

Title of Programme: BEng / MEng Honours in Aerospace Engineering

Programme Code: ENENGA

Programme Specification

This programme specification is relevant to students entering:
01 September 2023

Associate Dean of School (Academic Quality Assurance):
Mariana Lilley



A programme specification is a collection of key information about a programme of study (or course). It identifies the aims and learning outcomes of the programme, lists the modules that make up each stage (or year) of the programme, and the teaching, learning and assessment methods used by teaching staff. It also describes the structure of the programme, its progression requirements and any programme-specific regulations. This information is therefore useful to potential students to help them choose the right programme of study, to current students on the programme, and to staff teaching and administering the programme.

Summary of amendments to the programme:

Section	Amendment
Table 1a	BEng Individual Project (Aerospace) 6ENT2045 replaces BEng Individual Project (Aerospace) 6ENT1079.
Table 1a	MEng Individual Project (Aerospace) 6ENT2051 replaces MEng Individual Project (Aerospace) 6ENT1096.
Table 1a	Aircraft Technical, Air Law and Operational Procedures 5ENT2054 replaces Air Law, Communications & Principles of Flight 5ENT1135.
Table 1a	Flight Performance, Planning and Communications 6ENT2056 replaces Aircraft General Knowledge, Flight Performance & Planning 6ENT1173.
Table 1a	Integrated Aerospace Systems 6ENT2057 replaces Integrated Systems 6ENT1170.
Table 1a	MEng Team Project 7ENT2044 replaces MEng Team Project 7ENT1073.

If you have any queries regarding the changes please email AQO@herts.ac.uk

Programme Specification

BEng Honours in Aerospace Engineering

BEng Honours in Aerospace Engineering with Space Technology

BEng Honours in Aerospace Engineering with Pilot Studies

MEng Honours in Aerospace Engineering

MEng Honours in Aerospace Engineering with Space Technology

MEng Honours in Aerospace Engineering with Pilot Studies

This programme specification (PS) is designed for prospective students, enrolled students, academic staff and potential employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. More detailed information on the teaching, learning and assessment methods, learning outcomes and content for each module can be found in Definitive Module Documents (DMDs).

Section 1

Awarding Institution/Body	University of Hertfordshire
Teaching Institution	University of Hertfordshire
University/partner campuses	College Lane
Programme accredited by	Royal Aeronautical Society
Final Qualification	BEng Honours / MEng Honours
All Final Award titles (Qualification and Subject)	BEng Honours Aerospace Engineering BEng Honours Aerospace Engineering with Space Technology BEng Honours Aerospace Engineering with Pilot Studies BEng Honours Aerospace Engineering (Sandwich) BEng Honours Aerospace Engineering with Space Technology (Sandwich) BEng Honours Aerospace Engineering with Pilot Studies (Sandwich) BEng Honours Aerospace Engineering with Year Abroad BEng Honours Aerospace Engineering with Space Technology with Year Abroad BEng Honours Aerospace Engineering with Pilot Studies with Year Abroad BEng Honours Aerospace Engineering with Study Abroad BEng Honours Aerospace Engineering with Space Technology with Study Abroad BEng Honours Aerospace Engineering with Pilot Studies with Study Abroad MEng Honours Aerospace Engineering MEng Honours Aerospace Engineering with Space Technology MEng Honours Aerospace Engineering with Pilot Studies MEng Honours Aerospace Engineering (Sandwich) MEng Honours Aerospace Engineering with Space Technology (Sandwich) MEng Honours Aerospace Engineering with Pilot Studies (Sandwich)

	MEng Honours Aerospace Engineering with Year Abroad
	MEng Honours Aerospace Engineering with Space Technology with Year Abroad
	MEng Honours Aerospace Engineering with Pilot Studies with Year Abroad
	MEng Honours Aerospace Engineering with Study Abroad
	MEng Honours Aerospace Engineering with Space Technology with Study Abroad
	MEng Honours Aerospace Engineering with Pilot Studies with Study Abroad
FHEQ level of award	6 (BEng), 7 (MEng)

A. Programme Rationale

The School offers a variety of MEng/BEng degrees. This programme specification covers Aerospace Engineering, Aerospace Engineering with Space Technology and Aerospace Engineering with Pilot Studies. The programme has been developed to (i) satisfy the QAA Engineering Benchmark requirements (ii) to fulfil the initial partial academic requirements of UK-SPEC for CEng status and (iii) meet the professional employment needs of industry.

Initially students study a common portfolio of modules covering a broad range of topics necessary for professional engineering allowing flexibility for students to change their award/pathway as they become more familiar with the opportunities available. The differentiating features of the various awards are progressively introduced as the students' progress.

BEng students with a sufficient level of achievement during levels 4 and 5 are encouraged to consider transfer to the MEng programme. Progression to the MEng programme requires eligibility for at least an upper second-class BEng Honours exit award without any compensatory (COMP) grades as defined in [UPR AS14](#). Students will be able to indicate this preference by discussion with their Programme Leader and completing a course transfer form by the end of first teaching week at the start of level 6.

The School has close contacts with a wide range of engineering companies and students are encouraged to take the sandwich option. Alternatively, they may consider Study Abroad options.

Graduates can expect to gain employment either within the industries directly associated with their named award in Aerospace or in industries associated with engineering in general. These industries include small- and large-scale manufacturing, defence, aerospace and military aircraft and space. Alternatively, graduates may continue their education to a post-graduate level and the University of Hertfordshire has a range of taught MSc awards or research awards that graduates may consider.

B. Educational Aims of the Programme

Diversity and Inclusion

Our programmes are purposefully designed to enable all students to engage meaningfully with the curriculum by being accessible and representative. We will support students to shape their learning experience, removing barriers and enabling them to succeed. The curriculum explicitly includes multiple and representative perspectives, valuing collective identities and individual diversity. Learning, teaching and assessment activities help students to understand how they can enhance outcomes both for themselves and for others. All students belong to a learning community, and during their studies we really want to hear their voices, encourage them to listen to others, and express themselves.

The programme has been devised in accordance with the University's graduate attributes of programmes of study as set out in [UPR TL03](#).

Additionally this programme aims to:

- provide a high-quality education in engineering;
- provide an education for the individual which enhances his/her prospects of professional employment in engineering and business both in national and international industries;
- provide studies which are accredited by one or more of the Professional Engineering institutions;

- provide studies which develop an awareness of, and underpinning knowledge and understanding of a broad range of Aerospace Engineering areas of expertise;
- provide studies which enable the student to attain a high level of expertise in a range of topics specific to their named award.
 - Aerospace Engineering students will particularly study aerodynamics and aircraft structural design.
 - Aerospace Engineering with Space Technology students will particularly study rocket and satellite technology and space vehicle design.
 - Aerospace Engineering with Pilot Studies students will particularly study the influence of pilot performance on aircraft design.

Graduate Attributes

Our graduates will be capable and professional, creative and enterprising, and will build their social and global awareness throughout. In addition to their subject expertise and proficiency, as a University of Hertfordshire graduate, they will be:

- Professionally focused
- Globally minded
- Sustainability driven
- Digitally capable and confident
- Inclusive and collaborative
- Evidence based and ethical

C. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced to the QAA benchmark statements for Engineering and the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (2014) and relate to the typical student. Additionally, the SEEC Credit Level Descriptors for Further and Higher Education (2021) have been used as a guiding framework for curriculum design.

	A. Knowledge & Understanding		Teaching and learning methods	Assessment strategy
	BEng	MEng		
A1	SM1b- Knowledge and understanding of the scientific principles and methodology underpinning aerospace engineering, and an understanding, to enable appreciation of the scientific and engineering context, and to support their understanding of relevant historical, current and future developments and technologies.	SM1m- A comprehensive knowledge and understanding of the scientific principles and methodology underpinning aerospace engineering, and an understanding and know-how of the scientific principles of related disciplines, to enable appreciation of the scientific and engineering context, and to support their understanding of relevant historical, current and future developments and technologies.	<p>Acquisition of knowledge and understanding is through the following approaches:</p> <p>Acquisition of A1 and A2 is through a combination of lectures, small group tutorials, coursework and laboratory work at levels 4 and 5 of the programme.</p> <p>Additional support is provided through the Mathematics Support Service. Specialist aspects of A2 are further developed at level 6.</p>	<p>Knowledge and understanding are assessed through combination of unseen examinations and in-course assessments in the form of laboratory reports, essays and phase tests. Some aspects of knowledge and understanding are assessed by design exercises and project reports and presentations. At level 6 some aspects of A3 are assessed by case study reports.</p>
A2	SM2b- Knowledge and understanding of mathematical and statistical methods underpinning aerospace engineering, and to enable the application of a range of mathematical and statistical methods, tools and notations proficiently in the analysis and solution of engineering problems.	SM2m- Knowledge and understanding of mathematical and statistical methods underpinning aerospace engineering, and to enable the application of a range of mathematical and statistical methods, tools and notations proficiently and critically in the analysis and solution of engineering problems.	<p>Acquisition of A3 is through a combination of lectures, projects and coursework throughout the programme.</p> <p>Staff deploy a range of teaching and learning strategies in the most appropriate way for each individual module. This will vary depending on the subject nature of a particular module and the level of study. A more didactic approach will tend to be adopted at lower levels, in particular for A1 and A2. An increasingly self-directed and interactive approach will be adopted at higher levels, particularly for A3.</p>	
A3	SM3b- Ability to apply and integrate knowledge and understanding of other engineering disciplines to support a study of aerospace engineering.	SM3m- Ability to apply and integrate knowledge and understanding of other engineering disciplines to support a study of aerospace engineering and the ability to evaluate them critically and to apply them effectively.	<p>Throughout, the learner is encouraged to undertake independent study both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.</p>	
A4		SM4m – Awareness of developing technologies related to aerospace engineering		

A5		<p>SM5m - A comprehensive knowledge and understanding of mathematical and computational models relevant to aerospace engineering, and an appreciation of their limitations.</p>		
A6		<p>SM6m – Understanding the range of concepts from a range of areas, including some outside engineering, and the ability to evaluate them critically and to apply them in engineering projects.</p>		
<p>A. Knowledge & Understanding (Economic, Legal, Social, Ethical & Environmental Context)</p>		<p>Teaching and learning methods</p>	<p>Assessment strategy</p>	
	BEng	MEng		
A7	<p>EL1b- Understanding of the need for a high level of professional and ethical production in engineering and a knowledge of professional codes of conduct.</p>	<p>EL1m- Understanding of the need for a high level of professional and ethical production in engineering, a knowledge of professional codes of conduct, and how ethical dilemmas can arise.</p>	<p>The economic, legal, social, ethical and environmental context of the role of engineers is developed in a series of project-based exercises through the programme, and reinforced by a taught module at the start of the programme.</p>	<p>Knowledge and Understanding A7 to A13 are assessed through coursework, project reports, technical reports and presentations.</p>
A8	<p>EL2- Knowledge and understanding of the commercial, economic and social context of engineering processes.</p>	<p>EL2- Knowledge and understanding of the commercial, economic and social context of engineering processes.</p>		
A9	<p>EL3b- Knowledge and understanding of management techniques, including project management, that may be used to achieve engineering objectives.</p>	<p>EL3m- Knowledge and understanding of management techniques, including project and change management, that may be used to achieve engineering objectives, their limitations, and how they be applied appropriately.</p>		
A10	<p>EL4- Understanding of the requirement for engineering activities to promote sustainable</p>	<p>EL4- Understanding of the requirement for engineering activities to promote sustainable development</p>		

	development and ability to apply quantitative techniques where appropriate.	and ability to apply quantitative techniques where appropriate.		
A11	EL5b- Awareness of the relevant legal requirements governing engineering activities, including personnel, health and safety, contracts, intellectual property rights, product safety and liability issues.	EL5m- Awareness of the relevant legal requirements governing engineering activities, including personnel, health and safety, contracts, intellectual property rights, product safety and liability issues, and an awareness that these may differ internationally.		
A12	EL6b- Knowledge and understanding of risk issues, including health and safety, environmental and commercial risk, risk assessment and risk management techniques.	EL6m- Knowledge and understanding of risk issues, including health and safety, environmental and commercial risk, risk assessment and risk management techniques, and an ability to evaluate commercial risk.		
A13		EL7m - Understanding the key drivers for business success, including innovation, calculated commercial risks and customer satisfaction.		
B. Intellectual Skills			Teaching and learning methods	Assessment strategy
	BEng	MEng		
B1	EA1b- Understanding of engineering principles and the ability to apply them to analyse of key engineering processes.	EA1m- Understanding of engineering principles and the ability to apply them to undertake critical analysis of key engineering processes.	Engineering analysis skills are developed throughout the programme by the methods and strategies outlined for section A of the intended learning outcomes above, again moving from a more didactic approach to an increasingly self-directed and interactive approach at higher levels, particularly for B2, B3 and B4.	Engineering analysis skills B1, B2 and B4 are assessed through unseen examination papers, laboratory reports and coursework related to in-course exercises.
B2	EA2- Ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques.	EA2- Ability to identify, classify and describe the performance of systems and components through the use of analytical methods and modelling techniques.	Analysis, problem solving and modelling skills are further developed through tutorial	Engineering analysis skills B3 are assessed through project reports and presentations.

B3	EA3b- Ability to apply quantitative and computational methods in order to solve engineering problems and implement appropriate action.	EA3m- Ability to apply quantitative and computational methods, using alternative approaches, and understanding their limitations, in order to solve engineering problems and implement action.	work, laboratory work, in-course exercises and project work.	
B4	EA4b- Understanding of, and the ability to apply, an integrated or systems approach to solving engineering problems.	EA4m- Understanding of, and the ability to apply, an integrated or systems approach to solving complex engineering problems.		
B5		EA5m – Ability to use fundamental knowledge to investigate new and emerging technologies.		
B6		EA6m – Ability to extract and evaluate pertinent data and to apply engineering analysis techniques in the solution of unfamiliar problems.		
C. Transferable Skills (Practical skills)			Teaching and learning methods	Assessment strategy
	BEng	MEng		
C1	D1- Understand and evaluate business, customer and user needs, including considerations such as the wider engineering context, public perception and aesthetics.	D1- Understand and evaluate business, customer and user needs, including considerations such as the wider engineering context, public perception and aesthetics.	Design skills are developed throughout the programme by the methods and strategies outlined above, again moving from a more didactic approach to an increasingly self-directed and interactive approach at higher levels, particularly for C3 and C4.	C1, C2, C5 and C6 are assessed through unseen examination, coursework, project reports, technical reports and oral presentations.
C2	D2- Investigate and define the problem, identifying any constraints including environmental and sustainability limitations; ethical health, safety, security and risk issues; intellectual property; codes of practice and standards.	D2- Investigate and define the problem, identifying any constraints including environmental and sustainability limitations; ethical health, safety, security and risk issues; intellectual property; codes of practice and standards.	Feedback is given to all students on all coursework produced. Throughout, the learner is encouraged to develop intellectual skills further by independent study.	C3, C4 is assessed by review of group project work.

C3	D3b- Work with information that may be incomplete or uncertain, and quantify the effect of this on the design.	D3m- Work with information that may be incomplete or uncertain, quantify the effect of this on the design and, where appropriate, use theory or experimental research to mitigate deficiencies.	
C4	D4- Apply advanced problem solving skills, technical knowledge and understanding, to establish rigorous and creative solutions that are fit for purpose for all aspects of the problem including production, operation, maintenance and disposal.	D4- Apply advanced problem solving skills, technical knowledge and understanding, to establish rigorous and creative solutions that are fit for purpose for all aspects of the problem including production, operation, maintenance and disposal.	
C5	D5- Plan and manage the design process, including cost drivers, and evaluate outcomes.	D5- Plan and manage the design process, including cost drivers, and evaluate outcomes.	
C6	D6- Communicate their work to technical and non-technical audiences.	D6- Communicate their work to technical and non-technical audiences.	
C7		D7m – Demonstrate wide knowledge and comprehensive understanding of design processes and methodologies and the ability to apply and adapt them in unfamiliar situations.	
C8		D8m – Demonstrate the ability to generate an innovative design for products, systems, components or processes to fulfil new needs.	

	C. Transferable Skills (Engineering Practice)		Teaching and learning methods	Assessment strategy
	BEng	MEng		
C9	P1- Understanding of contexts in which engineering knowledge can be applied (e.g. operations and management, application and development of technology, etc.)	P1- Understanding of contexts in which engineering knowledge can be applied (e.g. operations and management, application and development of technology, etc.)	<p>Staff deploy a range of teaching and learning strategies in the most appropriate way for each individual module. This will vary depending on the subject nature of a particular module and the level of study. A more didactic approach will tend to be adopted at lower levels, in particular for C9, C10, C11, C12 and C19.</p> <p>Acquisition of skills for C13, C14 and C15 are through a combination of formal lectures and tutorials, as well as project-based work.</p> <p>An increasingly self-directed and interactive approach will be adopted at higher levels, particularly for C14, C15 and C16.</p>	<p>Engineering practice is assessed through combination of unseen examinations and in-course assessments.</p> <p>Assessments take many forms as appropriate, and include laboratory reports, demonstrations, essays and phase tests.</p>
C10	P2b- Knowledge of characteristics of particular materials, equipment, processes or products.	P2m- Knowledge of characteristics of particular materials, equipment, processes or products, with extensive knowledge and understanding of a wide range of engineering materials and components.		
C11	P3- Ability to apply relevant practical and laboratory skills.	P3- Ability to apply relevant practical and laboratory skills.		
C12	P4- Understanding use of technical literature and other information sources.	P4- Understanding use of technical literature and other information sources.		
C13	P5- Knowledge of relevant legal and contractual issues.	P5- Knowledge of relevant legal and contractual issues.		
C14	P6- Understanding of appropriate codes of practice and industry standards.	P6- Understanding of appropriate codes of practice and industry standards.		
C15	P7- Awareness of quality issues and their application to continuous improvement.	P7- Awareness of quality issues and their application to continuous improvement.		
C16	P8- Ability to work with technical uncertainty.	P8- Ability to work with technical uncertainty.		
C17		P9m – A thorough understanding of current practice and its limitations,		

C18		and some appreciation of likely new developments. P10m – Ability to apply engineering techniques taking account of a range of commercial and industrial constraints.		
C19	P11b - Understanding of, and the ability to work in, different roles within an engineering team.	P11m - Understanding of, and the ability to work in, different roles within an engineering team, and the ability to exercise initiative and personal responsibility, which may be as a team member or leader.		
C. Transferable Skills			Teaching and learning methods	Assessment strategy
BEng		MEng		
C20	G1 - Apply their skills in problem solving, communication, information retrieval, working with others and the effective use of general IT facilities.	G1 - Apply their skills in problem solving, communication, information retrieval, working with others and the effective use of general IT facilities.	Additional general skills are developed throughout the programme by the methods and strategies outlined in above.	Additional general skills are assessed through the following approaches:
C21	G2 - Plan self-learning and improve performance, as the foundation for lifelong learning/CPD.	G2 - Plan self-learning and improve performance, as the foundation for lifelong learning/CPD.	C20 is developed through feedback on coursework reports, oral presentations and project reports. C21 is developed in a dedicated module that emphasises the role of such practice.	C20 and C21 are assessed through coursework, individual project and technical reports and oral presentations.
C22	G3b - Plan and carry out a personal programmes of work, adjusting where appropriate.	G3m - Monitor and adjust a personal programme of work on an ongoing basis.	C22 is developed through project work planning and throughout the programme.F4 is developed through group project and assignment work.	C22 and C23 are assessed by review of an individual's progress during individual project work.
C23	G4 - Exercise initiative and personal responsibility, which may be as a team member or leader.	G4 - Exercise initiative and personal responsibility, which may be as a team member or leader.	Throughout, the learner is encouraged to develop transferable skills by maintaining a record of evidence and completing a personal development plan.	

D. Programme Structures, Features, Levels, Modules, and Credits

The BEng programme is normally offered in full-time (3 years), sandwich (4 years) or part-time (6 years) modes, and leads to the award of a BEng degree with Honours in the student's chosen engineering discipline.

The MEng programme is normally offered in full-time (4 years), sandwich (5 years) or part-time (8 years) modes, and leads to the award of a BEng degree with Honours in the student's chosen engineering discipline.

Entry is normally at level 4 (with A-Level, or equivalent qualifications) but is possible at level 5 with suitable qualifications (e.g. an Edexcel HND in Engineering with appropriate subjects studied). Direct entry into level 6 is also possible, for example following successful completion of two years of a similar BEng or MEng degree programme at another HE institution. In this case, the final award will not be accredited. Intake is normally Semester A (September).

Professional and Statutory Regulatory Bodies

BEng (Hons) Accredited CEng (Partial)

This degree is accredited by the Royal Aeronautical Society (RAeS) on behalf of the Engineering Council as:

- fully satisfying the educational base for an Incorporated Engineer (IEng).
- partially satisfying the educational base for a Chartered Engineer (CEng).

MEng (Hons) Accredited CEng (Full)

This degree is accredited by the Royal Aeronautical Society (RAeS) on behalf of the Engineering Council as fully satisfying the educational base for a Chartered Engineer (CEng).

See <https://www.aerosociety.com/> for further information.

Work-Based Learning, including Sandwich Programmes

A designated sandwich programme leads to a University award in the sandwich mode and the word "sandwich" appears on the award certificate. A sandwich award requires the successful completion of at least 30 weeks full-time equivalent placement activity from a maximum of two separate approved placements, neither of which will be normally less than 12 weeks in duration, as defined in [UPR AS11](#).

The work experience will normally be completed within the United Kingdom but with approval may be completed within other countries. Progress of the student's placement is monitored by visits from University academic staff. Students will be required to document this period of work in accordance with the guidelines produced by the School. Students on industrial placement will be registered on the Placement Year module (6AAD0015).

Students are encouraged by university staff, to use their experience and their reports as a basis for a presentation to the local Professional Institution Branch, Regions or Division possibly through student paper or poster competitions.

Students who have not achieved the minimum progression requirements at the end of level 5 may be prevented from undertaking a sandwich placement. Additionally, students on industrial placement but who have level 4 or 5 modules to repeat, will not normally be allowed to re-enrol on these modules until they return from industrial placement. This is to avoid a conflict between UH attendance requirements and the student's commitment to their employer.

Students who do not take the sandwich option, progressing directly to level 6, are automatically transferred to the full-time mode.

All students are required to complete a level 4 (first year) 15-credit module titled "Aerospace Engineering Professionalism" giving them information to prepare for industrial experience and work-based learning. Sustainability, recyclability and advances in technology and their impact on engineers and specifically the Aerospace industry sector will be covered in the materials, design and design and build CDIO modules at levels 4 and 5 and explicitly researched in the project modules at levels 6 and 7 (MEng only).

Study Abroad Options

Students may also opt to take additional studies through the Year Abroad or Semester Abroad options at a partner institution in place of all or part of the sandwich placement year, i.e. between Levels 5 and 6. To be eligible for these options students will normally be expected to have passed 120 credits at level 4 and 120 credits at level 5 with an average of at least 60%. In order to maintain registration with UH, students studying abroad for a full year will be registered on the 6ENT0001 Year Abroad module whilst students studying abroad for a single semester will be enrolled on the 6ENT1051 Semester Abroad module. In recognition of the extra study, provided a full transcript of their achievement in the host academic institution is submitted to the Board of Examiners, this will lead to an award of a MEng degree with Honours in one of the named awards as listed in Section 1 “with Year Abroad” or “with Study Abroad” on the award.

Further Features

In order to recognise the significant programme-related extra-curricular commitment and experience that can be gained by students who participate in BMFA University Challenge, IMechE UAS Challenge, Formula Student or other similar competitions, there are two zero-credit-rated elective modules that students may take. These are:

UAV Projects (6ENT1042)
Formula Student (6ENT1043)

They are assessed on a Pass/Fail basis. If taken, they do not contribute to degree classification, but will appear on a student’s results transcript.

Programme Structure

The programme structure and progression information below (Table 1a and 1b) is provided for the Honours award. Any interim awards are identified in Table 1b. The Unit/Programme Learning Outcomes are developed and assessed through the constituent modules, as identified within the Unit/Programme Specifications listed in Section B, above.

For all awards:

- Progression to level 5 requires a minimum of 90 credits at level 4.
- Progression to level 6 requires of 210 credit points and above with at least 90 credit points at Level 5 to remain on the honours award.
- Industrial Placement, Year Abroad and Study Abroad modules always take place between levels 5 and 6.
- Progression to non-honours level 6 with 180 credits may be permissible. The maximum study rate in such an instance would normally be 120 credits but students would be expected to remedy any failed modules from level 5 in the first instance.

Table 1a Outline Programme Structure

BEng (Hons) Aerospace Engineering

Mode of study

BEng Full Time: 3 years; Part-time: 6 years

Entry point Semester A

Level 4

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Dynamics & Vibration	5ENT1133	15	0	60	40	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

Table 1a Outline Programme Structure

BEng (Hons) Aerospace Engineering (Sandwich)

Mode of study

BEng Sandwich: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Dynamics & Vibration	5ENT1133	15	0	60	40	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Industrial Placement	6AAD0015	0	0	0	P/F	0	AB

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							

Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

Table 1a Outline Programme Structure

BEng (Hons) Aerospace Engineering with Year Abroad

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Dynamics & Vibration	5ENT1133	15	0	60	40	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Year Abroad	6ENT0001	0	0	0	P/F	0	AB

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							

Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

Table 1a Outline Programme Structure

BEng (Hons) Aerospace Engineering with Study Abroad

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Dynamics & Vibration	5ENT1133	15	0	60	40	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Semester Abroad	6ENT1051	0	0	0	P/F	0	A or B

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Space Technology

Mode of study

BEng Full-time: 3 years; Part-time: 6 years

Entry point Semester A

Level 4

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Avionics Systems	5ENT1067	15	0	0	100	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Space Technology (Sandwich)

Mode of study

BEng Sandwich: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Avionics Systems	5ENT1067	15	0	0	100	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Industrial Placement	6AAD0015	0	0	0	P/F	0	AB
Compulsory Modules							
Module Title							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A

Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Space Technology with Year Abroad

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Avionics Systems	5ENT1067	15	0	0	100	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Year Abroad	6ENT0001	0	0	0	P/F	0	AB
Compulsory Modules							
Module Title							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A

Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Space Technology with Study Abroad

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Avionics Systems	5ENT1067	15	0	0	100	0	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Semester Abroad	6ENT1051	0	0	0	P/F	0	A or B
Compulsory Modules							
Module Title							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A

Flight Testing	6ENT1166	15	0	60	40	0	A
Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Pilot Studies

Mode of study

BEng Full-time: 3 years; Part-time: 6 years

Entry point Semester A

Level 4

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Technical, Air Law and Operational Procedures	5ENT2054	15	50	0	0	50	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Pilot Studies (Sandwich)

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Technical, Air Law and Operational Procedures	5ENT2054	15	50	0	0	50	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Industrial Placement	6AAD0015	0	0	0	P/F	0	A or B
Compulsory Modules							
Module Title							

Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Pilot Studies with Year Abroad

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Technical, Air Law and Operational Procedures	5ENT2054	15	50	0	0	50	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Year Abroad	6ENT0001	0	0	0	P/F	0	A or B
Compulsory Modules							
Module Title							

Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

BEng (Hons) Aerospace Engineering with Pilot Studies with Study Abroad

Mode of study

BEng Full-time: 4 years; Part-time: 6 years

Entry point Semester A

Level 4

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Engineering Mathematics for Aerospace	4ENT1168	15	40	60	0	0	A
Mechanical Science for Aircraft Engineering	4ENT1169	15	20	60	20	0	A
Aerospace Technology & Industry	4AAD0016	15	60	0	0	40	A
Introduction to Projects and Design	4ENT1170	15	0	0	100	0	A
Electrical Science for Aircraft Engineering	4ENT1171	15	100	0	0	0	B
Programming for Aircraft Engineers	4ENT1172	15	40	0	0	60	B
Aerospace Engineering Professionalism	4ENT1173	15	40	0	60	0	B
Introductory Robotics & Microcontrollers	4ENT1174	15	0	0	100	0	B

Level 5

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Fluids & Aerodynamics	5ENT1128	15	20	60	20	0	A
Thermodynamics for Aerospace	5ENT1129	15	80	0	20	0	A
Materials for Aerospace	5ENT1130	15	50	0	50	0	A
Practical Aerodynamics	5ENT1131	15	0	0	100	0	A
Control & Autopilot Systems	5ENT1132	15	75	0	0	25	B
Aircraft Structural Mechanics	5ENT1134	15	0	60	40	0	B
Aircraft Technical, Air Law and Operational Procedures	5ENT2054	15	50	0	0	50	B
Structural Design & CAE	5ENT1136	15	0	0	100	0	B

Level 6

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Module							
Module Title							
Semester Abroad	6ENT1051	0	0	0	P/F	0	A or B
Compulsory Modules							
Module Title							

Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
BEng Individual Project (Aerospace)	6ENT2045	30	0	0	80	20	AB

Table 1a Outline Programme Structure

MEng (Hons) Aerospace Engineering

Mode of study

MEng Full Time: 4 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering.

Level 6

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
FEA & Crashworthiness	7ENT1153	15	0	60	40	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Advanced CFD	7ENT1157	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

Table 1a Outline Programme Structure

MEng (Hons) Aerospace Engineering (Sandwich)

Mode of study

MEng Sandwich: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering (Sandwich).

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Industrial Placement	6AAD0015	0	0	0	P/F	0	AB

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
FEA & Crashworthiness	7ENT1153	15	0	60	40	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Advanced CFD	7ENT1157	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

Table 1a Outline Programme Structure

MEng (Hons) Aerospace Engineering with Year Abroad

Mode of study

MEng Full-time: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Year Abroad.

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Year Abroad	6ENT0001	0	0	0	P/F	0	AB
Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
FEA & Crashworthiness	7ENT1153	15	0	60	40	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Advanced CFD	7ENT1157	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

Table 1a Outline Programme Structure

MEng (Hons) Aerospace Engineering with Study Abroad

Mode of study

MEng Full-time: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Study Abroad.

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Semester Abroad	6ENT1051	0	0	0	P/F	0	A or B

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Aerospace Structures & FEA	6ENT1167	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Advanced Aerodynamics	6ENT1171	15	0	60	40	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
FEA & Crashworthiness	7ENT1153	15	0	60	40	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Advanced CFD	7ENT1157	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Space Technology

Mode of study

MEng Full-time: 4 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Space Technology.

Level 6

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Module Title							
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Space Dynamics	7ENT1154	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Space Systems	7ENT1158	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Space Technology (Sandwich)

Mode of study

MEng Full-time: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Space Technology (Sandwich).

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Industrial Placement	6AAD0015	0	0	0	P/F	0	AB

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Space Dynamics	7ENT1154	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Space Systems	7ENT1158	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Space Technology with Year Abroad

Mode of study

MEng Full-time: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as (Hons) Aerospace Engineering with Space Technology with Year Abroad.

Level 6

Compulsory Module Module Title	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Year Abroad	6ENT0001	0	0	0	P/F	0	AB

Compulsory Modules Module Title	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	%Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Space Dynamics	7ENT1154	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Space Systems	7ENT1158	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Space Technology with Study Abroad

Mode of study

MEng Full-time: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Space Technology with Study Abroad.

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Semester Abroad	6ENT1051	0	0	0	P/F	0	A or B

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Rocket Performance and Propulsion	6AAD0026	15	0	60	40	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Satellite Communications	6ENT1172	15	0	0	100	0	B
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Space Dynamics	7ENT1154	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Space Systems	7ENT1158	15	0	60	40	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Pilot Studies

Mode of study

MEng Full-time: 4 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Pilot Studies.

Level 6

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Compulsory Modules							
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Advanced Avionics	7ENT1155	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Embedded Aerospace Systems	7AAD0037	15	0	0	100	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Pilot Studies (Sandwich)

Mode of study

MEng Sandwich: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Pilot Studies (Sandwich).

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Industrial Placement	6AAD0015	0	0	0	P/F	0	A or B

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Advanced Avionics	7ENT1155	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Embedded Aerospace Systems	7AAD0037	15	0	0	100	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

MEng (Hons) Aerospace Engineering with Pilot Studies with Year Abroad

Mode of study

MEng Sandwich: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Pilot Studies with Year Abroad.

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Year Abroad	6ENT0001	0	0	0	P/F	0	A or B

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	P/F	AB
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Advanced Avionics	7ENT1155	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Embedded Aerospace Systems	7AAD0037	15	0	0	100	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

BEng (Hons) Aerospace Engineering with Pilot Studies with Study Abroad

Mode of study

MEng Sandwich: 5 years; Part-time: 8 years

Entry point Semester A

Levels 4 (120 credits) and 5 (120 credits) same as BEng (Hons) Aerospace Engineering with Pilot Studies with Study Abroad.

Level 6

Compulsory Module Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Semester Abroad	6ENT1051	0	0	0	P/F	0	A or B

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
Aerospace Performance and Propulsion	6ENT1132	15	0	60	40	0	A
Flight Testing	6ENT1166	15	0	60	40	0	A
Navigation, Human Factors & Meteorology	6ENT1169	15	100	0	0	0	A
Aerospace Vehicle Design	6ENT1133	15	0	0	100	0	B
Integrated Aerospace Systems	6ENT2057	15	60	0	40	0	B
Flight Performance, Planning and Communications	6ENT2056	15	50	0	25	25	B
Piloting Experience	6ENT1151	0	0	0	0	100	AB
MEng Individual Project (Aerospace)	6ENT2051	30	0	0	80	20	AB

Level 7

Compulsory Modules Module Title	Module Code	Credit Points	% Test	% Examination	% Coursework	% Practical	Semesters
MEng Team Project	7ENT2044	45	0	0	80	20	AB
Stability & Control of Aircraft	7ENT1152	15	0	60	40	0	A
Advanced Avionics	7ENT1155	15	0	0	100	0	A
Aeroelasticity & Structural Failure	7ENT1156	15	40	60	0	0	B
Embedded Aerospace Systems	7AAD0037	15	0	0	100	0	B
Procurement & Supply Chain Management	7ENT1069	15	0	60	40	0	B

Honours classification

The University has approved structure and assessment regulations common to all programmes. Full details are provided in [UPR AS14](#), Section D. However, this programme has specific regulations relating to the determination of Honours classification given under the Programme-Specific Regulations in Section 2.

Table 1b Final and interim awards available

The programme provides the following final and interim awards:

Final Award	Award Title	Minimum requirements	Available at end of Level	Programme Learning Outcomes developed (see above)
MEng (Hons) in the named award	Aerospace Engineering	480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7. Additionally, students must satisfactorily complete the MEng Individual Project (Aerospace) and MEng Team Project modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
MEng (Hons) in the named award (Sandwich)	Aerospace Engineering with Space Technology	480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7. Additionally, students must satisfactorily complete the MEng Individual Project (Aerospace), MEng Team Project and Placement Year modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
MEng (Hons) in the named award with Study Abroad	Aerospace Engineering with Pilot Studies	480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7. Additionally, students must satisfactorily complete the MEng Individual Project (Aerospace), MEng Team Project and Semester Abroad modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
MEng (Hons) in the named award with Year Abroad		480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7. Additionally, students must satisfactorily complete the MEng Individual Project (Aerospace), MEng Team Project and Year Abroad modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
BEng (Hons) in the named award	Aerospace Engineering	360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) module.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award (Sandwich)	Aerospace Engineering with Space Technology	360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and Placement Year modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award with Study Abroad	Aerospace Engineering with Pilot Studies (***)	360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and Semester Abroad modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award with Year Abroad		360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and Year Abroad modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.

Interim Award	Award Title	Minimum requirements	Available at end of Level	Programme Learning Outcomes developed (see above)
University Certificate		45 credit points at level 4	4	See UPR AS11, section 13: http://sitem.herts.ac.uk/secreg/upr/AS11.htm

Certificate of Higher Education		120 credit points at level 4	4, 5	See UPR AS11, section 13: http://sitem.herts.ac.uk/secreg/upr/AS11.htm
Diploma of Higher Education		240 credit points including at least 120 at level 5	5, 6	See UPR AS11, section 13: http://sitem.herts.ac.uk/secreg/upr/AS11.htm
BEng in the named award	Aerospace Studies (**) Aerospace Studies with Space Technology (**) Aerospace with Pilot Studies (**) (***)	For students entering directly at level 6 only, 75 UH specified credits must be at level 6. (*)	6	A combination of learning outcomes, based on modules passed (see Tables 2a and 2b).
BEng in the named award	Aerospace Engineering (**)	300 credit points including 180 at level 6/5 of which 60 must be at level 6.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng in the named award (Sandwich)	Aerospace Engineering with Space Technology (**)	300 credit points including 180 at level 6/5 of which 60 must be at level 6. Additionally, students must satisfactorily complete the Placement Year module.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng in the named award with Study Abroad	Aerospace Engineering with Pilot Studies (**) (***)	300 credit points including 180 at level 6/5 of which 60 must be at level 6. Additionally, students must satisfactorily complete the Semester Abroad module.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng in the named award with Year Abroad	Aerospace Systems Technology (**) (***)	300 credit points including 180 at level 6/5 of which 60 must be at level 6. Additionally, students must satisfactorily complete the Year Abroad module.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award	Aerospace Systems Technology (**) (***)	360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) module.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award (Sandwich)		360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and Placement Year modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.

BEng (Hons) in the named award with Study Abroad		360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and Semester Abroad modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award with Year Abroad		360 credit points including 240 at level 6/5 of which 120 must be at level 6. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and Year Abroad modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award	Aerospace Studies (**) Aerospace Studies with Space Technology (**) Aerospace with Pilot Studies (**)	360 credit points including 240 at level 6/5 of which 120 must be at level 6 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace).	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng(Hons) in the named award (Sandwich)	(***)	360 credit points including 240 at level 6/5 of which 120 must be at level 6 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and the Placement Year module.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng(Hons) in the named award with Study Abroad		360 credit points including 240 at level 6/5 of which 120 must be at level 6 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and the Semester Abroad modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.
BEng (Hons) in the named award with Year Abroad		360 credit points including 240 at level 6/5 of which 120 must be at level 6 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete the BEng Individual Project (Aerospace) and the Year Abroad modules.	6	All programme learning outcomes for the specified named award (see Tables 2a and 2b), based on modules passed.

MEng (Hons) in the named award	Aerospace Studies (**) Aerospace Studies with Space Technology (**) Aerospace with Pilot Studies (**)	480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete an MEng Individual Project and the MEng Team Project modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
MEng (Hons) in the named award (Sandwich)	Studies (**)	480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete an MEng Individual Project, the MEng Team Project and the Placement Year modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
MEng (Hons) in the named award with Study Abroad		480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete an MEng Individual Project, the MEng Team Project and the Semester Abroad modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.
MEng (Hons) in the named award with Year Abroad		480 credit points including 360 at levels 7/6/5 of which 120 must be at level 7 (minimum Engineering Council compensation requirements have not been achieved). Compliant with UH compensation requirements. Additionally, students must satisfactorily complete an MEng Individual Project, the MEng Team Project and pass the Year Abroad modules.	7	All programme learning outcomes for the specified named award (see Tables 2c and 2d), based on modules passed.

Notes:

(*) In accordance with UPR AS11, the maximum APL permitted towards this interim award is 225 points at levels 4/5.

(**) This award is not accredited by the Professional Bodies

(***) Students who fail the 6ENT1151 Piloting Experience module cannot be considered for a degree in “with Pilot Studies”. However, they can be considered for a degree in Aerospace Systems Technology (not accredited by the Professional Bodies) as an Interim Award.

Programme-specific assessment regulations

The programme complies with the University's academic regulations (in particular, [UPR AS11](#), [UPR AS12](#) and [UPR AS14](#)) with the exception of those listed below, which have been approved by the University:

- Major projects (group and individual) – i.e. BEng Individual Project (Aerospace) 6ENT2045, MEng Individual Project (Aerospace) 6ENT2051, MEng Team Project 7ENT2044 – cannot be compensated.

- Students who are offered a re-enrolment opportunity on project modules in line with University regulations, will normally be allocated an entirely different project.
- Piloting Experience 6ENT1151 cannot be compensated.
- Students exiting with a BEng (Hons) award or MEng (Hons) award shall have their degree classification determined in accordance with UPR AS14 and include the individual projects in the calculation of degree.

Course Code	Course Instance	Award Title	Modules (child instance codes & title)	Must be included in classification algorithm?
EIBENGAAE	A3F, A4S, A6P	BEng (Hons) Aerospace Engineering	6ENT2045-0906 BEng Individual Project (Aerospace)	Yes
EIBENGAAE	AEST3F, AEST4S, AEST6P	BEng (Hons) Aerospace Engineering with Space Technology	6ENT2045-0906 BEng Individual Project (Aerospace)	Yes
EIBENGAAE	AEPSA3F, AEPSA4S, AEPSA6P	BEng (Hons) Aerospace Engineering with Pilot Studies	6ENT2045-0906 BEng Individual Project (Aerospace)	Yes
EIMENGAE	MENGA4F, MENGA5S, MENGA8P	MEng (Hons) Aerospace Engineering	6ENT2051-0906 MEng Individual Project (Aerospace)	Yes
			7ENT2044-0906 MEng Team Project	Yes
EIMENGAE	MENGAST4F, MENGAST5S, MENGAST8P	MEng (Hons) Aerospace Engineering with Space Technology	6ENT2051-0906 MEng Individual Project (Aerospace)	Yes
			7ENT2044-0906 MEng Team Project	Yes
EIMENGAE	MAEPSA4F, MAEPSA5S, MAEPSA8P	MEng (Hons) Aerospace Engineering with Pilot Studies	6ENT2051-0906 MEng Individual Project (Aerospace)	Yes
			7ENT2044-0906 MEng Team Project	Yes

Professional Statutory Regulatory Bodies thresholds will apply for accredited awards as per the Engineering Council Compensation and Condonement notice November 2018.

BEng (Hons) accredited awards:

- To comply with professional body regulations students must achieve in all 15 credit point modules, after all available attempts under the University regulations, a minimum of 30% (in any allowable attempt) at levels 4, 5 and 6, before the board of examiners will be able to consider compensation for an accredited honours degree. A maximum of 30 credit points can be compensated across the programme, in line with University regulations and professional body accreditation requirements.

MEng (Hons) accredited awards:

- To comply with professional body regulations students must achieve in all 15 credit point modules, after all available attempts under the University regulations, a minimum of 30% (in any allowable attempt) at levels 4, 5 and 6, and 40% (in any allowable attempt) at level 7, before the board of examiners will be able to consider compensation for an accredited honours degree. A maximum of 30 credit points can be compensated across the programme, in line with University regulations and professional body accreditation requirements. **Compensation is limited to 15 credit points at Level 7.**

For non-honours awards, the standard University regulations on progression and compensation shall apply, and the Programme Board of Examiners shall have discretion to transfer a student onto a non-honours

award where it is to the advantage of the student to do so (for example, where the criteria for progression on an accredited award have not been met).

Further programme-specific regulations (requiring School-level approval) are given below:

- Part time students decide their study paths by discussion with the Programme Leader.
- Students wishing to take the CAA or FAA PPL, or BMAA NPPL, Ground School Examinations are responsible for paying the examination fees.
- In order to fly solo, students must meet the medical requirements specified by the relevant regulatory body (EASA, CAA, FAA or BMAA). Where a specific medical examination is required it can be carried out by any UK CAA approved Authorised Medical Examiner (AME) and can be arranged through the flying school. However, there are several AMEs in each county and others overseas. Further details of the medical requirements for flying and the necessary medical examination can be found on the UK Aerospace Aviation Authority website <http://www.caa.co.uk> which must be consulted; the costs of any medical certificate shall be borne by the student. (Note that the medical requirements for flying are currently under review, so may change during the currency of this document.)
- The costs of Headsets, Charts, Navigation Equipment and other items necessary for the Aerospace Engineering with Pilot Studies pathway shall be borne by the student.
- The minimum 20 hours flying requirement associated with the 6ENT1151 Piloting Experience module shall be completed by students by the end of Semester B in their final year of study (level 6). Students should note that they may commence flying at a University-approved Flying School at any point after the commencement of their study on the programme. Students will pay for their flying lessons directly to the flying school. This is an additional cost not covered by the tuition fees.

E. Management of Programme & Support for student learning.

Management

The programme is managed and administered through:

- Dean of School;
- Associate Dean (Academic Quality Assurance);
- Associate Dean (Learning, Teaching and Student Experience);
- Programme Leader who has overall responsibility for the effective operationalization of the programme, and ensuring that academic standards are maintained and an effective student learning experience is provided;
- An Admissions Tutor with specific responsibility for open days and selection;
- Student representatives on programme committees;
- Module Leaders who are responsible for individual modules.
- A designated administrative team to deal with day-to-day administration associated with the modules within the programme.

Support

Students are supported by:

- An induction week at the beginning of each new academic session;
- Overseas Orientation
- You will have a Personal Tutor who will be an important point of contact, able to help you gain a good understanding of the School and programme you are studying
- A substantial Student Centre that provides advice on issues such as finance, University regulations, legal matters, accommodation, and international student support;
- Office of Dean of Students, incorporating Chaplaincy, Counselling and nursery;
- Canvas, a versatile on-line inter-active intranet and learning environment;
- Guided student-centred learning on StudyNet module sites;
- Access to extensive digital and print collections of information resources;
- Attractive modern study environments in 2 Learning Resources Centres;
- Student Success Hubs, which include a Mathematics Drop-in Centre
- A Mathematics Drop-in Centre;
- Medical Centre;
- University Disability Advisors;

- An Equality Office;
 - Careers and Employment
 - Hertfordshire Student's Union
 - Dedicated programme site
-

F. Other sources of information

In addition to this Programme Specification, the University publishes guidance to registered students on the programme and its constituent modules:

- A dedicated programme site
- A Definitive Module Document (DMD) for each constituent module;

The [Ask Herts](#) website provides information on a wide range of resources and services available at the University of Hertfordshire including academic support, accommodation, fees, funding, visas, wellbeing services and student societies.

As a condition of registration, all students of the University of Hertfordshire are required to comply with the University's rules, regulations and procedures. These are published in a series of documents called 'University Policies and Regulations' (UPRs). The University requires that all students consult these documents which are available on-line, on the UPR web site, at: <http://www.herts.ac.uk/secreg/upr/>. In particular, [UPR SA07](#) 'Regulations and Advice for Students' Particular Attention - Index' provides information on the UPRs that contain the academic regulations of particular relevance for undergraduate and taught postgraduate students.

In accordance with section 4(5) of the Higher Education and Research Act 2017 (HERA), the UK Office for Students (OfS) has registered the University of Hertfordshire in the register of English higher education providers. The Register can be viewed at: <https://www.officeforstudents.org.uk/advice-and-guidance/the-register/the-ofs-register/>.

G. Entry requirements

For current entry tariff point requirements, please refer to the relevant page for the Course on the University website or on the online prospectus.

Applications are also welcomed from those holding other qualifications including equivalent Scottish Higher or Irish Higher Certificates, International Baccalaureate, and appropriate equivalent international qualifications.

In addition to the academic fees, students studying the module 6ENT1151 Piloting Experience as part of the BEng in Aerospace Engineering with Pilot Studies will be responsible for the cost of at least 20 hours flying tuition at a UH approved flying school. Students who are unable to pay these fees may be awarded an Interim Award as stated in the Programme-Specific Regulations (Section D).

Direct Entry at Second and Final Year

In accordance with University Admissions Policy to allow flexible entry at different levels, it may be possible for applicants to enter the programme at second and final year level. In all instances, candidates will be required to discuss their individual circumstances with the appropriate Admissions Tutor.

Students applying for direct entry into level 5 are required to have an Edexcel HND in an appropriate discipline with merits and distinctions in appropriate subjects which must include Mathematics plus technical or physical sciences. Equivalent European and overseas qualifications are also accepted subject to University approval.

Direct entry into level 6 is also possible, for example following successful completion of two years of a similar BEng or MEng degree programme at another HE institution with either a GPA of 4 from 5, 8 from 10 or a 2:1 performance across the years of study. In this case, the final award will not be accredited. Intake is normally Semester A (September).

Level 4 of this programme includes provision to Hertfordshire International College (HIC), through parallel HIC modules. HIC students, having completed Level 4, may articulate onto this programme at Level 5. In order to do so, they must have successfully completed 120 credits of study at Level 4.

Level 4 of this programme includes provision for progression to level 4 for Technology Degree Programme (Initial Year) students.

The programme is subject to the University's Principles, Policies and Regulations for the Admission of Students to Undergraduate and Taught Postgraduate Programmes (in [UPR SA03](#)), along with associated procedures. These will take account of University policy and guidelines for assessing accredited prior certificated learning (APCL) and accredited prior experiential learning (APEL).

If you would like this information in an alternative format please contact:
Hutton Hub Student Administration Service hhaq@herts.ac.uk

If you wish to receive a copy of the latest External Examiner's Report for the programme, please email a request to aqo@herts.ac.uk

BEng (Hons) Aerospace Engineering

Table 2a: Development of Intended Programme Learning Outcomes in the Constituent Modules

This map identifies where the programme learning outcomes are delivered and assessed in the constituent modules. It provides (i) an aid to academic staff in understanding how individual modules contribute to the programme aims (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own learning, personal and professional development as the programme progresses.

		Programme Learning Outcomes (as identified in section 1)																			
		Knowledge & Understanding														Intellectual Skills					
Module Title	Module Code	SM1	SM2	SM3	SM4	SM4	SM5	SM6	EL1	EL2	EL3	EL4	EL5	EL6	EL7	EA1	EA2	EA3	EA4	EA5	EA6
Level 4	Engineering Mathematics for Aerospace	4ENT1168		X	X											X					
	Mechanical Science for Aircraft Engineering	4ENT1169														X		X			
	Aerospace Technology & Industry	4AAD0016								X	X	X				X			X		
	Introduction to Projects & Design	4ENT1170												X							
	Electrical Science for Aircraft Engineering	4ENT1171	X																	X	
	Programming for Aircraft Engineers	4ENT1172																	X	X	
	Aerospace Engineering Professionalism	4ENT1173							X	X		X	X								
	Introductory Robotics & Microcontrollers	4ENT1174									X	X			X						
Level 5	Fluids & Aerodynamics	5ENT1128														X	X				
	Thermodynamics for Aerospace	5ENT1129	X													X	X				
	Materials for Aerospace	5ENT1130															X				
	Practical Aerodynamics	5ENT1131			X						X				X					X	
	Control & Autopilot Systems	5ENT1132	X	X												X	X	X	X		
	Aircraft Structural Mechanics	5ENT1134	X													X	X	X			
	Aircraft Dynamics & Vibration	5ENT1133	X													X	X				
	Aircraft Technical, Air Law and Operational Procedures	5ENT2054									X			X							
Avionics Systems	5ENT1067	X							X							X	X		X		

		Programme Learning Outcomes (as identified in section 1)																			
		Knowledge & Understanding															Intellectual Skills				
Module Title	Module Code	SM1	SM2	SM3	SM4	SM4	SM5	SM6	EL1	EL2	EL3	EL4	EL5	EL6	EL7	EA1	EA2	EA3	EA4	EA5	EA6
Structural Design & CAE	5ENT1136			X								X							X		
Placement Year	6AAD0015																				
Aerospace Performance & Propulsion	6ENT1132	X	X	X												X	X	X	X		
Flight Testing	6ENT1166	X														X	X		X		
Aerospace Structures & FEA	6ENT1167	X														X	X	X			
Aerospace Vehicle Design	6ENT1133			X					X	X	X		X			X					
Integrated Aerospace Systems	6ENT2057		X													X	X	X	X		
Advanced Aerodynamics	6ENT1171	X	X	X												X		X			
Flight Performance, Planning and Communications	6ENT2056																				
Navigation, Human Factors & Meteorology	6ENT1169		X																		
Rocket Performance and Propulsion	6AAD0026	X	X	X												X		X	X		
Satellite Communications	6ENT1172	X	X	X												X	X				
BEng Individual Project (Aerospace)	6ENT2045	X							X	X	X	X	X	X							

Level 6

BEng (Hons) Aerospace Engineering

Table 2b: Development of Intended Programme Learning Outcomes in the Constituent Modules

This map identifies where the programme learning outcomes are delivered and assessed in the constituent modules. It provides (i) an aid to academic staff in understanding how individual modules contribute to the programme aims (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own learning, personal and professional development as the programme progresses.

		Programme Learning Outcomes (as identified in section 1)																							
		Practical Skills																							
Module Title	Module Code	D1	D2	D3	D4	D5	D6	D7	D8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	G1	G2	G3	G4	
Level 4	Engineering Mathematics for Aerospace	4ENT1168																							
	Mechanical Science for Aircraft Engineering	4ENT1169										X													
	Aerospace Technology & Industry	4AAD0016	X	X				X		X											X		X	X	
	Introduction to Projects & Design	4ENT1170	X	X	X							X			X					X		X	X	X	
	Electrical Science for Aircraft Engineering	4ENT1171									X	X													
	Programming for Aircraft Engineers	4ENT1172										X													
	Aerospace Engineering Professionalism	4ENT1173											X	X	X						X				
	Introductory Robotics & Microcontrollers	4ENT1174					X	X			X	X					X			X				X	
Level 5	Fluids & Aerodynamics	5ENT1128									X	X													
	Thermodynamics for Aerospace	5ENT1129									X	X													
	Materials for Aerospace	5ENT1130								X	X						X								
	Practical Aerodynamics	5ENT1131	X	X	X							X				X	X				X		X	X	
	Control & Autopilot Systems	5ENT1132								X	X														
	Aircraft Structural Mechanics	5ENT1134	X																						
	Aircraft Dynamics & Vibration	5ENT1133										X													
	Aircraft Technical, Air Law and Operational Procedures	5ENT2054													X										
Avionics Systems	5ENT1067						X		X			X											X		

		Programme Learning Outcomes (as identified in section 1)																							
		Practical Skills																							
Module Title	Module Code	D1	D2	D3	D4	D5	D6	D7	D8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	G1	G2	G3	G4	
Structural Design & CAE	5ENT1136				X	X	X			X		X				X	X			X		X		X	
Placement Year	6AAD0015																								
Aerospace Performance & Propulsion	6ENT1132				X							X					X								
Flight Testing	6ENT1166			X						X		X					X				X				
Aerospace Structures & FEA	6ENT1167	X																							
Aerospace Vehicle Design	6ENT1133	X	X	X	X	X	X			X		X	X	X	X		X			X	X		X	X	
Integrated Aerospace Systems	6ENT2057																				X				
Advanced Aerodynamics	6ENT1171				X						X														
Flight Performance, Planning and Communications	6ENT2056				X	X																X			
Navigation, Human Factors & Meteorology	6ENT1169												X												
Rocket Performance and Propulsion	6AAD0026																								
Satellite Communications	6ENT1172																								
BEng Individual Project (Aerospace)	6ENT2045						X						X		X		X				X		X		

Level 6

MEng (Hons) Aerospace Engineering

Table 2c: Development of Intended Programme Learning Outcomes in the Constituent Modules

This map identifies where the programme learning outcomes are delivered and assessed in the constituent modules. It provides (i) an aid to academic staff in understanding how individual modules contribute to the programme aims (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own learning, personal and professional development as the programme progresses.

		Programme Learning Outcomes (as identified in section 1)																			
		Knowledge & Understanding														Intellectual Skills					
Module Title	Module Code	SM1	SM2	SM3	SM4	SM4	SM5	SM6	EL1	EL2	EL3	EL4	EL5	EL6	EL7	EA1	EA2	EA3	EA4	EA5	EA6
Level 4	Engineering Mathematics for Aerospace	4ENT1168		X	X											X					
	Mechanical Science for Aircraft Engineering	4ENT1169														X		X			
	Aerospace Technology & Industry	4AAD0016								X	X	X				X			X		
	Introduction to Projects & Design	4ENT1170												X							
	Electrical Science for Aircraft Engineering	4ENT1171	X																	X	
	Programming for Aircraft Engineers	4ENT1172																	X	X	
	Aerospace Engineering Professionalism	4ENT1173							X	X		X	X								
	Introductory Robotics & Microcontrollers	4ENT1174									X	X			X						
Level 5	Fluids & Aerodynamics	5ENT1128														X	X				
	Thermodynamics for Aerospace	5ENT1129	X													X	X				
	Materials for Aerospace	5ENT1130															X				
	Practical Aerodynamics	5ENT1131			X						X				X					X	
	Control & Autopilot Systems	5ENT1132	X	X												X	X	X	X		
	Aircraft Structural Mechanics	5ENT1134	X													X	X	X			
	Aircraft Dynamics & Vibration	5ENT1133	X													X	X				
	Aircraft Technical, Air Law and Operational Procedures	5ENT2054																			
Avionics Systems	5ENT1067	X							X							X	X		X		

		Programme Learning Outcomes (as identified in section 1)																			
		Knowledge & Understanding															Intellectual Skills				
Module Title	Module Code	SM1	SM2	SM3	SM4	SM4	SM5	SM6	EL1	EL2	EL3	EL4	EL5	EL6	EL7	EA1	EA2	EA3	EA4	EA5	EA6
Structural Design & CAE	5ENT1136			X								X							X		
Placement Year	6AAD0015																				
Aerospace Performance & Propulsion	6ENT1132	X	X	X												X	X	X	X		
Flight Testing	6ENT1166	X														X	X		X		
Aerospace Structures & FEA	6ENT1167	X														X	X	X			
Aerospace Vehicle Design	6ENT1133			X					X	X	X		X			X					
Integrated Aerospace Systems	6ENT2057		X													X	X	X	X		
Advanced Aerodynamics	6ENT1171	X	X	X												X		X			
Flight Performance, Planning and Communications	6ENT2056																				
Integrated Aerospace Systems	6ENT2057																				
Rocket Performance and Propulsion	6AAD0026	X	X	X												X		X	X		
Satellite Communications	6ENT1172	X	X	X												X	X				
MEng Individual Project (Aerospace)	6ENT2051																				
Embedded Aerospace Systems	7AAD0037																	X			
Procurement & Supply Chain Management	7ENT1069								X	X	X	X	X	X							
MEng Team Project	7ENT2044		X		X				X	X		X	X		X	X		X	X		
Stability & Control of Aircraft	7ENT1152	X	X			X	X											X			
FEA & Crashworthiness	7ENT1153	X	X													X	X	X			
Space Dynamics	7ENT1154			X		X															
Advanced Avionics	7ENT1155																	X			
Aeroelasticity & Structural Failure	7ENT1156	X		X			X									X	X	X			
Advanced CFD	7ENT1157	X	X	X												X	X	X			
Space Systems	7ENT1158					X	X														X

MEng (Hons) Aerospace Engineering

Table 2d: Development of Intended Programme Learning Outcomes in the Constituent Modules

This map identifies where the programme learning outcomes are delivered and assessed in the constituent modules. It provides (i) an aid to academic staff in understanding how individual modules contribute to the programme aims (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own learning, personal and professional development as the programme progresses.

		Programme Learning Outcomes (as identified in section 1)																							
		Practical Skills																							
Module Title	Module Code	D1	D2	D3	D4	D5	D6	D7	D8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	G1	G2	G3	G4	
Level 4	Engineering Mathematics for Aerospace	4ENT1168																							
	Mechanical Science for Aircraft Engineering	4ENT1169										X													
	Aerospace Technology & Industry	4AAD0016	X	X				X		X											X		X	X	
	Introduction to Projects & Design	4ENT1170	X	X	X							X			X						X		X	X	X
	Electrical Science for Aircraft Engineering	4ENT1171									X	X													
	Programming for Aircraft Engineers	4ENT1172										X													
	Aerospace Engineering Professionalism	4ENT1173											X	X	X							X			
	Introductory Robotics & Microcontrollers	4ENT1174					X	X			X	X					X				X			X	
Level 5	Fluids & Aerodynamics	5ENT1128									X	X													
	Thermodynamics for Aerospace	5ENT1129									X	X													
	Materials for Aerospace	5ENT1130								X	X						X								
	Practical Aerodynamics	5ENT1131	X	X	X							X				X	X				X		X	X	
	Control & Autopilot Systems	5ENT1132									X	X													
	Aircraft Structural Mechanics	5ENT1134	X																						
	Aircraft Dynamics & Vibration	5ENT1133										X													
Aircraft Technical, Air Law and Operational Procedures	5ENT2054																								

		Programme Learning Outcomes (as identified in section 1)																							
		Practical Skills																							
Module Title	Module Code	D1	D2	D3	D4	D5	D6	D7	D8	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	G1	G2	G3	G4	
Avionics Systems	5ENT1067						X			X			X											X	
Structural Design & CAE	5ENT1136				X	X	X			X		X				X	X			X		X			X
Placement Year	6AAD0015																								
Aerospace Performance & Propulsion	6ENT1132				X							X					X								
Flight Testing	6ENT1166			X						X		X					X				X				
Aerospace Structures & FEA	6ENT1167	X																							
Aerospace Vehicle Design	6ENT1133	X	X	X	X	X	X			X		X	X	X	X		X			X	X			X	X
Integrated Aerospace Systems	6ENT2057																				X				
Advanced Aerodynamics	6ENT1171				X						X														
Flight Performance, Planning and Communications	6ENT2056																								
Integrated Aerospace Systems	6ENT2057																								
Rocket Performance and Propulsion	6AAD0026																								
Satellite Communications	6ENT1172																								
BEng Individual Project (Aerospace)	6ENT2045						X						X		X		X				X			X	
Embedded Aerospace Systems	7AAD0037											X													
Procurement & Supply Chain Management	7ENT1069													X											
MEng Team Project	7ENT2044		X	X		X		X					X	X	X	X	X	X	X	X	X				X
Stability & Control of Aircraft	7ENT1152																								
FEA & Crashworthiness	7ENT1153																								
Space Dynamics	7ENT1154																								
Advanced Avionics	7ENT1155											X													
Aeroelasticity & Structural Failure	7ENT1156	X		X	X														X						
Advanced CFD	7ENT1157	X	X	X																					
Space Systems	7ENT1158							X												X					

Level 6

Level 7

Table 3: Development of Graduate Attributes in the Constituent Modules

This map identifies where the Graduate Attributes are delivered in the constituent modules. It provides (i) an aid to academic staff in understanding how individual modules contribute to the development of the Graduate Attributes (ii) a checklist for quality control purposes and (iii) a means to help students monitor their own personal and professional development as the programme progresses. [Note that there is no requirement for the Graduate Attributes to be assessed through these modules]

D = Delivered

	Module Title	Module Code	Professionally Focused	Globally Minded	Sustainability Driven	Digitally capable & confident	Inclusive and collaborative	Evidenced based and Ethical
Level 4	Aerospace Technology & Industry	4AAD0016	D					D
	Engineering Mathematics for Aerospace	4ENT1168	D					D
	Mechanical Science for Aircraft Engineering	4ENT1169	D					D
	Introduction to Projects & Design	4ENT1170	D					D
	Electrical Science for Aircraft Engineering	4ENT1171	D					D
	Programming for Aircraft Engineers	4ENT1172	D			D		D
	Aerospace Engineering Professionalism	4ENT1173	D					D
	Introductory Robotics & Microcontrollers	4ENT1174	D					D
Level 5	Avionics Systems	5ENT1067	D					D
	Fluids & Aerodynamics	5ENT1128	D					D
	Thermodynamics for Aerospace	5ENT1129	D					D
	Materials for Aerospace	5ENT1130	D					D
	Practical Aerodynamics	5ENT1131	D					D
	Control & Autopilot Systems	5ENT1132	D					D
	Aircraft Dynamics & Vibration	5ENT1133	D					D
	Aircraft Structural Mechanics	5ENT1134	D					D
	Structural Design & CAE	5ENT1136	D					D
Aircraft Technical, Air Law and Operational Procedures	5ENT2054	D		D			D	
Placement Year	Placement Year	6AAD0015	D					D
	Year Abroad	6ENT0001		D				
	Semester Abroad	6ENT1051		D				

Level 6	Rocket Performance and Propulsion	6AAD0026	D					D
	Aerospace Performance & Propulsion	6ENT1132	D					D
	Aerospace Vehicle Design	6ENT1133	D					D
	Flight Testing	6ENT1166	D					D
	Aerospace Structures & FEA	6ENT1167	D					
	Integrated Aerospace Systems	6ENT2057	D					D
	Advanced Aerodynamics	6ENT1171	D					D
	Satellite Communications	6ENT1172	D					D
	BEng Individual Project (Aerospace)	6ENT2045	D					D
	MEng Individual Project (Aerospace)	6ENT2052	D					D
	Flight Performance, Planning and Communications	6ENT2056	D					D
	Integrated Aerospace Systems	6ENT2057	D					D
Level 7	Embedded Aerospace Systems	7AAD0037	D					D
	Procurement & Supply Chain Management	7ENT1069	D					D
	MEng Team Project	7ENT2044	D					D
	Stability & Control of Aircraft	7ENT1152	D					D
	FEA & Crashworthiness	7ENT1153	D					D
	Space Dynamics	7ENT1154	D					D
	Advanced Avionics	7ENT1155	D					D
	Aeroelasticity & Structural Failure	7ENT1156	D					D
	Advanced CFD	7ENT1157	D					D
Space Systems	7ENT1158	D					D	

Section 2

Programme management

Relevant QAA subject benchmarking statements	Aerospace Engineering
Type of programme	Undergraduate / Integrated Masters
Date of validation/last periodic review	November 19
Date of production/ last revision of PS	March 2023
Relevant to level/cohort	Level 4 entering September 2023
Administrative School	School of Physics, Engineering & Computer Science
Language of Delivery	English

Table 4 Course structure

Course details			
Course Code	Course Description	HECOS	UCAS
EIBENGAAE	BEng (Hons) Aerospace Engineering	100115	H410
EIBENGAAE	BEng (Hons) Aerospace Engineering with Pilot Studies	100115	H496
EIBENGAAE	BEng (Hons) Aerospace Engineering with Space Technology	100115	H400
EIMENGAE	MEng (Hons) Aerospace Engineering	100115	H401
EIMENGAE	MEng (Hons) Aerospace Engineering with Pilot Studies	100115	H497
EIMENGAE	MEng (Hons) Aerospace Engineering with Space Technology	100115	H402