

## FACULTY OF SCIENCE AND ENGINEERING

### UNDERGRADUATE STUDENT HANDBOOK

YEAR 3 (FHEQ LEVEL 6)

BSC AEROSPACE 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 <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.

### 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>

### **Key Programme Staff**

Aerospace Engineering Programme Director	Aerospace Engineering Year Coordinator	
Dr Nidhal Jamia	Dr Hadi Madinei	

### Further Guidance for Year 3 students enrolled on a non-accredited BSc programme

Please be aware that the non-accredited BSc programme will follow standard University regulations, and it is important to be aware of the following:

### **CORE** modules

There are no CORE modules in the Year 3 BSc programmes.

### **B-version of modules**

Where a module has an additional assessment rule (for example, students must pass the exam with a mark of 40%+ in order to pass the module), B-versions of these modules have been created for the BSc programmes. The module content and assessment are the same, but the additional assessment rule does not feature.

### **Compensation at Final Year**

As standard final year regulations apply for the BSc, these currently permit compensation in up to 40-credits down to 0 in non-core modules at Final Year.

### **Resits at Final Year**

There is <u>no</u> opportunity for resits in final year for those on the BSc programme, unlike BEng/MEng.

### Calculation of the BSc degree classification

Calculation of the BSc will follow standard university regulations with the following system applied - The overall average will be worked out with 3\*weighting for the best 80 Cr from year 3, 2\* weighting for remaining 40Cr from Year 3 and best 40Cr from Year 2, 1\*weighting for remaining Year 2 modules. A formula is then applied to calculate the degree classification average.

As previously highlighted the BSc programmes are not-accredited.

### Year 3 (FHEQ Level 6) 2025/26 BSc Aerospace Engineering

**BSc Aerospace Engineering** 

### **Compulsory Modules**

Semester 1 Modules	Semester 2 Modules
EG-3081	EG-397
Rotorcraft Theory	Propulsion
10 Credits	10 Credits
Dr S Azizishirvanshahi	Prof MT Whittaker
EG-335	
Gas Dynamics	
10 Credits	
Prof WG Dettmer	
EG-360	
Dynamics 2	
10 Credits	
Dr S Azizishirvanshahi	

**EG-3080B** 

Engineering Management B (Aero, EEE, Mech)

10 Credits

Prof JC Arnold/Dr HKJ Jahanger/Dr EH Jewell/Mr JK Mcfadzean/Dr B Morgan/Ms LE Norman-Lewis/...

**EG-353** 

Individual Engineering Project

30 Credits

Dr AC Tappenden/Dr M Fazeli/Prof PJ Holliman

**EGA302A** 

Aerospace Engineering Design 3

20 Credits

Mr JK Mcfadzean/Prof BJ Evans/Dr N Jamia/Dr AD Shaw/Dr NV Taylor

### **Total 120 Credits**

### **Optional Modules**

Choose exactly 20 credits

Space Stream -

These options MUST be chosen by those on the Space Stream

EGA321	Satellite Systems	Dr X Zou	TB1	10
EGA341	Space Propulsion and Power Systems	Dr Z Jelic	TB2	10

### Or

Choose exactly 20 credits

Structural/Computational Stream -

These options MUST be chosen by those on the Structural/Computational Stream

EG-323	Finite Element Method	Dr W Harrison	TB1	10
EG-396	Computational Aerodynamics	Dr TN Croft	TB2	10

### Or

Choose exactly 20 credits

Materials/Propulsion Stream -

These options MUST by chosen by those on the Materials/Propulsion Stream

EG-381	Fracture and Fatigue	Prof RE Johnston	TB1	10
EGA301B	Composite Materials B	Dr FA Korkees	TB2	10

### Year 3 (FHEQ Level 6) 2025/26 BSc Aerospace Engineering

BSc Aerospace Engineering with a Year Abroad BSc Aerospace Engineering with a Year in Industry

### **Total 120 Credits**

### **Optional Modules**

Choose exactly 20 credits Space Stream -

These options MUST be chosen by those on the Space Stream

EGA321	Satellite Systems	Dr X Zou	TB1	10
EGA341	Space Propulsion and Power Systems	Dr Z Jelic	TB2	10

### Or

Choose exactly 20 credits

Structural/Computational Stream -

These options MUST be chosen by those on the Structural/Computational Stream

EG-323	Finite Element Method	Dr W Harrison	TB1	10
EG-396	Computational Aerodynamics	Dr TN Croft	TB2	10

### Or

Choose exactly 20 credits Materials/Propulsion Stream -

These options MUST by chosen by those on the Materials/Propulsion Stream

EG-381	Fracture and Fatigue	Prof RE Johnston	TB1	10
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