation Systems** **10 Credits** **Prof I Masters** **CORE**	**EGTM60** **Aerospace Materials Engineering** **10 Credits** **Prof C Pleydell-Pearce** **CORE**
EGTM79 **Sustainability and Environmental Assessment** **10 Credits** **Prof GTM Bunting/Mr MH Green** **CORE**	
Dissertation	
EG-D06 **MSc Dissertation - Materials Engineering** **60 Credits** **Dr A Das** **CORE**	
Total 180 Credits	

Optional Modules

Choose exactly 50 credits

The following modules must be chosen by graduates without Swansea Materials degree

EG-M340	Polymers: Structure + Processing	Dr FA Korkees	TB2	10 (CORE)
EG-M73	Composite Materials	Dr FA Korkees	TB2	10 (CORE)
EGM402	Fracture and Fatigue	Prof RE Johnston	TB1	10 (CORE)
EGTM88	Ceramics	Dr E Sackett	TB2	10 (CORE)
EGTM92	Physical Metallurgy of Steels	Dr E Sackett	TB1	10 (CORE)

Or

Choose exactly 50 credits

The following modules must be chosen by Swansea Materials graduates

EG-M122	Group Project (Mechanical, Materials & EEE)	Dr AK Bastola	TB1+2	30 (CORE)
EG-M190	Socio-Technical Engineering	Dr SA Rolland/Dr A Larimi	TB2	10 (CORE)
EG-M47	Business Leadership for Engineers	Dr JE Norambuena-Contreras/Dr Z Tehrani	TB2	10 (CORE)

Or
Choose exactly 50 credits
The following modules must be chosen by Swansea Aerospace Engineering graduates

EG-M340	Polymers: Structure + Processing	Dr FA Korkees	TB2	10 (CORE)
EG-M343	Microstructure and Characterisation	Dr L Prakash	TB1	10 (CORE)
EG-M47	Business Leadership for Engineers	Dr JE Norambuena-Contreras/Dr Z Tehrani	TB2	10 (CORE)
EGTM88	Ceramics	Dr E Sackett	TB2	10 (CORE)
EGTM92	Physical Metallurgy of Steels	Dr E Sackett	TB1	10 (CORE)