Course Handbook

BEng(Hons) Aerospace Engineering

MEng(Hons) Aerospace Engineering

2018-2019
Course Leader: Dr Darren Ansell
School of Engineering

Please read this Handbook in conjunction with the University’s Student Handbook.

All course materials, including lecture notes and other additional materials related to your course and provided to you, whether electronically or in hard copy, as part of your study, are the property of (or licensed to) UCLan and MUST not be distributed, sold, published, made available to others or copied other than for your personal study use unless you have gained written permission to do so from the Dean of School. This applies to the materials in their entirety and to any part of the materials.
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1. Welcome to the course

Welcome to Aerospace Engineering at UCLan. We hope to provide you with an interesting and challenging education, and to develop competences appropriate to Aerospace Engineering.

Please read the handbook carefully as it is a source of information on the academic, administrative and operational aspects of your course and it is intended to explain what is required of you. Feel free to discuss any aspects with myself or any member of the course team. Enjoy your time studying with us!

Dr Darren Ansell – Course Leader for MEng/BEng (Hons) Aerospace Engineering.

1.1 Rationale, aims and learning outcomes of the course

The MEng/BEng (Hons) Aerospace Engineering course aim is to develop graduates with a broad understanding of current technology and practice in aerospace engineering, covering the relevant aspects of vehicles, systems, design and analysis.

The course is three years (BEng) or four years (MEng) in duration, plus an extra year if an industrial placement is included. Satisfactory completion of an industrial placement leads to the award: MEng/BEng (Hons) Aerospace Engineering with Industrial Placement.

- Produce graduates with the knowledge, understanding and skills necessary for successful careers in aerospace engineering and for continuous professional development
- Develop the intellectual, practical and team-working skills to enable students to (a) identify, interpret and analyse engineering problems, (b) postulate, develop and assess possible solutions and (c) select, justify and deliver optimised solutions.
- Develop relevant personal skills to enable students to take responsibility for their own learning and development.
- Develop skills in the use of computing, planning and problem-solving methods, as well as the practice of effective communication.
- Provide degree courses that meet the needs of industry and satisfy the accreditation requirements of professional engineering institutions.
- (Specific to MEng) Produce graduates with the knowledge, understanding and skills necessary for technical leadership and specialisation.
- (Specific to Industrial Placement) Produce graduates with direct experience of the practice of engineering in industry and the operation of engineering companies.

The discipline of Aerospace Engineering encompasses a wide skills base and the emphasis of this course is placed on system-level design rather than that of individual component devices. By concentrating on the principles fundamental to multi-system integration, the course equips graduates with the knowledge, skills and confidence to thrive in the rapidly evolving field of aerospace engineering, produce designs suitable for a variety of applications and the transferrable skills to find employment in a diverse set of industrial and commercial sectors.

The full program specifications, including learning outcomes, are referenced in the Appendices.

1.2 Course Team

Names and contact details of the key members of the team:

Course Leader for MEng/BEng (Hons) Aerospace Engineering
Darren Ansell
Computing & Technology Building, room CM237☎
01772 89 5304, ✉ dansell@uclan.ac.uk
Lecturer for MEng/BEng (Hons) Aerospace Engineering Linghai Lu
Computing & Technology Building, room CM132
01772 89 3223,.startTimeLn=llu3@uclan.ac.uk

Lecturer for MEng/BEng (Hons) Aerospace Engineering Jules Simo
Computing & Technology Building, room CM021
01772 89 3545, startTimeLn=jsimo@uclan.ac.uk

Year Tutor for First Year Engineering students Muqi Wulan
Computing & Technology Building, room CM037
01772 89 3247, startTimeLn=mwulan@uclan.ac.uk

Retention Co-ordinator Patrick Ryan
Computing & Technology Building, room CM024
01772 89 3273, startTimeLn=pryan1@uclan.ac.uk

Industrial Placements Tutor Joel Allison
Computing & Technology Building, room CM131
01772 89 3251, startTimeLn=jallison@uclan.ac.uk

1.3 Expertise of staff

Your course leader Dr Darren Ansell spent fifteen years in industry as an aerospace engineer prior to joining UCLan and is undertaking ground breaking research in unmanned vehicle research, aerospace materials and intelligent systems. Darren also acts as an academic advisor.

Course lecturer Linghai Lu teaches Aerospace Vehicles modules and is an expert in flight simulation. Linghai is dedicated professional with 10+ years’ experience in the aerospace field. Specialises in maximising aircraft performance and safety through developing innovative methodologies. Linghai also acts as an academic advisor.

Course lecturer Dr. Jules Simo’s research interests include orbital mechanics, space mission analysis and design, solar sail mission applications, robotics and autonomous systems, dynamical systems theory. Recent work focused on the guidance and control of space systems as well the application of multidisciplinary optimisation and artificial intelligence techniques to systems engineering. Jules also acts as an academic advisor.

1.4 Academic Advisor

You will be assigned an Academic Advisor who will provide additional academic support during the year. They will be the first point of call for many of the questions that you might have during the year. Your Academic Advisor will be able to help you with personal development, including developing skills in self-awareness, reflection and action planning.

1.5 Administration details

Campus Admin Services provides academic administration support for students and staff and are located in the following hubs which open from 8.45am until 5.15pm Monday to Thursday and until 4.00pm on Fridays. The hub can provide general assistance and advice regarding specific processes such as extenuating circumstances, extensions and appeals.
Allen Building
Medicine
Dentistry
telephone: 01772 895566
e-mail: AllenHub@uclan.ac.uk

Harris Building
Lancashire Law School
Humanities and the Social Sciences
Centre for Excellence in Learning and Teaching
telephone: 01772 891996/891997
e-mail: HarrisHub@uclan.ac.uk

Foster Building
Forensic and Applied Sciences
Pharmacy and Biomedical Sciences
Psychology
Physical Sciences
telephone: 01772 891990/891991
e-mail: FosterHub@uclan.ac.uk

Computing and Technology Building
Art, Design and Fashion
Computing
Journalism, Media and Performance
Engineering
telephone: 01772 891994/891995
e-mail: CandTHub@uclan.ac.uk

Greenbank Building
Sport and Wellbeing
Management
Business
telephone: 01772 891992/891993
e-mail: GreenbankHub@uclan.ac.uk

Brook Building
Community, Health and Midwifery
Nursing
Health Sciences
Social Work, Care and Community
telephone: 01772 891992/891993
e-mail: BrookHub@uclan.ac.uk
1.6 Communication

The University expects you to use your UCLan email address and check regularly for messages from staff. If you send us email messages from other addresses they risk being filtered out as potential spam and discarded unread.

The School of Engineering will primarily contact you via your UCLan email address, but you should also regularly check the Starfish system (student relationship management software). Details on how to do this will be given during your induction weeks, and by your academic advisors. Students can contact staff members by email, but please be aware that staff members may at times be away on business or research trips and not always have immediate access to email. In the event you need to contact a member of staff urgently then you are free to contact any other members of the aerospace team detailed above. Appointments with staff should be made via email or by using the Starfish system.

1.7 External Examiner

The University has appointed an External Examiner to your course who helps to ensure that the standards of your course are comparable to those provided at other higher education institutions in the UK. The name of this person, their position and home institution can be found below.

Dr Andrew Pinkerton, CEng, FIMechE,
Senior Lecturer, Engineering Department, Lancaster University, UK.

External Examiner reports for the Engineering courses can be accessed electronically via the Engineering@UCLan Blackboard pages.

2. Structure of the course

2.1 Overall structure

Table 1 and Table 2 illustrate the programme structure for BEng (Hons) and MEng (Hons) courses respectively. These courses exist as part of the Modular Credit Accumulation and Transfer Scheme (MODCATS). The award requires that a student pass 360 credits total for BEng (Hons), or 480 credits for MEng (Hons).

Each full-time year of study requires you to pass modules to the value of 120 credits. Most modules on the programmes are standard sized and worth 20 credits, although there are examples of modules worth 10, 30 and 40 credits. Students wishing to follow part time study are counselled by a member of staff and a suitable programme of study developed.

Please note that the programme structures may be subject to minor modifications to reflect improvements/developments in the course or within industry. If this is the case your current year of study will not be affected and you will be notified of the changes for future year(s) of study. There is also a foundation entry route and details of course structure can be found in the appendix.

### BEng(Hons) Aerospace Engineering

<table>
<thead>
<tr>
<th>Level Four</th>
<th>Module code</th>
<th>Module title</th>
<th>Credit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory modules</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER1631</td>
<td>Aerospace Vehicles</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td>ER1020</td>
<td>Engineering Design</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>
## Table 1 BEng Aerospace Engineering Programme Structure

### MEng(Hons) Aerospace Engineering

#### Level Four

<table>
<thead>
<tr>
<th>Module code</th>
<th>Module title</th>
<th>Credit value</th>
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<tbody>
<tr>
<td>ER1631</td>
<td>Aerospace Vehicles</td>
<td>30</td>
</tr>
<tr>
<td>ER1020</td>
<td>Engineering Design</td>
<td>30</td>
</tr>
<tr>
<td>ER1030</td>
<td>Engineering Science</td>
<td>30</td>
</tr>
<tr>
<td>ER1010</td>
<td>Engineering Analysis</td>
<td>30</td>
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</tbody>
</table>

#### Level Five

<table>
<thead>
<tr>
<th>Module code</th>
<th>Module title</th>
<th>Credit value</th>
</tr>
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<tbody>
<tr>
<td>EI 2010</td>
<td>Aircraft Design and Manufacture</td>
<td>20</td>
</tr>
<tr>
<td>EI 2020</td>
<td>Systems Design and Computing</td>
<td>20</td>
</tr>
<tr>
<td>EI 2910</td>
<td>Structures and FEA</td>
<td>20</td>
</tr>
<tr>
<td>MP 2576</td>
<td>Thermofluids</td>
<td>20</td>
</tr>
<tr>
<td>SC2153</td>
<td>Further Engineering Mathematics and Simulation</td>
<td>20</td>
</tr>
<tr>
<td>MP 2721</td>
<td>Operations Management A</td>
<td>20</td>
</tr>
</tbody>
</table>

#### Option

<table>
<thead>
<tr>
<th>Module code</th>
<th>Module title</th>
<th>Credit value</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI 3999</td>
<td>Industrial Placement</td>
<td>120</td>
</tr>
</tbody>
</table>

#### Level Six

<table>
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<tr>
<th>Module code</th>
<th>Module title</th>
<th>Credit value</th>
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</thead>
<tbody>
<tr>
<td>EI 3000</td>
<td>Individual Project</td>
<td>20</td>
</tr>
<tr>
<td>EI 3010</td>
<td>Flight Dynamics and Control</td>
<td>20</td>
</tr>
<tr>
<td>EI 3030</td>
<td>Aeromechanics</td>
<td>20</td>
</tr>
<tr>
<td>EI 3040</td>
<td>Aerospace Propulsion</td>
<td>20</td>
</tr>
<tr>
<td>MP 3604</td>
<td>Advanced CAD</td>
<td>20</td>
</tr>
<tr>
<td>MP 3732</td>
<td>Operations Management B</td>
<td>20</td>
</tr>
</tbody>
</table>
Table 2 MEng Aerospace Engineering Programme Structure

2.2 Modules available
Each module is a self-contained block of learning with defined aims, learning outcomes and assessment. A standard module is worth 20 credits. It equates to the learning activity expected from one sixth of a full-time undergraduate year. Modules may be developed as half or double modules with credit allocated up to a maximum of 120 credits per module. Module codes are as shown in Table 1 and 2 above.

2.3 Course requirements
All modules in the B.Eng course are compulsory. In the M.Eng course, there are optional modules at Level 7 (typically in your fourth year of study) but we cannot guarantee all options will be available, depending on demand.

Most modules include formal written examinations, but some are assessed by coursework and/or project work.

It is important that international students are familiar with English language proficiency requirements, together with visa and immigration requirements.
2.4 Progression Information
Discussions about your progression through the course normally take place in February each year. It is an opportunity for you to make plans for your study over the next academic year. The course team will tell you about the various modules / combinations available and you will both agree on the most appropriate (and legal) course of study for you.

2.5 Study Time
2.5.1 Weekly timetable
Timetables are accessible online through the UCLan Student Portal:

https://dailytimetable.uclan.ac.uk/

2.5.2 Expected hours of study
As outlined in the school handbook the normal amount of work involved in achieving a successful outcome to your studies is to study for 10 hours per each credit you need to achieve – this includes attendance at UCLan and time spent in private study.

This requirement translates to a total of 6 hours per 20 credit module per week. We expect that you commit 36 hours study per week (pro-rata for part-time students and/or semester-based modules), inclusive of your contact hours. So for a typical module you may have a 2 hour lecture, and a 1 hour tutorial, leaving you approximately 3 hours for self-directed study (further reading, tutorial questions, assignments, revision). Often you will be working in groups for practical work and you should try and arrange to meet up outside the scheduled class times. You will also need to use equipment such as computer and laboratory facilities for practical work, again sometimes outside the scheduled class times.

2.5.3 Attendance Requirements
You are required to attend all timetabled learning activities for each module. Notification of illness or exceptional requests for leave of absence must be made as follows:

Students should report non-attendance to the hub email – CandTHubAttendance@uclan.ac.uk or by telephoning the hub on 01772 891994 or 01772 891995.

You are encouraged to seek the advice of your Academic Adviser and/or Course Leader if your personal circumstances make it difficult to meet your study obligations.

3. Approaches to teaching and learning
3.1 Learning and teaching methods
Aerospace Engineering programmes use a number of different assessment techniques that will allow you to demonstrate your understanding of concepts and issues covered. These may be broadly categorised as ‘examination’ and ‘coursework’, but several different types are used, e.g. open-book exams, closed-book exams, laboratory reports, practical assessments in the laboratory, computer simulation and analysis, written reports etc.

Evidence of achievement, upon which assessment will be based, will be gained through a programme of practical exercises, assignments and exams. Each week you may be involved in some practical work such as a laboratory exercise, a computer-based assignment, group or individual project work etc. You will often work in groups and make group presentations but you will write up and submit work individually so that you gain credit for your contribution, not that of somebody else.

It should be emphasised that the purpose of assessment is to not only grade you, and provide information to facilitate management of the course, but also to provide feedback to you. In this way
you can monitor your own progress, refine your own judgement of your abilities and regulate it accordingly.

You should keep all the returned work in a file and you may have to submit this at the end of the year for the external examiners to assess.

**Individual module leaders will distribute information on the methods of assessment used, and their weighting, at the start of each module.**

### 3.2 Study skills

There are a variety of services to support students and these include

**WISER** [http://www.uclan.ac.uk/students/study/wiser/index.php](http://www.uclan.ac.uk/students/study/wiser/index.php)

### 3.3 Learning resources

**3.3.1 Learning Information Services (LIS)**

At UCLan all laboratories, workshops and other specialised equipment and facilities are centrally managed, thus making them available to users right across the campus. For further information please visit:

[http://www.uclan.ac.uk/students/study/specialist_teaching_resources/index.php](http://www.uclan.ac.uk/students/study/specialist_teaching_resources/index.php)

### 3.4 Personal development planning

Your academic advisor will help you to develop a personal development plan through your course of meetings with him or her. This plan will help you to gain important skills and experiences which will help prepare you for your future careers.

### 3.5 Preparing for your career

We encourage all students to seek out extra-curricular opportunities to enhance your learning and development during the course of your studies. Examples include industrial placements, assisting academic research staff with research projects and wider activities.

### 4. Student Support

Within the school of engineering, in the first instance please contact your academic advisor if you require any support. There are helpful guides available online too, just visit:

[http://www.uclan.ac.uk/students/](http://www.uclan.ac.uk/students/)

#### 4.1 Academic Advisors

As a new student within the School of Engineering at the University of Central Lancashire (UCLan) you will be allocated to an academic advisor, who will work with you individually and in small groups to provide you with general support and guidance and to monitor your progress. Your academic advisor will be one of the team of academics that will teach you on your course whilst studying here at UCLan. You will be notified of your academic advisor and be given their contact details early in the academic year.
4.2 Students with disabilities
If you have a disability that may affect your studies, please either contact the Disability Advisory Service - disability@uclan.ac.uk - or let one of the course team know as soon as possible. With your agreement information will be passed on to the Disability Advisory Service. The University will make reasonable adjustments to accommodate your needs and to provide appropriate support for you to complete your study successfully. Where necessary, you will be asked for evidence to help identify appropriate adjustments.

Arrangements are made for students who have a disability/learning difficulty for which valid supporting evidence can be made available. Contact the Disability Adviser for advice and information, disability@uclan.ac.uk

4.3 Students' Union One Stop Shop

The Opportunities Centre is the Union's One Stop Shop to find employment or volunteering whilst you study. With thousands of jobs and voluntary positions advertised, agency work through the Bridge and information on over 2000 volunteer positions within the Union.

5. Assessment

5.1 Assessment Strategy
Please note that all modules will be assessed. You are expected to attempt all required assessments for each module for which you are registered, and to do so at the times scheduled unless authorised extensions, special arrangements for disability, or extenuating circumstances allow you to defer your assessment.

Your module leaders will provide information of the assessment strategy used during each series of module lectures/workshops and they are also detailed on the course specification documents.

5.2 Notification of assignments and examination arrangements
This information will be provided within your course supplement handbook and in your module information packs.

5.3 Referencing

You will be required to reference within your assignments. Referencing is important in acknowledging where you have gathered information from and to give credit to the authors of the work. Please note that if your work is not referenced correctly then this may be taken as plagiarism. Refer to your course supplement handbook for guidance on the correct referencing style to use.

5.4 Confidential material
Guidance on confidential information and ethical guidelines will be provided by the module leader and within the module information pack.

5.5 Cheating, plagiarism, collusion or re-presentation
Please refer to the information included in section 6.6 of the University Student Handbook for full definitions. The University uses an online Assessment Tool called Turnitin. A pseudo-Turnitin assignment will be set up using the School space on Blackboard to allow students to check as many drafts as the system allows before their final submission to the 'official' Turnitin assignment. Students are required to self-submit their own assignment on Turnitin and will be given access to the Originality Reports arising from each submission. In operating Turnitin, Schools must take steps to ensure that the University's requirement for all summative assessment to be marked anonymously is not undermined and therefore Turnitin reports should either be anonymised or
considered separately from marking. Turnitin may also be used to assist with plagiarism detection and collusion, where there is suspicion about individual piece(s) of work.

6. Classification of Awards
The University publishes the principles underpinning the way in which awards and results are decided in Academic Regulations. Decisions about the overall classification of awards are made by Assessment Boards through the application of the academic and relevant course regulations.

7. Student Feedback
You can play an important part in the process of improving the quality of this course through the feedback you give. Module and course leaders are always interested in your feedback and it is invaluable to continually improve the course. You can also get involved in more formal student staff liaison committee meetings too (see below).

7.1 Student Staff Liaison Committee meetings (SSLCs)
Details of the Protocol for the operation of SSLCs is included in section 8.2 of the University Student Handbook.
### Programme Specification

This Programme Specification provides a concise summary of the main features of the programme and the 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.

**Sources of information on the programme can be found in Section 17**

<table>
<thead>
<tr>
<th>1. Awarding Institution / Body</th>
<th>University of Central Lancashire</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Teaching Institution and Location of Delivery</td>
<td>University of Central Lancashire</td>
</tr>
<tr>
<td>3. University School/Centre</td>
<td>Computing, Engineering and Physical Sciences</td>
</tr>
<tr>
<td>4. External Accreditation</td>
<td>Royal Aeronautical Society (RAeS) Institution of Mechanical Engineers (IMechE) <em>(Accreditation is currently being sought!)</em></td>
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<tr>
<td>5. Title of Final Award</td>
<td>MEng (Hons) Aerospace Engineering</td>
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<tr>
<td>6. Modes of Attendance offered</td>
<td>Full Time Sandwich</td>
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<tr>
<td>7. UCAS Code</td>
<td>6L13 4Q67</td>
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<td>8. Relevant Subject Benchmarking Group(s)</td>
<td>QAA Engineering (2010)</td>
</tr>
<tr>
<td>9. Other external influences</td>
<td>UK Engineering Council (EC-UK) QAA Academic Infrastructure</td>
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<tr>
<td>10. Date of production/revision of this form</td>
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### 11. Aims of the Programme

- Produce graduates with the knowledge, understanding and skills necessary for successful careers in aerospace engineering and for continuous professional development
- Develop the intellectual, practical and team-working skills to enable students to (a) identify, interpret and analyse engineering problems, (b) postulate, develop and assess possible solutions and (c) select, justify and deliver optimised solutions.
• Develop relevant personal skills to enable students to take responsibility for their own learning and development.

• Develop skills in the use of computing, planning and problem-solving methods, as well as the practice of effective communication.

• Provide degree courses that meet the needs of industry and satisfy the accreditation requirements of professional engineering institutions.

• (Specific to MEng) Produce graduates with the knowledge, understanding and skills necessary for technical leadership and specialisation.

• (Specific to Industrial Placement) Produce graduates with direct experience of the practice of engineering in industry and the operation of engineering companies.

12. Learning Outcomes, Teaching, Learning and Assessment Methods

FOR INFORMATION

EC-UK learning outcomes are cross-referenced in brackets (either by category of outcomes or by individual outcomes)

A. Knowledge and Understanding

| A2. In-depth understanding of the wider multidisciplinary engineering context and its underlying principles. [A2] |
| A3. Ability to apply social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement. [A3, S] |
| A4. Ability to learn and apply new theories, concepts, methods etc. in unfamiliar situations. [A4] |

Teaching and Learning Methods

Lectures, Seminars and Tutorials: A1, A2, A3
Active Learning: A3, A4
Practical Sessions: A1
Supervised Workshops: n/a
Project Reviews: A1, A2

Assessment methods

Written Exam: A1, A2
Coursework: A1, A2, A3
Practical Assessment: A1, A2, A3

B. Subject-specific skills

| B1. Extensive practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities. [B1] |
| B2. Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement. [E] |
| B3. Creation/development of viable products, processes and systems and ensure fitness for purpose. [D] |
| B4. Appropriate application of resources, methods, tools and processes in engineering practice. [P] |

Teaching and Learning Methods

Lectures, Seminars and Tutorials: B2, B4
Active Learning: B2
Practical Sessions: B1, B4
Supervised Workshops: B1, B3
Project Reviews: B1

Assessment methods

Written Exam: B2
Coursework: B1, B2, B3, B4
Practical Assessment: B1, B3

C. Thinking Skills

| C1. Apply appropriate quantitative science and engineering tools to the analysis of problems. [C1] |
| C2. Demonstrate creative and innovative ability in synthesising solutions and in formulating designs. [C2] |
| C3. Comprehend the broad picture and thus work with an appropriate level of detail. [C3] |
| C4. Develop, monitor and update a plan, to reflect a changing operating environment. [C4] |

Teaching and Learning Methods
### Lectures, Seminars and Tutorials
- C1

### Active Learning
- C2

### Practical Sessions
- C1

### Supervised Workshops
- n/a

### Project Reviews
- C3, C4

### Assessment methods
- Written Exam: C1
- Coursework: C2, C3, C4
- Practical Assessment: C1

### Other skills relevant to employability and personal development

D1. Possess developed transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others. [D1]

D2. Make effective use of information technology and information retrieval skills. [D2]

D3. Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development. [D3]

D4. Monitor and adjust a personal programme of work on an on-going basis, and learn independently. [D4]

### Teaching and Learning Methods

<table>
<thead>
<tr>
<th>Lectures, Seminars and Tutorials</th>
<th>D1, D3, D4</th>
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<tbody>
<tr>
<td>Active Learning</td>
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</tr>
<tr>
<td>Practical Sessions</td>
<td>D2</td>
</tr>
<tr>
<td>Supervised Workshops</td>
<td>n/a</td>
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<td>Project Reviews</td>
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### Assessment methods

| Written Exam                     | n/a       |
| Coursework                        | D3, D4    |
| Practical Assessment              | D1, D2    |

### Programme Structures

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title (C) for Core, (COMP) for Compulsory and (O) for Optional</th>
<th>Credit Rating</th>
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<tbody>
<tr>
<td>Level 7</td>
<td>EI 4000, EI 4900, MP4580</td>
<td>Aerospace Group Design (COMP) / Computational Modelling (COMP) / Engineer and Society (COMP)</td>
<td>40 (20, 20)</td>
</tr>
<tr>
<td></td>
<td>EI 4010, EI 4030, EI 4035, EI 4050</td>
<td>Select TWO Options: Aerospace Vehicle Simulation (O) / Aircraft Flight Physics (O) / Aerospace Structures and Materials (O) / Aerospace Operations (O)</td>
<td>20 (20, 20, 20)</td>
</tr>
<tr>
<td>Level 6</td>
<td>EI 3000, EI 3010, EI 3030, EI 3040, MP3604, MP3732</td>
<td>Individual Project (C) / Flight Dynamics and Control (COMP) / Aeromechanics (COMP) / Aerospace Propulsion (COMP) / Advanced CAD (COMP) / Operations Management B (COMP)</td>
<td>20 (20, 20, 20, 20)</td>
</tr>
<tr>
<td></td>
<td>EI 3999</td>
<td>Industrial Placement (O)</td>
<td>120</td>
</tr>
<tr>
<td>Level 5</td>
<td>EI 2010, EI 2020, EI 2910, MP2576</td>
<td>Aircraft Design and Manufacture (COMP) / Systems Design and Computing (COMP) / Structures and FEA (COMP) / Thermo fluids (COMP)</td>
<td>20 (20, 20, 20)</td>
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</tbody>
</table>

### Awards and Credits

| Level 7 | EI 3999 Industrial Placement (O) | 120 |
| Level 6 | EI 3000 Individual Project (C) | 20 |
| Level 5 | EI 2010 Aircraft Design and Manufacture | 20 |

**MEng (Hons) Aerospace Engineering**
480 credits including 220 credits at Level 6 or above and 120 credits at Level 7.

Industrial placement route requires successful completion of EI3999 which has a notional credit of 120 credits.

**BEng (Hons) Aerospace Engineering**
360 credits including 220 credits at Level 5 or above and 100 credits at Level 6 or above.

**BEng Aerospace Engineering**
320 credits including 180 credits at Level 5 or above and 60 credits at Level 6 or above.

**Diploma of Higher Education**
240 credits including 100 credits at Level 5 or above.
15. Personal Development Planning

Professional development is an integral part of the course and includes sessions on personal qualities, self-management, effective communication and academic assessments, as well as professional and career management.

Services are available UCLan Student Support. Students are encouraged to consider “WISER”, which offers help in learning how to study more effectively and how to communicate at an advanced and professional level.

Specific guidance on engagement, influence and impact is provided for project-based modules:

EI 2010 Aircraft Design and Manufacture
EI 2020 Systems Design and Computing
EI 3000 Individual Project
EI 4000 Aerospace Group Project

This is reinforced by the personal tutorial system. Each student will be allocated to a named lecturer who will act as Personal Tutor for all years of study.

Preparation for “EI 3999 Industrial Placement” will commence at the start of the preceding year and will include advice and assistance on how to secure employment (e.g. how to complete application forms, how to write a CV and a covering letter, how to present at interview). While there are no pre-arranged placements and no guarantees of securing a placement, the programme team will offer positive support where practicable. Students who do secure an industrial placement will be allocated a Placement Tutor who will visit UK-based workplaces during that year.

16. Admissions criteria*

(including agreed tariffs for entry with advanced standing)

*Correct as at date of approval. For latest information, please consult the University’s website.

All applicants must have achieved GCSE English at Grade C or above, or an equivalent qualification.

Entry requirement in 2015 for MEng (Hons) Aerospace Engineering is 300 points or above:

GCE A2: BBB including Maths, Physics and a STEM subject.

OR

BTEC Extended Diploma in Engineering: DDM including Mathematics for Engineering Technicians (Unit 4, Minimum D), Further Mathematics for Engineering Technicians (Unit 28) and Mechanical Principles and Applications (Unit 5)

OR

Equivalent qualifications

Entry requirement from 2016 for MEng (Hons) Aerospace Engineering is 340 points or above:

GCE A2: AAB including Maths, Physics and a STEM subject.

OR

BTEC Extended Diploma in Engineering: DDD including Mathematics for Engineering Technicians (Unit 4), Further Mathematics for Engineering Technicians (Unit 28) and Mechanical Principles and Applications (Unit 5)

OR

Equivalent qualifications

Applications will be welcomed from individuals with non-standard qualifications or relevant work experience who can demonstrate the ability to cope with and benefit from degree-level studies. Those who have not
studied recently may be required to undertake a foundation programme prior to entry to Aerospace Engineering.

17. Key sources of information about the programme

- **Internal**
  
  [http://www.uclan.ac.uk/courses/meng_aerospace_engineering.php](http://www.uclan.ac.uk/courses/meng_aerospace_engineering.php)

- **External**
  
  [http://www.engc.org.uk/professional-qualifications/standards/uk-spec](http://www.engc.org.uk/professional-qualifications/standards/uk-spec)
  
  
  [http://www.qaa.ac.uk/publications/information-and-guidance](http://www.qaa.ac.uk/publications/information-and-guidance)
  
  
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<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Core (C), Compulsory (COMP) or Option (O)</th>
<th>Programme Learning Outcomes</th>
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<td>A1  A2  A3  A4  B1  B2  B3  B4  C1  C2  C3  C4  D1  D2  D3  D4</td>
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<td>LEVEL 7</td>
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<td></td>
<td>EI 4010</td>
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<td>✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓   ✓</td>
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<tr>
<td></td>
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<td>Aircraft Flight Physics</td>
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19. **LEARNING OUTCOMES FOR EXIT AWARDS:**

For each exit award available, list learning outcomes relating to the knowledge and understanding, subject specific skills, thinking, other skills relevant to employability and personal development that a typical student might be expected to gain as a result of successfully completing each level of a course of study.

For example, for a standard BA/BSc (Hons) award the exit award learning outcomes for CertHE (Level 4) and DipHE (Level 5), BA/BSc (Level 6) should be included; for a postgraduate Masters, this would normally be PGDip and PGCert.

**Learning outcomes for the award of: CertHE**

- Demonstrate knowledge and understanding of some of the essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
- Appreciation of some aspects of the wider multidisciplinary engineering context and its underlying principles.
- Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, and project participation.
- Attempt to systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
- Creation/development of some aspects of viable products, processes and systems and ensure fitness for purpose.
- Apply appropriate quantitative science and engineering tools to the analysis of problems.
- Demonstrate some level of creative and innovative ability in synthesising solutions and in formulating designs.
- Possess some transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
- Make effective use of some aspects of information technology and information retrieval skills.
- Plan some aspects of self-learning and improve performance as the foundation for lifelong learning and continuing professional development.

**Learning outcomes for the award of: DipHE**

- Demonstrate knowledge and understanding of many aspects of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
- Appreciation of many aspects of the wider multidisciplinary engineering context and its underlying principles.
- Appreciation of many aspects of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.
- Ability to learn appropriate level of new theories, concepts, methods etc. in unfamiliar situations.
- Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.
- Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
- Creation/development of many aspects of viable products, processes and systems and ensure fitness for purpose.
- Appropriate application of resources, methods, tools and processes in engineering practice.
- Apply appropriate quantitative science and engineering tools to the analysis of problems.
- Demonstrate high level of creative and innovative ability in synthesising solutions and in formulating designs.
- Comprehend the broad picture and thus work with an appropriate level of detail.
- Develop, monitor and update many aspects of a plan, to reflect a changing operating environment.
Possess many transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
Make effective use of appropriate information technology and information retrieval skills.
Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.
Monitor and adjust some aspects of a personal programme of work on an on-going basis, and learn independently.

Learning outcomes for the award of: BEng
Demonstrate knowledge and understanding of much of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
Appreciation of the wider multidisciplinary engineering context and its underlying principles.
Appreciation of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.
Ability to learn new theories, concepts, methods etc. in unfamiliar situations.
Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.
Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
Creation/development of viable products, processes and systems and ensure fitness for purpose.
Appropriate application of resources, methods, tools and processes in engineering practice.
Apply appropriate quantitative science and engineering tools to the analysis of problems.
Demonstrate creative and innovative ability in synthesising solutions and in formulating designs.
Comprehend the broad picture and thus work with an appropriate level of detail.
Develop, monitor and update a plan, to reflect a changing operating environment.

Possess many transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
Make effective use of information technology and information retrieval skills.
Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.
Monitor and adjust a personal programme of work on an on-going basis, and learn independently.

Learning outcomes for the award of: BEng (Hons)
Demonstrate knowledge and understanding of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
Consider and apply wider multidisciplinary engineering context and its underlying principles into practice.
Appreciation of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.
Ability to learn and apply new theories, concepts, methods etc. in unfamiliar situations.
Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.
Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
Creation/development of viable products, processes and systems and ensure fitness for purpose.
Appropriate application of resources, methods, tools and processes in engineering practice.
Apply appropriate quantitative science and engineering tools to the analysis of problems.
Demonstrate creative and innovative ability in synthesising solutions and in formulating designs.
Comprehend the broad picture and thus work with an appropriate level of detail.
Develop, monitor and update a plan, to reflect a changing operating environment.
Possess developed transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
Make effective use of information technology and information retrieval skills.
Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.
Monitor and adjust a personal programme of work on an on-going basis, and learn independently.

Learning outcomes for the award of: MEng (Hons)
Extensive knowledge and understanding of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
In-depth understanding of wider multidisciplinary engineering context and its underlying principles into practice.
Ability to apply social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.
Ability to learn and apply new theories, concepts, methods etc. in unfamiliar situations.
Extensive practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.
Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
Creation/development of viable products, processes and systems and ensure fitness for purpose.
Appropriate application of resources, methods, tools and processes in engineering practice.

Apply appropriate quantitative science and engineering tools to the analysis of problems.
Demonstrate creative and innovative ability in synthesising solutions and in formulating designs.
Comprehend the broad picture and thus work with an appropriate level of detail.
Develop, monitor and update a plan, to reflect a changing operating environment.

Possess developed transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
Make effective use of information technology and information retrieval skills.
Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.
Monitor and adjust a personal programme of work on an on-going basis, and learn independently.
### Programme Specification

This Programme Specification provides a concise summary of the main features of the programme and the 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.

*Sources of information on the programme can be found in Section 17*

<table>
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<tr>
<th>13. Awarding Institution / Body</th>
<th>University of Central Lancashire</th>
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<tbody>
<tr>
<td>14. Teaching Institution and Location of Delivery</td>
<td>University of Central Lancashire</td>
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<tr>
<td>15. University School/Centre</td>
<td>School of Engineering</td>
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<td>16. External Accreditation</td>
<td>Royal Aeronautical Society (RAeS) Institution of Mechanical Engineers (IMechE) <em>(Accreditation is currently being sought)</em></td>
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<td>17. Title of Final Award</td>
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<td>A798 2S13</td>
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<td>20. Relevant Subject Benchmarking Group(s)</td>
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<td>21. Other external influences</td>
<td>UK Engineering Council (EC-UK) QAA Academic Infrastructure</td>
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<td>22. Date of production/revision of this form</td>
<td>June 2017</td>
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### Aims of the Programme

- Produce graduates with the knowledge, understanding and skills necessary for successful careers in aerospace engineering and for continuous professional development.
- Develop the intellectual, practical and team-working skills to enable students to (a) identify, interpret and analyse engineering problems, (b) postulate, develop and assess possible solutions and (c) select, justify and deliver optimised solutions.
- Develop relevant personal skills to enable students to take responsibility for their own learning and development.
- Develop skills in the use of computing, planning and problem-solving methods, as well as the practice of effective communication.
- Provide degree courses that meet the needs of industry and satisfy the accreditation requirements of professional engineering institutions.
- *(Specific to Industrial Placement)* Produce graduates with direct experience of the practice of engineering in industry and the operation of engineering companies.
24. Learning Outcomes, Teaching, Learning and Assessment Methods

EC-UK learning outcomes are cross-referenced in brackets (either by category of outcomes or by individual outcomes)

### A. Knowledge and Understanding

**A1.** Demonstrate knowledge and understanding of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics. [A1, US]

**A2.** Appreciation of the wider multidisciplinary engineering context and its underlying principles. [A2]

**A3.** Appreciation of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement. [A3, S]

**A4.** Ability to learn new theories, concepts, methods etc. in unfamiliar situations. [A4]

#### Teaching and Learning Methods

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<td>Project Reviews</td>
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#### Assessment methods

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<tr>
<td>Coursework</td>
<td>A1, A2, A3</td>
</tr>
<tr>
<td>Practical Assessment</td>
<td>A1, A2, A3</td>
</tr>
</tbody>
</table>

### B. Subject-specific skills

**B1.** Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities. [B1]

**B2.** Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement. [E]

**B3.** Creation/development of viable products, processes and systems and ensure fitness for purpose. [D]

**B4.** Appropriate application of resources, methods, tools and processes in engineering practice. [P]

#### Teaching and Learning Methods

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#### Assessment methods

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<td>Coursework</td>
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<tr>
<td>Practical Assessment</td>
<td>B1, B3</td>
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### C. Thinking Skills

**C1.** Apply appropriate quantitative science and engineering tools to the analysis of problems. [C1]

**C2.** Demonstrate creative and innovative ability in synthesising solutions and in formulating designs. [C2]

**C3.** Comprehend the broad picture and thus work with an appropriate level of detail. [C3]

**C4.** Develop, monitor and update a plan, to reflect a changing operating environment. [C4]

#### Teaching and Learning Methods

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<tr>
<td>Lectures, Seminars and Tutorials</td>
<td></td>
</tr>
<tr>
<td>Active Learning</td>
<td>C2</td>
</tr>
<tr>
<td>Practical Sessions</td>
<td>C1</td>
</tr>
<tr>
<td>Supervised Workshops</td>
<td>n/a</td>
</tr>
<tr>
<td>Project Reviews</td>
<td>C3, C4</td>
</tr>
</tbody>
</table>

#### Assessment methods

<table>
<thead>
<tr>
<th>Assessment methods</th>
<th>C1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Exam</td>
<td></td>
</tr>
<tr>
<td>Coursework</td>
<td>C2, C3, C4</td>
</tr>
<tr>
<td>Practical Assessment</td>
<td>C1</td>
</tr>
</tbody>
</table>
D. Other skills relevant to employability and personal development

D1. Possess developed transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others. [D1]

D2. Make effective use of information technology and information retrieval skills. [D2]

D3. Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development. [D3]

D4. Monitor and adjust a personal programme of work on an on-going basis, and learn independently. [D4]

Teaching and Learning Methods

| Lectures, Seminars and Tutorials | D1, D3, D4 |
| Active Learning                | n/a       |
| Practical Sessions            | D2        |
| Supervised Workshops          | n/a       |
| Project Reviews               | D1        |

Assessment methods

| Written Exam | n/a |
| Coursework   | D3, D4 |
| Practical Assessment | D1, D2 |

13. Programme Structures

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Credit Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI 3000</td>
<td>Individual Project (C)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI 3010</td>
<td>Flight Dynamics and Control (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI 3030</td>
<td>Aeromechanics (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Aerospace Propulsion (COMP)</td>
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<tr>
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<td>Advanced CAD (COMP)</td>
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</tr>
<tr>
<td>MP3732</td>
<td>Operations Management B (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 5</td>
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<td></td>
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<tr>
<td>EI 2010</td>
<td>Aircraft Design and Manufacture (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI 2020</td>
<td>Systems Design and Computing (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI 2910</td>
<td>Structures and FEA (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP2576</td>
<td>Thermofluids (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC2153</td>
<td>Further Engineering Mathematics and Simulation (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MP2721</td>
<td>Operations Management A (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level 4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER1010</td>
<td>Engineering Analysis (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
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<td>Engineering Design (COMP)</td>
<td></td>
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</tr>
<tr>
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<td>Engineering Science (COMP)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER1631</td>
<td>Aerospace Vehicles (COMP)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. Awards and Credits

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Credit Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EI 3999</td>
<td>Industrial Placement (O)</td>
<td>120</td>
</tr>
<tr>
<td>Level 5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EI 2010</td>
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<td></td>
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<tr>
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<tr>
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<td>Structures and FEA (COMP)</td>
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<tr>
<td>Level 4</td>
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<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Programme</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEng (Hons) Aerospace Engineering</td>
<td>360 credits including 220 credits at Level 5 or above and 100 credits at Level 6 or above.</td>
</tr>
<tr>
<td>Diploma of Higher Education</td>
<td>240 credits including 100 credits at Level 5 or above.</td>
</tr>
<tr>
<td>Certificate of Higher Education</td>
<td>120 credits including 100 credits at Level 4 or above.</td>
</tr>
</tbody>
</table>

Note: (C) for Core, (COMP) for Compulsory and (O) for Optional
15. Personal Development Planning

Professional development is an integral part of the course and includes sessions on personal qualities, self-management, effective communication and academic assessments, as well as professional and career management.

Services are available UCLan Student Support. Students are encouraged to consider “WISER”, which offers help in learning how to study more effectively and how to communicate at an advanced and professional level.

Specific guidance on engagement, influence and impact is provided for project-based modules:
- EI 2010 Aircraft Design and Manufacture
- EI 2020 Systems Design and Computing
- EI 3000 Individual Project

This is reinforced by the personal tutorial system. Each student will be allocated to a named lecturer who will act as Personal Tutor for all years of study.

Preparation for “EI 3999 Industrial Placement” will commence at the start of the preceding year and will include advice and assistance on how to secure employment (e.g. how to complete application forms, how to write a CV and a covering letter, how to present at interview). While there are no pre-arranged placements and no guarantees of securing a placement, the programme team will offer positive support where practicable. Students who do secure an industrial placement will be allocated a Placement Tutor who will visit UK-based workplaces during that year.

16. Admissions criteria*

(including agreed tariffs for entry with advanced standing)

*Correct as at date of approval. For latest information, please consult the University’s website.

All applicants must have achieved GCSE English at Grade C or above, or an equivalent qualification.

Entry requirement for **BEng (Hons) Aerospace Engineering** is **280 points** or above:
- GCE A2: BBC including Maths (Minimum B), Physics (Minimum B) and a STEM subject.
- OR
- BTEC Extended Diploma in Engineering: DMM including Mathematics for Engineering Technicians (Unit 4, Minimum D), Further Mathematics for Engineering Technicians (Unit 28) and Mechanical Principles and Applications (Unit 5)
- OR
- Equivalent qualifications

Applications will be welcomed from individuals with non-standard qualifications or relevant work experience who can demonstrate the ability to cope with and benefit from degree-level studies. Those who have not studied recently may be required to undertake a foundation programme prior to entry to Aerospace Engineering.

17. Key sources of information about the programme

- **Internal**
  - [http://www.uclan.ac.uk/courses/beng_aerospace_engineering.php](http://www.uclan.ac.uk/courses/beng_aerospace_engineering.php)

- **External**
  - [http://www.engage.org.uk/professional-qualifications/standards/uk-spec](http://www.engage.org.uk/professional-qualifications/standards/uk-spec)
  - [http://www.qaa.ac.uk/publications/information-and-guidance](http://www.qaa.ac.uk/publications/information-and-guidance)
<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Module Title</th>
<th>Knowledge and understanding</th>
<th>Programme Learning Outcomes</th>
<th>Other Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Core (C), Compulsory (COMP) or Option (O)</td>
<td></td>
<td></td>
<td>Subject-specific Skills</td>
<td>Thinking Skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
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<tr>
<td><strong>LEVEL 6</strong></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EI 3000</td>
<td>Individual Project</td>
<td>C</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EI 3010</td>
<td>Flight Dynamics and Control</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EI 3030</td>
<td>Aeromechanics</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>EI 3040</td>
<td>Aerospace Propulsion</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EI 3999</td>
<td>Industrial Placement</td>
<td>O</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MP3604</td>
<td>Advanced CAD</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MP3732</td>
<td>Operations Management B</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td><strong>LEVEL 5</strong></td>
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<td></td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EI 2010</td>
<td>Aircraft Design and Manufacture</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>EI 2020</td>
<td>Systems Design and Computing</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>EI 2910</td>
<td>Structures and FEA</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>MP2576</td>
<td>Thermo fluids</td>
<td>COMP</td>
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<td>✓</td>
<td>✓</td>
</tr>
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<td>SC2153</td>
<td>Further Engineering Math and Simul</td>
<td>COMP</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>MP2721</td>
<td>Operations Management A</td>
<td>COMP</td>
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<tr>
<td>ER1631</td>
<td>Aerospace Vehicles</td>
<td>COMP</td>
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<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
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<td>Engineering Design</td>
<td>COMP</td>
<td></td>
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<td>✓</td>
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<td>ER1030</td>
<td>Engineering Science</td>
<td>COMP</td>
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<td>✓</td>
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</tr>
<tr>
<td>ER1010</td>
<td>Engineering Analysis</td>
<td>COMP</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
19. LEARNING OUTCOMES FOR EXIT AWARDS:

For each exit award available, list learning outcomes relating to the knowledge and understanding, subject specific skills, thinking, other skills relevant to employability and personal development that a typical student might be expected to gain as a result of successfully completing each level of a course of study.

For example, for a standard BA/BSc (Hons) award the exit award learning outcomes for CertHE (Level 4) and DipHE (Level 5), BA/BSc (Level 6) should be included; for a postgraduate Masters, this would normally be PGDip and PGCert.

Learning outcomes for the award of: CertHE

Demonstrate knowledge and understanding of some of the essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.

Appreciation of some aspects of the wider multidisciplinary engineering context and its underlying principles.

Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, and project participation.

Attempt to systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.

Creation/development of some aspects of viable products, processes and systems and ensure fitness for purpose.

Apply appropriate quantitative science and engineering tools to the analysis of problems.

Demonstrate some level of creative and innovative ability in synthesising solutions and in formulating designs.

Possess some transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.

Make effective use of some aspects of information technology and information retrieval skills.

Plan some aspects of self-learning and improve performance as the foundation for lifelong learning and continuing professional development.

Learning outcomes for the award of: DipHE

Demonstrate knowledge and understanding of many aspects of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.

Appreciation of many aspects of the wider multidisciplinary engineering context and its underlying principles.

Appreciation of many aspects of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.

Ability to learn appropriate level of new theories, concepts, methods etc. in unfamiliar situations.

Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.

Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.

Creation/development of many aspects of viable products, processes and systems and ensure fitness for purpose.

Appropriate application of resources, methods, tools and processes in engineering practice.

Apply appropriate quantitative science and engineering tools to the analysis of problems.

Demonstrate high level of creative and innovative ability in synthesising solutions and in formulating designs.

Comprehend the broad picture and thus work with an appropriate level of detail.

Develop, monitor and update many aspects of a plan, to reflect a changing operating environment.
Possess many transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
Make effective use of appropriate information technology and information retrieval skills.
Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.
Monitor and adjust some aspects of a personal programme of work on an on-going basis, and learn independently.

Learning outcomes for the award of: BEng

Demonstrate knowledge and understanding of much of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
Appreciation of the wider multidisciplinary engineering context and its underlying principles.
Appreciation of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.
Ability to learn new theories, concepts, methods etc. in unfamiliar situations.

Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.
Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
Creation/development of viable products, processes and systems and ensure fitness for purpose.
Appropriate application of resources, methods, tools and processes in engineering practice.

Apply appropriate quantitative science and engineering tools to the analysis of problems.
Demonstrate creative and innovative ability in synthesising solutions and in formulating designs.
Comprehend the broad picture and thus work with an appropriate level of detail.
Develop, monitor and update a plan, to reflect a changing operating environment.

Possess many transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.
Make effective use of information technology and information retrieval skills.
Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.
Monitor and adjust a personal programme of work on an on-going basis, and learn independently.

Learning outcomes for the award of: BEng (Hons)

Demonstrate knowledge and understanding of essential facts, concepts, theories and principles of aerospace engineering, and its underpinning science and mathematics.
Consider and apply wider multidisciplinary engineering context and its underlying principles into practice.
Appreciation of the social, environmental, ethical, economic and commercial considerations affecting the exercise of engineering judgement.
Ability to learn and apply new theories, concepts, methods etc. in unfamiliar situations.

Practical engineering skills (acquired through laboratories, workshops, design, etc.) and show evidence of team-working, project participation and leadership abilities.
Systematic use of engineering analysis in order to interpret problems, assess technologies, propose solutions, implement processes and enable continuous improvement.
Creation/development of viable products, processes and systems and ensure fitness for purpose.
Appropriate application of resources, methods, tools and processes in engineering practice.

Apply appropriate quantitative science and engineering tools to the analysis of problems.
Demonstrate creative and innovative ability in synthesising solutions and in formulating designs.
Comprehend the broad picture and thus work with an appropriate level of detail.
Develop, monitor and update a plan, to reflect a changing operating environment.

**Possess developed transferable skills that will be of value in a wide range of situations, including problem-solving; communication; and working with others.**

Make effective use of information technology and information retrieval skills.

Plan self-learning and improve performance as the foundation for lifelong learning and continuing professional development.

Monitor and adjust a personal programme of work on an on-going basis, and learn independently.
### Programme Specification

1. **Awarding Institution / Body**
   - University of Central Lancashire

2. **Teaching Institution and Location of Delivery**
   - University of Central Lancashire
   - Preston campus

3. **University School**
   - School of Engineering

4. **External Accreditation**
   - N/A

5. **Title of Final Award**
   - MEng (Hons) / BEng (Hons) / BSc (Hons)
   - Engineering (Foundation Entry)
   - (non-award bearing programme: initial stage of 5-year (MEng) or 4-year (BEng / BSc) degree course)

6. **Modes of Attendance offered**
   - Full-time / Part-Time
   - Note that part-time attendance mode is not guaranteed to be one day per week.

7. **UCAS Code**
   - TBD

8. **Relevant Subject Benchmarking Group(s)**

   Note that the QAA SBSs mainly focus on Bachelor’s degree with honours level and Master’s level, and so are informative rather than directly applicable to this Foundation Year Entry course.

9. **Other external influences**
   - Engineering Council UK-SPEC
   - QAA

10. **Date of production/revision of this form**
    - 4 May 2016

### 11. Aims of the Programme

- To equip the student with a broad range of subject-specific and transferable skills that will enable progression to a range of undergraduate honours programmes (BSc / BEng / MEng) within the School of Engineering, most of which lead to awards with Professional Accreditation.

- To enable the student to gain confidence as an independent learner and the ability to reflect on their own range of skills and knowledge.
• To encourage the student to identify and pursue further learning opportunities and/or employment.

• To encourage the student to develop an awareness of the role of the engineer, and other related professions, in industry.

12. Learning Outcomes and Teaching, Learning and Assessment Methods

<table>
<thead>
<tr>
<th>A. Knowledge and Understanding</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of the programme the students will be able to:</td>
</tr>
<tr>
<td>A1. Demonstrate the skills necessary to undertake undergraduate degree level study in areas covered by the School of Engineering, including basic ICT skills and mathematics.</td>
</tr>
<tr>
<td>A2. Explain and apply the basic principles relevant to a range of areas covered in courses within the School of Engineering.</td>
</tr>
<tr>
<td>A3. Discuss the external factors impacting various areas covered in courses within the School of Engineering.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching and Learning Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range of teaching and learning methods will be used such as lectures, tutorials, workshops, discussions, feedback sessions, practical sessions, design exercises and simulations, including use of ICT and online materials (via elearn / Blackboard).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment Methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>A range of assessment methods will be used such as portfolios, examinations, practical exercises and team-work exercises. Formative assessment will include peer/self-evaluation and on-line evaluation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Subject-Specific Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of the programme the students will be able to:</td>
</tr>
<tr>
<td>B1. Demonstrate a logical approach to problem solving, design and analysis.</td>
</tr>
<tr>
<td>B2. Communicate effectively through written, graphical and oral presentations.</td>
</tr>
<tr>
<td>B3. Demonstrate basic competence in academic research methods including use of ICT and electronic resources.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching and Learning Methods</th>
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</thead>
<tbody>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Thinking Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of the programme the students will be able to:</td>
</tr>
<tr>
<td>C1. Demonstrate effective decision-making in the context of understanding and solving problems related to areas covered in courses within the School of Engineering.</td>
</tr>
<tr>
<td>C2. Recognise and apply appropriate techniques to develop solutions to real-world problems.</td>
</tr>
<tr>
<td>C3. Reflect on their own understanding and begin to develop critical judgements.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching and Learning Methods</th>
</tr>
</thead>
</table>
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**Assessment Methods**

A range of assessment methods will be used such as portfolios, examinations, practical exercises and team-work exercises. Formative assessment will include presentations, peer/self-evaluation and on-line evaluation.

**D. Other skills relevant to employability and personal development**

On successful completion of the programme the students will be able to:

D1. Work independently and manage time effectively.

D2. Demonstrate effective communication using reports and presentations.

D3. Demonstrate effective ICT skills.

**Teaching and Learning Methods**

A range of teaching and learning methods will be used such as lectures, tutorials, workshops, discussions and feedback sessions, including use of ICT and online materials (via elearn / Blackboard).

**Assessment Methods**

A range of assessment methods will be used such as portfolios and team-work exercises. Formative assessment will include presentations, peer/self-evaluation and on-line evaluation.

### 13. Programme Structure

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Credit rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>ERC001</td>
<td>Study Skills</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>ERC002</td>
<td>Basic Mathematics</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>ERC003</td>
<td>Information and Communications Technology</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>ERC004</td>
<td>Practical Skills</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>ERC005</td>
<td>Design Studies</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>ERC006</td>
<td>Analytical Studies</td>
<td>20</td>
</tr>
</tbody>
</table>

### 14. Awards and Credits

BSc (Hons) / BEng (Hons) / MEng (Hons) Engineering (Foundation Entry)

Requires completion of 120 credits at Level 3.

Successful completion of the six Foundation Year Entry modules at the appropriate performance level (see below) leads to progression to Year 1 of appropriate undergraduate programmes within the School of Engineering.

An average mark of 60% or above is required for progression to MEng (Hons) courses.

- MEng (Hons) Aerospace Engineering
- MEng (Hons) Computer Aided Engineering
- MEng (Hons) Civil Engineering
- MEng (Hons) Electronic Engineering
- MEng (Hons) Energy Engineering
- MEng (Hons) Fire Engineering
- MEng (Hons) Mechanical Engineering
- MEng (Hons) Motor Sports Engineering
- MEng (Hons) Oil and Gas Safety Engineering
- MEng (Hons) Robotics Engineering
An average mark of 50% or above is required for progression to BEng (Hons) Aerospace Engineering, BEng (Hons) Computer Aided Engineering, BEng (Hons) Civil Engineering, BEng (Hons) Electronic Engineering, BEng (Hons) Energy Engineering, BEng (Hons) Fire Engineering, BEng (Hons) Mechanical Engineering, BEng (Hons) Mechanical Maintenance Engineering, BEng (Hons) Motor Sports Engineering, BEng (Hons) Oil and Gas Safety Engineering, BEng (Hons) Robotics Engineering, BEng (Hons) Building Services and Sustainable Engineering.

An average mark of 40% or above is required for progression to BSc (Hons) Building Surveying, BSc (Hons) Construction Project Management, BSc (Hons) Facilities Management, BSc (Hons) Quantity Surveying, BSc (Hons) Fire and Leadership Studies, BSc (Hons) Fire Safety and Risk Management.

Details of the delivery and focus of some of the modules would depend on the specific programme the student is registered for. Progression to School of Engineering programmes other than the programme for which the student is registered may be subject to interview.

<table>
<thead>
<tr>
<th>15. Personal Development Planning</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDP-related learning is presented informally at induction and is supported in all six modules in various respects. Students will be expected to develop a portfolio of their work throughout the year (coursework, reports, completed example sheets etc.), and discuss aspects of their personal and professional development with members of the course team including their Academic Advisor.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Admissions Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard entrants will require 200 points at A-level (from two A-level passes), or 160 points (MPP) at BTEC, or equivalent. GCSE-level Mathematics and English at grade C or above are required. There are no other mandatory formal educational or specialist knowledge requirements for admission to this Foundation Year Entry programme.</td>
</tr>
</tbody>
</table>

| Non-standard entrants will be considered on an individual basis, normally through interview, and are expected to be able to demonstrate personal reflection on their career to-date and show a strong desire and ability to study. They may be asked to produce a piece of written work to help assess their ability to benefit from the programme. |

| International applicants will have to demonstrate that they will benefit from the course and that they have a good grasp of the English language: English should be at the standard IELTS level required (or equivalent) by the University for admission to a Foundation Year |

Entry course at level 3, i.e. an overall IELTS score of 6.0 or higher with no subscore below 5.5.

17. **Key sources of information about the programme**

- UCLan web pages and prospectus.
- UCAS website
- Other UCLan marketing activities, e.g. Open Days etc.
## 18. Curriculum Skills Map

<table>
<thead>
<tr>
<th>Level</th>
<th>Module Code</th>
<th>Module Title</th>
<th>Core (C), Compulsory (Comp)</th>
<th>Knowledge and Understanding</th>
<th>Subject-Specific Skills</th>
<th>Thinking Skills</th>
<th>Other skills relevant to employability and personal development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>A1</td>
<td>A2</td>
<td>A3</td>
<td>B1</td>
<td>B2</td>
</tr>
<tr>
<td>Level 3</td>
<td>ERC001</td>
<td>Study Skills</td>
<td>Comp</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>ERC002</td>
<td>Basic Mathematics</td>
<td>Comp</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>ERC003</td>
<td>ICT</td>
<td>Comp</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>ERC004</td>
<td>Practical Skills</td>
<td>Comp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ERC005</td>
<td>Design Studies</td>
<td>Comp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ERC006</td>
<td>Analytical Studies</td>
<td>Comp</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
University Student Handbook for Taught Courses

2018/19

Please read this Handbook in conjunction with your Course Handbook.

All course materials, including lecture notes and other additional materials related to your course and provided to you, whether electronically or in hard copy, as part of your study, are the property of (or licensed to) UCLan and MUST not be distributed, sold, published, made available to others or copied other than for your personal study use unless you have gained written permission to do so from the Dean/Head of School. This applies to the materials in their entirety and to any part of the materials.

This Handbook is produced centrally and locked for editing. Partner institutions only are given permission to contextualise the Handbook.
**UCLan Mission statement**
We create positive change in our students, staff, business partners and wider communities, enabling them to develop their full potential by providing excellent higher education, innovation and research.

**UCLan Values**
- The pursuit of excellence in all that we do.
- Equality of opportunity for all, supporting the rights and freedoms of our diverse community.
- The advancement and protection of knowledge, freedom of speech and enquiry.
- Supporting the health, safety and wellbeing of all.

**Student Charter**
The Student Charter has been developed by the University and the Students’ Union so that students gain the maximum from their UCLan experience. It is a two-way commitment or ‘contract’ between the University and each individual student. It acts as a means of establishing in black and white what students can expect from the University and the Union in terms of support, and in return what we expect from our students. [Read the full Student Charter](#).

**Supporting Diversity at UCLan**
UCLan recognises and values individual difference and has a public duty to promote equality and remove discrimination on various grounds including race, gender, disability, religion or belief, sexual orientation and age. During your time at UCLan we expect you to be able to
- experience "an integrated community based on mutual respect and tolerance where all staff and students can feel safe, valued and supported."
- contribute to creating a positive environment where discriminatory practices and discrimination no longer happen.

Please review the UCLan [Equality and Diversity Policy](#) for further information.
Contents page

1. Welcome and Introduction to the University
2. Learning Resources
3. Preparing for your career
4. Student support
5. Students’ Union
6. Rationale, aims and learning outcomes of the course
7. Assessment
8. Student Voice
1. Welcome and Introduction to the University

The University of Central Lancashire (UCLan) welcomes you and hopes that you will enjoy studying at UCLan and that you will find your course both interesting and rewarding. This Handbook provides you with generic University level information and the Course Handbook provides specific information about your programme of study.

1.1 Communication

The University expects you to use your UCLan email address and check regularly for messages from staff. If you send us email messages from other addresses they risk being filtered out as potential spam and discarded as unread.

1.2 External Examiner

The University has appointed an External Examiner to your course who helps to ensure that the standards of your course are comparable to those provided at other higher education institutions in the UK. External Examiner reports will be made available to you electronically. The School will also send a sample of student coursework to the external examiner(s) for external moderation purposes, once it has been marked and internally moderated by the course tutors. The sample will include work awarded the highest and lowest marks and awarded marks in the middle range. Details of the External Examiner associated with your course can be found in your Course Handbook.

1.3 Expected hours of study

The normal amount of work involved in achieving a successful outcome to your studies is to study for 10 hours per each credit you need to achieve – this includes attendance at UCLan and time spent in private study. Please note however that this may vary depending on your particular course and programme of study. You should therefore check your Course Handbook or contact a member of staff within the relevant School.

1.4 Attendance Requirements

Student attendance at timetabled learning activities of courses and modules is required. Notification of illness or exceptional requests for leave of absence must be made as detailed in the Course Handbook. Individual modules and/or courses may incorporate a specific attendance requirement as part of the assessment criteria for successful completion of a module.

Students with continuous unauthorised absence may be deemed to have withdrawn from the course. The date of withdrawal will be recorded as the last day of attendance. You may request a review of this decision if you have grounds in line with the Academic Appeals Procedure. Tuition fees will be charged in accordance with Appendix 2 of our Tuition Fee Policy.

You must swipe in using your student card. Each time you are asked to enter your details on the Student Attendance Monitoring system (SAM) you must remember that the University has a responsibility to keep information up to date. You must only enter your own details on the system as to enter any other names would result in inaccurate records and be dishonest. Any student who is found to make false entries, such as scanning but not attending, can be disciplined under the Regulations for the Conduct of Students.
1.5 Data Protection
All of the personal information obtained from you and other sources in connection with your studies at the University will be held securely and will be used by the University both during your course and after you leave the University for a variety of purposes. These purposes are all explained during the enrolment process at the commencement of your studies. If you would like a more detailed explanation of the University’s policy on the use and disclosure of personal information, please see the University’s Data Protection Policy and Privacy Notice or contact the Information Governance Officer, Office of the University Secretary and Legal Officer, University of Central Lancashire, Preston, PR1 2HE or email DPFOIA@uclan.ac.uk.

2. Learning resources

2.1 Learning Information Services (LIS)
Extensive resources are available to support your studies provided by LIS – library and IT staff. Take advantage of the free training sessions designed to enable you to gain all the skills you need for your research and study.

You can find the link to the Library Opening Hours here: http://www.uclan.ac.uk/students/study/library/opening_hours.php

2.2 Electronic Resources
LIS provide access to a range of electronic resources – e-journals and databases, e-books, images and texts.

3. Preparing for your career
Your future is important to us, so to make sure that you achieve your full potential whilst at university and beyond, your course has employability learning integrated into it. This is not extra to your degree, but an important part of it.

Your course will take you on a journey of development that will help you to map your personal story of your time at university.

You will be encouraged to record your learning journey so that you can demonstrate all the work-related skills you have developed, both before and during your time at UCLan. This will help you to show future employers just how valuable your degree is and the employability skills you have acquired.

• You will be given the opportunity to explore your identity, your strengths and areas for development, your values and what you want to get out of life.
• You will be able to investigate a range of options, including jobs and work experience, postgraduate study and self-employment.
• We will support you to enable you to successfully tackle the recruitment process and to develop your enterprise skills.

UCLan Careers offers a range of support for you including:-

• One to one career and employability advice and guidance appointments.
• Advice on finding graduate jobs, including how to improve your CV with work placements, internships, voluntary opportunities and part-time employment.

• Workshops, seminars, and events to enhance your learning and develop your skills.

• Employer presentations and events, to give you the chance to network with potential employers and find out from them what they are looking for.

The UCLan careers portal careerEDGE contains all the information and resources you will need to help navigate your way to a successful career, including access to hundreds of graduate vacancies, placements and part-time jobs.

We are based in the entrance to Foster building and are open from 09:00-17:00, Monday to Thursday, 9:00-16:00 on Fridays. Come to see us to arrange your guidance appointment, have your CV and cover letter checked, get help in applying for a job or just to find out more about our full range of services. It’s your future: take charge of it!

UCLan Careers | Foster Building | University of Central Lancashire, Preston PR1 2HE
01772 895858
careers@uclan.ac.uk
www.uclan.ac.uk/careers

4. Student support, guidance and conduct

4.1 Student Support

"Got a Problem to Sort? Come to us for Support".

The <i> is your first point of call for all enquiries, help and advice. We provide guidance to all UCLan students whatever the query may be. We offer advice on:

• Bank and Confirmation of Study Letters
• Council Tax Exemption Certificates
• International Student Support
• Library Services and Support
• Printing and Printer Credit
• Student Financial Support
• UCLan Cards
• UCLan Financial Bursary (1st year students only)
• Student Support and Wellbeing (including Disability)

and much more.

We are based on the ground floor of the UCLan Library and open 7 days a week most of the year. Our friendly and approachable team will do their best to ensure your query is answered. Come and have a chat with us if you have a query on any aspect of student life and study. http://www.uclan.ac.uk/students/study/library/the_i.php

If you are struggling financially or have financial concerns which may prevent you from continuing on your course, you are advised to seek advice from the University’s Finance Support Team, based in the <i>, or in the Advice and Representation Centre at the Students’ Union.
If you are finding the course challenging or cannot complete independent study and assessments on time you should consult your Academic Advisor.

4.2 Students with disabilities
You are strongly encouraged to declare your disability on your application form when you apply to study at UCLan. If you have declared this Disability Services will be in contact with you to advise you about reasonable adjustments which may be appropriate in the circumstances. You can also tell any member of staff at the University, who will ask you to sign a disability disclosure form, to let the Disability Service know that you have a disability and agree to share this information with them. Disability Services will then get in touch with you to discuss your available options. Following this you will be assigned a Disability Adviser whom you can contact should you need any further help or assistance. https://www.uclan.ac.uk/students/health/disability_services.php

4.3 Assessment arrangements for students with a disability
Arrangements are made for students who have a disability/specific learning difficulty for which valid supporting evidence can be made available. Contact your Disability Adviser for advice and information, disability@uclan.ac.uk

4.4 Health and Safety
As a student of the University you share responsibility for the safety of yourself and for that of others around you. You must understand and follow all the regulations and safety codes necessary for a safe campus environment. Please help to keep it safe by reporting any incidents, accidents or potentially unsafe situations to a member of staff as soon as possible.

Safety assessments have been undertaken for each module of your course and you will be advised of all applicable safety codes and any specific safety issues during the induction to your course and modules. You must ensure that you understand and apply all necessary safety codes. These form an essential element of your personal development and contribute to the safety of others.

4.5 Conduct
You will be expected to abide by the Regulations for the Conduct of Students in the University. UCLan expects you to behave in a respectful manner towards all members of the University at all times demonstrated by using appropriate language in class, switching mobile phones / other devices off prior to attending classes, and also in your use of any social networking sites.

If your behaviour is considered to be unacceptable, any member of staff is able to issue an informal oral warning and the University will support staff by invoking formal procedures where necessary. You can read more about UCLan expectations in the Regulations for the Conduct of Students.
5. **Students’ Union**

The Students’ Union is the representative body for all UCLan students. The organisation exists separately from the University and is led by the elected officers of the Student Affairs Committee (SAC) as well as representatives on the Students’ Council. The Students’ Union building is located at the heart of the Preston campus, and is the hub for all student activities.

Representation and campaigning for students’ rights is at the core of what the Students’ Union does and is encompassed by its tag line of *Making Life Better for Students*. Should you wish to make a change to any aspect of your student experience, whether it be academically related or not, then the Students’ Union is where your voice can be heard, actions taken, or campaigns launched.

Your Students’ Union is also the home to a fantastic range of student-led societies, sports teams and multitudes of volunteering opportunities. You can also receive help in finding part-time work whilst you study. Not sure where to go? Pop into the Opportunities Centre on the ground floor of the Students’ Union building and someone will point you in the right direction.

We hope your time at University is trouble free, but should you come into difficulties around anything from academic appeals, to issues with housing, benefits or debt, then the Student Union’s dedicated staff team in the Advice and Representation Centre are on hand to help and offer impartial advice.

More information on all these things, as well as details about all the Student Union’s (not-for-profit) commercial services, including its student supermarket (Essentials) and student-bar (Source) can be found at [www.uclansu.co.uk](http://www.uclansu.co.uk)

6. **Rationale, aims and learning outcomes of the course**

6.1 You will find information specific to your chosen course of study in your Course Handbook, in the form of a ‘programme specification’. As defined by the QAA (Quality Assurance Agency) - the regulatory body responsible for overseeing quality compliance in the Higher Education Sector - a programme specification is a concise description of the intended learning outcomes of an HE programme. It is the means by which the outcomes are achieved and demonstrated. In general, modules or other units of study have stated outcomes, often set out in handbooks provided by institutions to inform student choice. These intended learning outcomes relate directly to the curriculum, study and assessment methods and criteria used to assess performance. Programme specifications can show how modules can be combined into whole qualifications. However, a programme specification is not simply an aggregation of module outcomes; it relates to the learning and attributes developed by the programme as a whole and which, in general, are typically in HE more than the sum of the parts.

6.2 Sometimes certain aspects of courses may be subject to change. Applicants are encouraged to check information on our relevant course pages from time to time, particularly before submitting any application for their academic year of study. Material changes about a
course will be notified to you in material produced after the change is made and at the time you are made any offer of a place of study for that course. For details about changes to course information after you have accepted any offer, please see our Additional Information and Conditions of Offer

7. Assessment
Please note that all modules will be assessed. You are expected to attempt all required assessments for each module for which you are registered, and to do so at the times scheduled unless authorised extensions, special arrangements for disability, or extenuating circumstances have been expressly agreed by the University to allow you to defer your assessment.

7.1 Dealing with difficulties in meeting assessment deadlines
Assignments must be submitted no later than the time and date on your assignment instructions / brief. If you anticipate that you will have difficulty in meeting assessment deadlines or you have missed or are likely to miss in-semester tests you must report this at the earliest possible opportunity. An academic staff member, such as your Academic Advisor or Module or Course Leader, will be able to provide advice to you on how to do this. Extenuating Circumstances are defined as unforeseen, unpreventable circumstances that significantly disrupt student performance in assessment. Where students have a temporary unexpected circumstance that means that they are unable to complete a particular assignment on time the student may apply for an extension of up to ten working days.

7.2 Extensions
Authorisation of the late submission of work requires written permission. Your School is authorised to give permission for one extension period of between 1 and 10 working days where appropriate evidence of good reason has been accepted and where submission within this timescale would be reasonable taking into account your circumstances. Requests for extensions should be made prior to the submission date as extensions cannot be given Retrospectively (Academic Regulations).

You should complete and submit an extension request form, with any supporting evidence, to your CAS Hub. Further information is available on the Student Portal at: https://www.uclan.ac.uk/students/study/examinations_and_awards/extensions.php

We aim to let you know if the extension has been granted within 1 working day of the receipt of the request.

If you are unable to submit work within 10 working days after the submission date due to verifiable extenuating circumstances, you may submit a case for consideration in accordance with the University’s Policies and Procedures on Extenuating Circumstances (Academic Regulations and Assessment Handbook).

7.3 Extenuating circumstances
Some students face significant events in their personal life that occur after their course has started, which have a greater impact on their studies than can be solved by the use of an extension. If this applies to you, the University is ready
to support you, with both your course and your personal wellbeing, through a process called Extenuating Circumstances (see Academic Regulations and Assessment Handbook).

You can apply for Extenuating Circumstances online via myUCLan. You must apply no later than 3 days after any examination or assessment submission date. Do not wait until you receive your assessment results to submit a claim. It is in your own interests to submit the claim as soon as possible.

You will be expected to re-submit claims for extenuating circumstances for each semester in which they apply. All evidence provided relating to extenuating circumstances will be treated in a sensitive and confidential manner. Supporting evidence will not be kept for longer than is necessary and will be destroyed shortly after the end of the current academic year. Further information about the submission process

In determining assessment recommendations, Assessment Boards will consider properly submitted claims from students who believe their performance has been adversely affected by extenuating circumstances. N.B. Assessment Boards are not permitted to alter individual assessment marks to take account of extenuating circumstances (Academic Regulations and Assessment Handbook).

7.4 Late submissions
If you submit work late without authorisation, a universal penalty will be applied in relation to your work:
- If you submit work within 5 working days following the published submission date you will obtain the minimum pass mark for that element of assessment.
- Work submitted later than 5 working days after the published submission date will be awarded a mark of 0% for that element of assessment.
- Unauthorised late submission at resubmission will automatically be awarded a mark of 0% for that element of assessment.

You may apply to appeal this decision in accordance with the University’s Academic Regulations.

7.5 Feedback Following Assessments
UCLan is committed to giving you clear, legible and informative feedback for all your assessments (Academic Regulations). You are expected to review and reflect on your feedback and learn from each experience to improve your performance as you progress through the course.

For courses (except distance learning):
You will be provided with generic feedback for in-module formative and summative elements of assessment which contribute to a module within 15 working days of the scheduled submission or examination date. Generic feedback on end of module assessment and dissertations will be made available within 15 days of publication of results. Generic feedback may be oral, written, posted on a website or other.

For distance learning courses:
You will be provided with generic feedback for in-module formative and summative elements of assessment which contribute to a module within 20 working days of the scheduled assessment.
submission or examination date. Generic feedback on end of module assessment and dissertations will be made available within 20 days of publication of results. Generic feedback may be oral, written, posted on a website or other.

### 7.6 Unfair Means to Enhance Performance

The University regards any use of unfair means in an attempt to enhance performance or to influence the standard of award obtained as a serious academic and/or disciplinary offence. Such offences can include, without limitation, cheating, plagiarism, collusion and re-presentation ('unfair means'). You are required to sign a declaration indicating that individual work submitted for assessment is your own and will be able to view your Originality Report following e-submission of assessed work.

If you attempt to influence the standard of the award you obtain through cheating, plagiarism or collusion, it will be considered as a serious academic and disciplinary offence as described within the [Academic Regulations](#) and the [Assessment Handbook](#).

- **Cheating** is any deliberate attempt to deceive and covers a range of offences described in the [Assessment Handbook](#).
- **Plagiarism** describes copying from the works of another person without suitably attributing the published or unpublished works of others. This means that all quotes, ideas, opinions, music and images should be acknowledged and referenced within your assignments.
- **Collusion** is an attempt to deceive the examiners by disguising the true authorship of an assignment by copying, or imitating in close detail another student’s work - this includes with the other student’s consent and also when 2 or more students divide the elements of an assignment amongst themselves and copy one another’s answers. It does not include the normal situation in which you learn from your peers and share ideas, as this generates the knowledge and understanding necessary for each individual to independently undertake an assignment; nor should it be confused with group work on an assignment which is specifically authorised in the assignment brief.
- **Re-presentation** is an attempt to gain credit twice for the same piece of work.

The process of investigation and penalties which will be applied can be reviewed in the [Assessment Handbook](#). If an allegation is found to be proven then the appropriate penalty will be implemented as set out below:

In the case of a **single** offence of unfair means in an undergraduate or postgraduate assessment:

- the appropriate penalty will be 0% for the element of assessment, and an overall fail for the module (whether or not the resulting numeric average mark is above or below the minimum pass mark). The affected element of the assessment must be resubmitted to the required standard. The mark for the module following resubmission will be restricted to the minimum pass mark. Where unfair means is detected for the first time on a reassessment for an already failed module, no further reassessment for the module will be permitted, and the appropriate fail grade will be awarded.
In the event of a **repeat** offence of unfair means (irrespective of whether the repeat offence involves the same form of unfair means) on the same or any other module within the course:

- the appropriate penalty will be 0% for the module with no opportunity for re-assessment. This penalty does not preclude you being able to retake the module in a subsequent year.

The penalties will apply if you transfer from one UCLan course to another during your period of study and module credits gained on the former course are transferred to the current course.

Contact the [Students’ Union Advice and Representation Centre](mailto:suadvice@uclan.ac.uk) by emailing: suadvice@uclan.ac.uk for support and guidance.

**7.7 Appeals against assessment board decisions**

If you consider that you have a reason to appeal against an assessment board decision, please bear in mind that your reasons must fall within the grounds specified in the University [Academic Regulations](#): Section I. You cannot appeal simply because you disagree with the mark given. The specified grounds for appeal are:

1. that an Assessment Board has given insufficient weight to extenuating circumstances;
2. that the student’s academic performance has been adversely affected by extenuating circumstances which the student has, for good reason, been unable to make known to the Assessment Board;
3. that there has been a material administrative error at a stage of the examining process, or that some material irregularities have occurred;
   that the assessment procedure and/or examinations have not been conducted in accordance with the approved regulations (this fourth ground will not be relevant to an appeal against a decision relating to an interruption or discontinuance of study. Such an appeal should be based on one or more of the three grounds above.

If you want to appeal, then you must do so within 14 days of your results being published. The onus is on you to find out your results and submit your appeal on time. Contact the [Students’ Union Advice and Representation Centre](mailto:suadvice@uclan.ac.uk) by emailing: suadvice@uclan.ac.uk for support and guidance.

**8. Student voice**

You can play an important part in the process of improving the quality of your course through the feedback you give. In addition to the ongoing discussion with the course team throughout the year, there are a range of mechanisms for you to feed back about your experience of teaching and learning which are outlined below. Where appropriate, we aim to respond to your feedback and let you know of our plans for improvement.

The Students Union can support you in voicing your opinion, provide on-going advice and support and encourage your involvement in all feedback opportunities. They will be requesting that you complete the National Student Survey (during semester 2 for students in their final year of study) or the UCLan Student Survey (all other students).
The Students’ Union and University work closely together to ensure that the student voice is heard in all matters of student-life. We encourage students to provide constructive feedback throughout their time at university, through course reps, surveys and any other appropriate means.

The Union’s Student Affairs Committee (SAC), members of Students’ Council and School Presidents each have particular representative responsibilities and are involved with decision making committees at levels as high as the University Board. Therefore it is very important students engage with the democratic processes of the Students’ Union and elect the students they see as most able to represent them.

8.1 Course Representatives and School Presidents
A course representative is a student who represents their fellow students’ views and opinions to the course team, school, university and students’ union. Course representatives work proactively and diplomatically to improve the academic and non-academic experiences of students.

The role of a course representative is extremely beneficial to both students on your course and the University. It enables students to have ownership of their student experience, to voice their opinions and to share positive practice with the course team, primarily at the Student Staff Liaison Committee Meetings (see below).

Course representatives will be elected every year either in April or September. Alongside receiving recognition, support and respect, being a course representative is a great opportunity to enhance your employability skills. If you are interested in becoming a course representative and wish to find out more about the role visit the Students’ Union website or by emailing: coursereps@uclan.ac.uk.

School Presidents are annually elected representatives who voice the opinions of students within each school. They communicate and engage with students in their school to gain feedback and work in partnership with senior management to create positive change. They are also trained to support and signpost course representatives where needed. If you wish to find out who your School President is or more about the role visit the Students’ Union website or email: coursereps@uclan.ac.uk

8.2 Student Staff Liaison Committee Meetings (SSLC)
The purpose of a SSLC meeting is to improve courses, to have an open discussion and respect each other’s views, to share good practice where identified, to provide opportunity for students to feedback to staff about their course and student experience, to regularly review the course to improve its development, and to jointly work together to action plan against issues raised.

There will normally be one meeting per semester which will last no more than 2 hours. Your School President will Chair the meetings with an academic co-Chair, using guidelines and will provide a record of the meeting with any decisions and / or responses made and / or actions taken as a result of the discussions held. A standard agenda and action grid template will be
used. Course representatives will gather feedback from students and communicate this to the School President in advance of the meetings.

8.3 Complaints
The University recognises that there may be occasions when you have cause for complaint about the service you have received. When this happens, the University’s Student Complaints Procedure is intended to provide an accessible, fair and straightforward system which ensures an effective, prompt and appropriate response. Click on this link for more information University’s Student Complaints Procedure

If you are a student registered for a University award at a partner college, who is dissatisfied with the provision at the college, you should pursue your complaint in accordance with the college’s complaints procedure in the first instance. In the event of continuing dissatisfaction when you have completed the college’s procedure, you will be entitled to submit your complaint to UCLan under stage 3 of the procedure.