PROGRAMME SPECIFICATION

This Programme Specification is correct as of the date indicated; however, minor amendments may be made throughout the year and will be incorporated in the annual updating process.

SECTION A: DETAILS OF THE COURSE AND AWARD

Programme Title	**BSc (Hons) Air Transport with Helicopter Pilot Training**
Awarding Body	**Buckinghamshire New University**
Teaching Institution	**Buckinghamshire New University**
Faculty	**Design, Media & Management**
School	**Applied Management & Law**
Name of Final Award	**Bachelor of Science with Honours, BSc (Hons)**
NQF/FHEQ Level of Qualification	**Level 6: Bachelor's degree with honours**
QAA Benchmark Statement(s)	**No aviation benchmarks. Mapped to FHEQ Framework (2008) and QAA Quality Code for Higher Education (QAA432 12/11)**
UCAS Code	**N850**
Course Code(s)	**BR1ATH1**
Mode and Length of Study	**3 years full-time**
Number of Intakes	**One intake per annum: September**
Regime of Delivery	**Attendance**
Language of Study	**English**
Details of Accreditation	**N/A**
Publication Date	**11 February 2015 Revised: June 2016 and August 2018 AND September 2018**

GLOSSARY:
ATO   Approved Training Organisation
ATPL   Air Transport Pilot Licence
CPLH   Commercial Pilot Licence (Helicopter)
PPLH   Private Pilot Licence (Helicopter)
EASA   European Aviation Safety Agency
CAA   Civil Aviation Authority

Potential Student Profile / Criteria for Admission:

What the award is about and who the programme is aimed at:

The programme is designed for those students who wish to obtain a recognised degree in air transport with a view to pursuing a career as a commercial helicopter pilot. The BSc (Hons) Air Transport with Helicopter Pilot Training offers students the opportunity to qualify for a Commercial Helicopter Pilot Licence (CPLH) whilst simultaneously reading for a degree in Air Transport. The programme is aimed at those school leavers who wish to develop the skills, knowledge and employability profile that will provide them with the opportunity to gain employment as commercial helicopter pilots. It is equally

geared toward fulfilling the needs of those mature students with an interest in furthering their studies, obtaining a CPLH and securing employment as commercial helicopter pilots.

The BSc (Hons) Air Transport with Helicopter Pilot Training degree aims to reflect the changes inherent in the dynamic aviation industry and to prepare students with the skills and knowledge required both to work within the aviation field and to attain the necessary qualification for the award of a CPLH. Buckinghamshire New University has historically been a leader in the field of aviation degrees with fixed-wing pilot training and this rotary pilot programme, developed with input from helicopter aviation professionals, remains at the cutting edge of provision in the sector. All students undertake basic theoretical pilot training (PPLH) in Year 1 (Level 4), while a range of practical and advanced theoretical training modules in Years 2 and 3 (Levels 5 and 6) is available through the university's approved industry partners who deliver the ATPL ground school theory and the related practical training necessary to qualify for the award of a CPLH.

Students who successfully complete the academic modules at Level 6 (Year 3) offered by Buckinghamshire New University and the pilot training theoretical and practical modules will be awarded a BSc (Hons) degree in Air Transport with Helicopter Pilot Training, and a Commercial Helicopter Pilot Licence. This will enable graduates to apply for positions with an array of helicopter organisations. Students who do not complete the practical Commercial Pilot Licence (CPLH) prior to graduation will, through the successful completion of their academic modules, accumulate the necessary credits to be awarded a BSc (Hons) Air Transport with Helicopter Pilot Training degree and may complete these practical elements for the award of the CPLH after graduation. Additional flexibility is assured in that students who fail to complete both elements of the Private Pilot Licence (PPLH) in Year 1 are afforded the opportunity to transfer to the BA (Hons) Airline and Airport Management degree. Students who successfully complete the Private Pilot Licence (PPLH) in Year 1 but fail to achieve any of the ATPL theoretical pilot training modules will have the opportunity to transfer onto the BSc (Hons) Air Transport with Private Pilot Training degree. This programme is unique in the UK Higher Education sector as it allows students to obtain a university degree and a CPLH in three years of full-time study at a lower cost than would be incurred in obtaining both qualifications separately.

Why students should choose this award and opportunities available for students after completion of the award:

Students should choose this award if they are seeking to study an exciting course, developed with input from industry professionals, which focuses on trends shaping the aviation industry today and for the future, together with the opportunity to qualify for a CPLH. Delivery of the programme is varied and student interactive whilst knowledge and skills are tested through a diverse menu of assessments. The programme is forward looking and will remain fully responsive to the ongoing changes taking place in the dynamic aviation industry. Enrolling on a management degree, in which helicopter pilot training forms a major element, is of benefit both to the student and to their future employers. From the student perspective, employability skills are enhanced. For employers, an understanding of the commercial and operational challenges facing the dynamically changing aviation industry, and an understanding and recognition of how pilots can affect profitability and contribute to the bottom line through issues as diverse as conserving fuel on the one hand and exhibiting excellent customer care on the other, are now an integral element of any employment interview. Increasingly employers are looking to their helicopter flight crew to be more than the "traditional pilot" and are calling for pilot applicants to demonstrate commercial nous in addition to the ability to pilot a helicopter.

Students graduating from this programme will be highly employable both as commercial helicopter pilots, or failing this is the wider aviation industry. Employment opportunities include: police, medical and sea rescue helicopter pilots; helicopters pilots for the oil industry; helicopter pilots for the film industry; flight planning and operations; air cargo operations; airport operations; air data analyst; air traffic control, aircraft operations management. Although this is a specialised programme specific to professional helicopter pilot training and the aviation industry, transferable skills include team work, communications, time management, critical thinking and enhanced decision-making. Students may also decide to further their studies by undertaking a Master's degree.

Admission Regulations:

Admission regulations are in accordance with those prescribed by University Regulations. Entrants to the full-time three-year BSc (Hons) Air Transport with Helicopter Pilot Training degree programme are expected to have a good standard of general education with the equivalent of two A level passes at Grade C or above. They should also, as a minimum, have the equivalent of passes at GCSE level in English, Physics and Mathematics at Grade C or above. Mature students with non-standard qualifications will be considered on an individual basis. Some evidence of previous work experience, particularly experience which relates to the aviation sector, is an advantage. Prospective students should have a genuine interest in developing both their theoretical and practical knowledge of the aviation industry and the skills required to work in it. Students should be prepared to take responsibility for their learning, be willing to work both individually and as part of a team and to participate fully in course activities. Good communication skills are an advantage.

Admission requirements to the full-time university degree programme are aligned with the requirements of ATOs (Approved Training Organisations) for prospective trainee helicopter pilots i.e. anyone intending to train as a helicopter pilot must have good passes in English (the international language of aviation), Maths and Physics (the core of many of the ATPL Pilot Theory Examinations). EASA (European Aviation Safety Agency) regulations require that pilot trainee students whose first language is not English must be able to achieve level 6.0 in IELTS spoken English before they can take any flight test for the issue of a pilot licence. This relates to both the PPLH (Private Helicopter Pilot Licence) and CPLH (Commercial Helicopter Pilot Licence). A student who obtains an overall score of 6.0 on the IELTS test but does not obtain this in the spoken category will be compelled to achieve this standard before they are permitted to take any flight licence test.

In addition to their academic qualifications, students will, before the end of their 1st year of study, be required to undertake a full-day assessment comprising: tests in mathematics and physics; eye-to-hand and -feet coordination; flying aptitude and motor skills; memory capacity; mathematical and technical capacity; instrument flying capacity; logic and deductive reasoning; and task management including multi-tasking capacity. Students receive constructive feedback in relation to their assessment and advice as to whether they should pursue commercial helicopter pilot training. Students may undertake the assessment prior to commencing their studies at the university if they so wish. Full information in this regard is available to prospective students on Open Days and in the university promotional material in relation to the commercial helicopter pilot training programme. Students undertake The Honourable Company of Air Pilots pilot aptitude test which is independent of any ATO. The test is designed to predict an applicant's chances of success in the requisite commercial flight training. It does not test personality but tests aptitude for high workload instrument flight. It is intended for people with no (or very little) flying experience. Participants are de-briefed by an experienced pilot. Based on the assessment, where students are not considered suitable candidates for commercial helicopter pilot training they will be counselled and alternative pathways, such as transferring to the BSc (Hons) Air Transport with Private Pilot Training or the BA (Hons) Airline and Airport Management, suggested.

In order to undertake the practical pilot training necessary to obtain the EASA PPLH, trainee pilot students are required to have a CAA (Civil Aviation Authority) Class 2 Medical Certificate (minimum), available from designated CAA medical examiners. Those proceeding to the Commercial Helicopter Pilot Training (CPLH) programme need to obtain a CAA Class 1 Medical Certificate, examinations for which are conducted at the CAA Medical Department. Potential helicopter pilot students are strongly advised to consider obtaining the higher level medical clearance before starting the helicopter pilot training programme to avoid possible disappointment later. Basic medical fitness to DVLA (driving licence) standard is necessary for any practical flight training.

SECTION B: PROGRAMME AIMS, OUTCOMES, LEARNING, TEACHING AND ASSESSMENT METHODS

Programme Aims

The main educational aims of the BSc (Hons) Air Transport with Helicopter Pilot Training are to:

- develop in students a firm foundation of specialised knowledge of the basic theory required by all commercial helicopter pilots (PL405H; PL401H; PL402H; PL403H; PL404H; PL501H; PL502H; PL503H; PL504H; PL505H; PL506H; PL507H)
- provide students with the opportunity to develop the specialist knowledge and operational ability to qualify for Commercial Helicopter Pilot License (PL410H; PL510H)
- provide students with a comprehensive grounding in the operational and management knowledge and skills required by employers in the dynamic aviation industry (AI408; AI403; AI405; AI407; AI503; AI507; AI506; AI604; AI605; AI606; AI607; TM603)
- provide an inclusive, current and versatile curriculum of study which reflects the needs of both the aviation industry and the challenges with which it is confronted (AI507; ; AI604; AI605; AI606; AI607; TM603)
- prepare students for employment or for postgraduate study by fostering an environment in which students are encouraged to: develop academic skills; challenge knowledge; apply theory to practice; develop critical awareness, analysis, and reasoning; solve problems; synthesise and evaluate information; and engage in research (AI503; AI507; AI506; AI601; AI602; AI604; AI605; AI606; AI607;TM603)
- enable graduates to meet the changing demands of employment through acquisition and development of a wide range of personal and transferable skills required by employers in the aviation industry: self-reliance; reflection; adaptability; creativity; flexibility; interpersonal communication; teamwork and leadership qualities (AI506; AI607)
- develop the confidence and academic skills of students enabling them to become active and autonomous learners and critical thinkers (AI507; AI601; AI602; AI604; AI605; AI606; TM603)

The aforementioned educational aims have one core objective: to equip pilot students with the knowledge and skills perceived as contributing to the professionalism sought by aviation industry employers. In addition, the BSc (Hons) Air Transport with Helicopter Pilot Training equips pilot students with the requisite specialised theoretical and practical expertise to function efficiently and safely as professional commercial helicopter pilots.

Programme Learning Outcomes

Programme outcomes on the BSc (Hons) Air Transport with Helicopter Pilot Training degree are designed to enable students to:

Knowledge and Understanding
1. Demonstrate knowledge, understanding and the ability to apply the theoretical knowledge acquired in order to obtain a Private Pilot Licence (Helicopters)(PPLH)
2. Demonstrate the specialist knowledge and understanding of pilot theory and its application in order to obtain an Commercial Pilot Licence (Helicopters) (CPLH)
3. Demonstrate knowledge and understanding of the structure, systems of regulation and business models adopted by airline and airport operators
4. Demonstrate a sound knowledge of ground service processes and interactions at airports as applied by airline and airport operators
5. Demonstrate specialist knowledge of the management and commercial operations of the air transport industry
6. Demonstrate an in-depth understanding of the importance of human factors and their impact on aviation safety

Intellectual/Cognitive Skills
1. Critically analyse and evaluate arguments, assumptions, abstract concepts and data in relation to the aviation industry to make judgements, frame appropriate questions and propose solutions to problems
2. Critically evaluate the challenges confronting the aviation industry in the global context and the regulatory framework and strategies deployed to overcome such challenges
3. Critically evaluate essential elements of strategy formulation and implementation in the aviation industry
4. Analyse and evaluate the issues and principles of sustainability and social responsibility in the context of aviation
5. Critically analyse and evaluate an airline operation's economic requirements and performance
6. Critically review, consolidate and extend a coherent body of knowledge in order to execute a sustained piece of independent work using appropriate media
7. Critically interpret, synthesise and evaluate information from a wide variety of sources relating to current and future developments in the aviation industry

Practical Skills
1. Demonstrate the specialist knowledge and operational ability required to quality for a Private Helicopter Pilot Licence (PPLH)
2. Demonstrate the specialist knowledge and operational ability required to quality for a Commercial Helicopter Pilot Licence (CPLH)

Key/Transferable Skills
1. Evaluate and apply leadership and management theory in the context of the aviation industry
2. Deploy accurately established techniques of analysis and enquiry within aviation
3. Review critically current research and primary resources (for example, refereed research articles and or/original materials appropriate to aviation

Table 1: Programme Skills Matrix – Assessment

Module Code	Information Acquisition	Critical Thinking, Analysis and Synthesis	Self-reflection and Criticality	Communication Skills: Oral	Communication Skills: Written	Information & Communications Technology (ICT)	Numeracy & Quantitative Skills	Problem Solving & Decision Making	Independent & Self-managed Learning	Working with Others
PL401H	☒	☒	☐	☐	☒	☐	☐	☐	☐	☐
PL402H	☐	☒	☐	☐	☒	☒	☒	☒	☐	☐
PL403H	☒	☐	☐	☐	☒	☐	☒	☐	☐	☐
PL404H	☒	☒	☐	☐	☒	☐	☐	☐	☐	☐
PL405H	☒	☐	☐	☐	☒	☒	☒	☒	☒	☐
PL410H	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐
AI408	☒	☐	☐	☒	☒	☒	☐	☒	☒	☒

Module Code	Information Acquisition	Critical Thinking, Analysis and Synthesis	Self-reflection and Criticality	Communication Skills: Oral	Communication Skills: Written	Information & Communications Technology (ICT)	Numeracy & Quantitative Skills	Problem Solving & Decision Making	Independent & Self-managed Learning	Working with Others
AI403	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒
AI405	☒	☒	☐	☒	☒	☒	☒	☒	☒	☒
AI407	☒	☐	☐	☐	☒	☒	☐	☒	☒	☒
PL501H	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐
PL502H	☐	☒	☐	☐	☒	☒	☒	☒	☐	☐
PL503H	☒	☐	☐	☐	☒	☒	☐	☒	☐	☐
PL504H	☒	☒	☐	☐	☒	☒	☒	☒	☐	☐
PL505H	☐	☐	☐	☐	☒	☒	☒	☒	☐	☐
PL506H	☐	☒	☐	☐	☒	☒	☒	☒	☐	☐
PL507H	☐	☒	☐	☐	☒	☒	☒	☒	☐	☐
PL510H	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐
AI503	☒	☒	☐	☐	☒	☒	☐	☒	☒	☒
AI507	☒	☒	☐	☐	☒	☐	☐	☒	☒	☐
AI506	☐	☒	☐	☐	☒	☐	☐	☐	☒	☐
AI601	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐
AI602	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐
AI604	☒	☒	☐	☐	☒	☐	☐	☒	☒	☐
AI605	☒	☒	☐	☐	☒	☒	☒	☒	☒	☐
AI606	☒	☒	☐	☐	☒	☒	☒	☒	☒	☐
AI607	☒	☒	☐	☒	☒	☒	☐	☒	☒	☒
TM603	☒	☒	☒	☐	☒	☒	☒	☒	☒	☒

Learning, Teaching and Assessment Methods to achieve the Programme Learning Outcomes

The programme comprises an amalgam of modules each with its individual credit value. In Year 1 students study their PPLH theoretical syllabus. For each module, students participate in a weekly lecture in addition to seminars in which students in small groups have the opportunity to undertake exercises and pose questions in relation to material presented in the lecture. A minimum of 45 hours practical flight training is required prior to undertaking the regulatory test for the PPLH. The Private Helicopter Pilot Licence practical training lays the foundations of flying and navigational skills. Practical flight training, undertaken contemporaneously with theoretical ground school modules, enables the student to place and apply the theory studied into a practical context. The module is taught by means of interactive seminars (briefings), practical demonstration and one-to-one instruction in accordance with EASA compliance regulations. Interactive workshops are also used in the form of simulation devices. The practical flight instruction centres on ensuring that students reach the level of knowledge and skills required to safely exercise the privileges and responsibilities of a Private Helicopter Pilot.

Delivery of academic modules on the BSc (Hons) Air Transport with Helicopter Pilot Training does not follow a traditional delivery schedule. This is due to the fact that all ATPLH theory modules are undertaken during the commercial pilot students' 2nd year of study when they are stationed at their selected Approved Training Organisation (ATO) despite the fact that some of these modules (PL401H;PL402H;PL403H;PL404H), totalling 45 credits, are validated at L4. The delivery schedule in Year 1 (where L4 academic modules are studied in semester 1 and L5 academic modules in semester 2) (see Programme Structure Table on page 10) is thus devised specifically to accommodate this anomaly. In order to enable students who wish to transfer from the BSc (Hons) Air Transport with Helicopter Pilot Training at the end of the 1st Year of study to the BSc (Hons) Air Transport with Private Pilot Training, Year 1 on both programmes follows the same format in order to facilitate seamless transfer. In order to prepare students for, and support them in, coping with L5 modules in the 2nd semester of year 1, an additional 1 hour Personal Tutor session per week has been timetabled. This session, which is in addition to the normal personal tutor one-to-one sessions, is devoted specifically to building capacity in terms of academic writing, analysis and evaluation, critical thinking, development of arguments, providing solutions to problems and other academic skills expected of students at L5. The assistance of the Learning Development Unit is also sought in offering such support.

The academic programme comprises a combination of 15- and 30-credit modules. Year 1 modules focus on the development of foundation knowledge and understanding of the theories, operations, activities and processes that characterise the aviation industry and on the introductory stages of the pilot training programme (PPLH). Additionally, emphasis is focused on professional skills and development with a view to equipping students with essential knowledge in relation to the personal attributes and skills required to improve both academic performance and employment prospects. Modules are delivered through a blend of lectures, interactive seminars, workshops, small-group activities and debates and are supported by adaptive release e-learning material delivered through the VLE. Small groups of students discuss, in seminars, the contents of the lectures, undertake exercises and receive support, guidance and assistance from the module lecturers. Guidance in the acquisition of information is provided in seminars specifically geared to this topic. Informal formative assessment takes place on an ongoing basis through seminars that are specifically structured to include activities that assist students in developing the knowledge and skills required to fulfil the module learning outcomes and undertake the assessments. There is emphasis on the self-guided learning skills that will increasingly be called upon in Year 3 with advice and guidance provided in relation to recommended reading and independent research. L5 modules, undertaken in the 1st year of study, facilitate student progress to the in-depth examination of theories, impacts and issues and students are called upon to analyse, assess, evaluate and provide solutions to problems arising from the everyday management and operation of the industry. As they progress, students are increasingly called upon to undertake independent research and to compile analytical and evaluative reports and proposals, enhancing both the written and oral communication skills highly sought after in the industry.

In the 2nd year of study students on the BSc (Hons) Air Transport with Helicopter Pilot Training undertake the theoretical elements of the ATPLH (comprising modules validated at both L4 and L5) and, where sufficient progress has been made, progress to the practical elements of their training. In Year 2 instruction on the ATPLH theory takes the form of lectures, interactive workshops, computer-based training and, where appropriate, practical demonstration as guided by EASA compliance regulations.

Students at all the university's Approved Training Organisations receive extensive face-to-face delivery of theoretical modules and each student is provided with a full set of individual providers EASA approved course materials for each module. Students make extensive use of online resources to support their guided independent study and as a supplement to face-to-face presentation. Question banks are available for use by students as an auxiliary tool. Individual drop-in sessions are used for guidance on problem areas. All ATO partners are accredited EASA/CAA examination centres. The programme comprises an amalgam of modules, each with its individual credit value. EASA regulation stipulates that the ATPLH theoretical programme should comprise a minimum of 750 hours of instruction which may include classroom work; interactive video; slide or tape presentations; learning carrels; computer-based training and other media as approved by the competent authority in suitable proportions (EASA Annex to ED Decision 2011/016/R).

The practical element of the helicopter pilot training includes: practical flight training (both helicopter and simulator); briefings (both one-to-one and mass briefings held pre- and post-flight); tutorials; lectures; seminars and self-guided study. A minimum of 45 hours practical flight training is required prior to undertaking the regulatory test for the PPLH. Entry to the CPLH (Commercial Helicopter Pilot Licence) stage of training requires students to have met the minimum flight time requirement plus passes with a minimum of 75% in all modules of the Air Transport Pilot Licence Ground School Theory. CAA document CAP 804 (Part 1) sets out the specific types and duration of flights required in order to qualify to take the CPLH skills test. It should be noted that these are the minimum regulatory requirements and many trainee pilots will require additional hours in order to reach the level of proficiency required to pass the mandatory tests required for the issuance of the various licences. Throughout their period of study students are encouraged to have enquiring minds and to seek an in-depth understanding of the issues studied, questioning and building knowledge as to how systems work and why processes are followed rather than a superficial acquisition of facts which lack comprehension of underlying complexities and are called upon to analyse, assess, evaluate and provide solutions to problems arising from the planning and operation of flights undertaken.

In Year 3 the strategy is for students to develop more fully their independent learning skills. Students are expected to develop and demonstrate the ability to critically review and analyse theories, concepts, assumptions and arguments and to synthesise and evaluate information relating to a wide variety of sources in relation to international aviation management. Independent learning is fostered by undertaking an extended piece of individual research which requires the student to take full responsibility for managing their personal and professional development. Skills of reasoning and problem solving are developed and assessed throughout the modules through the synthesis, analysis, evaluation and interpretation of relevant literature and research findings and the application of theories and concepts to the solution of problems. The importance of self-reflection and criticality are developed and demonstrated through the ability to self-appraise and reflect on the student's own learning. Case studies and other relevant information sources form the basis for strategic analysis, evaluation and implementation planning.

Learning at all levels is structured to ensure that students are engaged in subject-specific contexts. This, inter alia, includes contact with the aviation industry through visiting speakers and 'live' case-studies. Students are also afforded the opportunity to interact with and research diverse aspects of the aviation industry by virtue of fieldwork. Throughout the programmes, participation in field visits is encouraged that affords students the opportunity to experience theory applied in an operational context. Guest speakers are invited, where appropriate, to ensure interaction with industry and provide students with learning opportunities that are conducive to reflection on how theory is applied to practice.

At all levels modules enable students to develop key skills. Assignments are designed to reflect the learning outcomes for each module. Holistically, the module learning outcomes complement the programme outcomes; these are in turn aligned to the QAA Quality Code for Higher Education and the FHEQ Framework. Please note that there are currently no QAA aviation benchmarks.

In the academic modules, informal formative assessment, specifically geared to assisting students in meeting learning outcomes for the specific module, takes place on an ongoing basis through seminar and workshop activities. Further support for students is provided through the use of the Blackboard Virtual Learning Environment. For example, lecture notes, supporting materials, web links and pod- and video-casts may be made available to students online, as are the module programme and reading lists. Students are encouraged to use the Discussion Board feature to discuss issues raised in lectures,

seminars and workshops with peers and the module tutor. Use of the VLE further allows students to develop and demonstrate competence in the use of information technology.

Assessment Strategy

Assessment methods are those considered most appropriate to the nature of the programme, the student profile and the requirements of future employers in terms of the knowledge, understanding and skills required. The likelihood of any employee within the aviation industry being called upon to write an essay is minimal whilst the ability to write logical, coherent, structured, focused, well researched, analytical, evaluative or informative reports and make well prepared, coherent, focused presentations is an undeniable asset to those seeking employment in the industry. The ability to work with others is pivotal to success in all areas of employment within the aviation industry and, in the case of commercial pilots, is critical to the safe operation of a commercial aircraft. Assessments are designed specifically to test the learning outcomes outlined in each module descriptor.

In Level 4 modules (studied in Years 1 and 2 of the programme) a varied menu of assessment methods is provided, including: group work; presentations; a case study based on fieldwork; written assignments (generally reports); cumulative exercises; preparation of a handbook; a reflective journal and time-constrained assignments (TCAs). In those L5 modules, studied in Year 1, the variety of assessment mirrors that of Level 4 modules, though assignments are more demanding. Longer reports and presentations are required and the emphasis moves to assessing analytical and evaluative ability. Assessment for the theoretical element of the pilot training programme at PPLH level (Year 1) takes the form of nine multiple choice examinations. All PPLH theory is delivered by a partner Approved Training Organisation (ATO) and theoretical examinations are written under CAA examination conditions. Formative practice examinations are written by students prior to each summative examination. Feedback and marks attained for the formative practice examinations is generally made available to students within 36 hours of the practice examination being undertaken. A progress check is undertaken by the ATO as formative assessment to determine student preparedness to undertake formal summative assessment by an EASA qualified examiner for the award of a Private Helicopter Pilot Licence. The assessment takes the form of an examination/test in accordance with EASA regulations. This will normally comprise of an oral assessment of approximately 1 hour plus a 2 hour practical flying test (with additional briefing and debriefing sessions). Students must pass all elements of the assessment in order to be awarded a Private Helicopter Pilot Licence (PPLH).

In Year 2 learning outcomes for individual ATPLH theory modules are met by successful completion of assessment for the theoretical element of the pilot training programme which takes the form of fourteen (14) multiple choice examinations. Examinations, which are set and invigilated by CAA examiners, are held monthly and may be written at any accredited CAA examination centre of the applicant's choice. In general training providers, accredited to deliver the theoretical syllabus, prepare students to write the examinations over two sittings one midway through and one at the end of the theoretical tuition period with students undertaking seven examinations in each of the selected examination weeks. All ATOs conduct formative assessment prior to submitting students for the summative examinations and will not put students forward for the summative examinations unless they have met the ATO's minimum formative requirements. Formative assessment takes the form of multiple-choice written examinations. In total, students write 18.25 hours of summative examinations across the theoretical syllabus. Trainee pilots are required to attain a minimum pass mark of 75% in each of the 14 multiple choice examinations in order to be awarded a Commercial Helicopter Pilot Licence (CPLH). Regulations in relation to the theoretical modules are those stipulated by EASA and implemented via its accredited national agent (in the case of the UK the CAA). All ATPLH theory examinations are set, marked and moderated by the CAA and may be written only at CAA approved examination centres.

No element of the theoretical training at either PPLH or ATPLH level may be condoned. A pass in the theoretical knowledge examinations is accepted for the grant of the CPLH (Commercial Helicopter Pilot Licence) up to 36 months from the date of gaining a pass in all the required examination papers. In the case of the PPLH all nine examinations must be passed within a 12 month period. Students are permitted to retake an examination four times however no student may spread the examinations over more than six examination sittings. Failure to have passed all the ATPLH theoretical examinations within the 36 month window entails the student rewriting all 14 examinations.

Assessment for the practical CPLH examination takes the form of an examination in accordance with EASA regulations. This normally comprises an oral assessment of approximately 1 hour plus a 2.5 hour practical flying test (with additional briefing and debriefing sessions). Students must pass all elements in order to be awarded credits for this module (PL510H). A formal progress check is undertaken by the ATO as a formative assessment to determine suitability for undertaking formal summative assessment by an EASA qualified examiner.

In year 3 (L6) academic modules, assessment is geared to testing criticality; reflection; complex problem solving; and decision making. There is a varied menu of assignments which includes reports, business and research proposals, case study analysis and examinations among others. The final Research Project or Business Plan and Proposal provide the ultimate test of students' ability to source, critically analyse, synthesise and critically evaluate information from a wide variety of sources and to apply their findings and recommendations to real-world situations.

Throughout their learning journey students are prepared for the assignments through seminars and workshops. Informal formative assessment takes place on an ongoing basis through seminars that are specifically structured to include activities that assist students in developing the knowledge and skills required to fulfil the module learning outcomes. Assistance is sought from the Learning Development Unit (LDU) in terms of the development of academic and report writing skills, presentation skills, critical reflection, and analytical skills amongst others. Each level has a one-hour allocated personal tutor slot which, in addition to the normal one-to-one personal tutor meetings, is also used for LDU presentations and exercises.

In Year 1 the balance of assessments has been drawn up to recognise both the nature of the students and to meet the requirements of the programme in terms of learning outcomes and transferable skills. Of the assessment regime on the BSc (Hons) Air Transport with Helicopter Pilot Training degree approximately 32% comprises individual written coursework; 20% is practical (group presentations); 35% TCA/examination-based; and 14% group written work. In Year 2 assessment of the ATPLH theory comprises 100% multiple choice examinations. In Year 3 (L6) 2.5% (or 5% dependent on the optional module selected) comprises oral presentation; 46% (or 43% dependent on the optional module selected) comprises individual written coursework; 43% examinations and 8% group work.

SECTION C: PROGRAMME STRUCTURE(S) AND MATRIX MAPPING
Table 2: Programme Structure Table

Course Title	BSc (Hons) Air Transport with Helicopter Pilot Training			
Course Code	BR1ATH1			
Mode of Study	Full-time Attendance			
Credit Value	**UK**	375 Credits	**ECTS**	187.5 Credits

Module Code	Module Title	QCF/FHEQ Level	Course Stage	Status in Award (Core / [O]ptional)	Credit Value	Written Exam %	Coursework %	Practical %	Semester Taught
Year 1									
PL405H	Private Pilot Licence (PPLH) Theory	4	1	C	15	100			SB
PL410H	Private Pilot Licence (PPL) Practical Training (H)	4	1	C	15			100	SB
AI408	Structure of the Air Transport Industry	4	1	C	30		100		S1
AI403	Air Transport – Security and Safety	4	1	C	15		100		S1
AI405	Airport Operations	4	1	C	15		100		S1
AI407	Developments of the Air Transport Sector	4	1	C	15	100			S2
AI503	Airline Management	5	1	C	15		100		S2
AI507	Airline Crisis and Continuity Management	5	1	C	15		100		S2
AI506	Management, Leadership and Change	5	1	C	15		100		S2
Year 2									
PL401H	Human Performance and Limitations	4	2	C	10	100			SB
PL402H	Communications	4	2	C	5	100			SB
PL403H	Aircraft General Knowledge	4	2	C	20	100			SB
PL404H	Air Law	4	2	C	10	100			SB
PL501H	Radio Navigation	5	2	C	10	100			SB
PL502H	Principles of Flight: Aeroplanes	5	2	C	10	100			SB
PL503H	Operational Procedures	5	2	C	5	100			SB
PL504H	Meteorology	5	2	C	10	100			SB

Code	Title								
PL505H	Instruments	5	2	C	10	100			SB

Course Title	BSc (Hons) Air Transport with Helicopter Pilot Training		
Course Code	BR1ATH1		
Mode of Study	Full-time Attendance		
Credit Value	**UK**	375 Credits	**ECTS**	187.5 Credits

Code	Title								
PL506H	General Navigation	5	2	C	10	100			SB
PL507H	Aircraft Performance and Planning	5	2	C	20	100			SB
PL510H*	Commercial Pilot Licence (CPL)	5	2	O	10			100	SB
Year 3									
AI601	Research Project	6	3	O	30		85	15	SB
AI602	Business and Enterprise	6	3	O	30		70	30	SB
AI604	Aviation in the Global Context	6	3	C	15	100			S1
AI605	Aviation Finance and Economics	6	3	C	30		100		SB
AI606	Sustainability Management	6	3	C	15	100			S1
AI607	Human Factors as a Fundamental Concept in Aviation Safety	6	3	C	15		70	30	S2
TM603	Strategic Management	6	3	C	15		100		S2

In Year 3 (L6) students must take either the 30 credit AI601 Research Project module or the 30 credits AI602 Business and Enterprise module.

Please note the balance of credits available at year one (L4) allows students to achieve the requisite 120 academic credits required for progression. However, for progression into Y2 (L5) of this course both PL405(H) and PL410(H) are essential to pass.

*PL510H Please note: not all students complete their CPLH licence in year 2. The balance of credits available however allows them to achieve the requisite 120 academic credits required for progression to Year 3

Table 3: Mapping of Programme Outcomes to Modules

Programme Outcome	Level 4 (Code)	Level 5 (Code)	Level 6 (Code)	Level 7 (Code)	Level 8 (Code)
A. Knowledge and Understanding					
A1	PL405H				
A2		PL501H PL502H PL503H PL504H PL505H PL506H PL507H			
A3	AI408 AI407 AI403	AI502	AI604 AI605		
A4	AI404	AI504	AI602		

Programme Outcome	Level 4 (Code)	Level 5 (Code)	Level 6 (Code)	Level 7 (Code)	Level 8 (Code)
A5	AI403 AI405	AI502 AI503	AI605 TM603		
A5	AI402 AI406	AI503 AI504 AI507 AI506 TM507			
A6			AI607		
B. Intellectual / Cognitive Skills					
B1	PL502H PL504H PL505H PL507H	AI501 AI503 AI504 AI507	AI601 AI604 AI606 AI607 TM603		
B2		AI507	AI604 AI606 TM603		
B3			AI602 TM603		
B4	AI408 AI407		AI606 TM603		
B5		AI503 AI504 AI507	AI605 TM603		
B6			AI601 AI602		
B7		AI502 AI503 AI504 AI507	AI601 AI602 AI604 AI605 AI606 AI607 TM603		
C. Practical Skills					
C1	PL405H PL410H	PL510H			
D. Key / Transferable Skills					
D1	AI408 AI407 AI403 AI405		AI604 AI606 TM603		
D2		AI506			
D3			AI601 AI602		

Programme Outcome	Level 4 (Code)	Level 5 (Code)	Level 6 (Code)	Level 7 (Code)	Level 8 (Code)
D4		AI501 AI503 AI507 AI506	AI601 AI602 AI604 AI606 AI607 TM603		

SECTION D: CONTACT HOURS

Hours are worked on the basis of full-time study. One Academic Credit is equated to 10 notional learning hours. A full-time undergraduate student will accumulate 120 credits in an academic year which is therefore equated to 1200 notional hours. Module Descriptors provide detailed breakdowns of the categories given below.

Table 4: Breakdown of Contact Hours

Year of course	Scheduled Learning and Teaching Activities	Guided Independent Study	Placement / Study Abroad	Total
Year 1 (Level 4)	376	824		**1,200 hours**
Year 2 (Level 5)	675	525		**1,200 hours**
Year 3 (Level 6)**	297	903		**1,200 hours**
Total	**1348 (37.44)**	**2252 (62.56%)**		**3,600 hours**

Note: In Year 2 hours will vary dependent on whether the students completes module PL510 in which case a further 35 hours will be added to the SLTA hours

Hours listed above may, in L6, depend on module choice (AI601 or AI602) and therefore the particular hours for an individual student may differ accordingly.

SECTION E: ASSESSMENT REGULATIONS

This programme conforms to the approved University procedures as detailed on the University website with the following exceptions.

The calculation of this award will be as follows:
- Level 6: 100%

- Trainee pilots are required to attain a minimum pass mark of 75% in each of the 9 multiple choice theoretical examinations required for the award of a Private Helicopter Pilot Licence and in each of the 14 multiple choice examinations required for the award of a Commercial Helicopter Pilot Licence (CPLH). Regulations in relation to the theoretical modules are stipulated by EASA and implemented via its accredited national agent (in the case of the UK the CAA).
- All pilot training credits, both theoretical and practical, are awarded on a pass/fail basis only in order to obviate the skewing of degree classifications by the 75% pass mark required by CAA regulations.
- Students who complete PL510H in L5 will achieve a total of 370 credits. This enables the student to meet the requirements of the ATPL validation (28th November 2013) which directed that the BSc (Honours) award should comprise of a minimum of 50% academic credits.

- In the first year the pilots do nine European Aviation Safety Association (EASA) exams, regulated by the UK Civil Aviation Authority (CAA) for their Private Pilot's Licence (PPL), worth 15 credits at

level 4. These are well organised and structured by the University's PPL training partner, Booker Aviation, but experience has demonstrated that some students simply choose not to take them at the prescribed time. This has led to a situation where some students who have elected to not do exams at their scheduled time do not complete them in time for the referral board and carry them into their second year. Thus these nine exams are not exempt from the new regulations requiring all 120 credits to be complete before the commencement of their second year of study.

- In the second year of the commercial pilot training degree, students undertake 14 much harder EASA exams, regulated by the CAA and delivered by the University's flight training partners. Each exam carries a separate weighting in terms of academic credit, the combination of which provides them with their 120 credits; some are level 4, some are level 5. These exams are crucial for their piloting careers; without them they cannot continue their flight training or get jobs with airlines as First Officers. As the course follows a modular approach to training, EASA regulations provide for a time limit exceeding the academic year in which these exams can be studied and taken. Thus for the commercial pilot training course (including those completing commercial training on the helicopter pilot training degree), exemption from the new regulations is permitted and EASA exams with a total academic credit weighting, not exceeding 30 credits, may be carried over into the students' third year, on the understanding that every effort is made by the student to complete those exams as soon as possible.

The following modules may not be condoned:
- AM601 Research Project or
- AM602 Business and Enterprise (students have an option of one of these modules)
- PL405H (PPLH Theory); PL410H (PPLH Practical) PL501/2/3/4/5/6/7H (ATPLH Theory) and PL510H (CPLH) Practical.

This programme is covered by the *University Academic Framework and Assessment Regulations*

Other

Programme Review and Enhancement:

The annual programme review and enhancement process conforms to university requirements. The course leader is responsible for the production of the evidence based Programme Report and Action Plan which in turn feeds into the Departmental Evidence Based Department Report and Action Plan. All pilot training programmes are managed by the Head of Academic Department of Travel and Aviation with the assistance of the Course Coordinators of the relevant Pilot Training Programme. A comprehensive partnership agreement/contract (Indicator 7 Quality Code – Chapter B10: Managing Higher Education Provision with Others – Dec, 2012) together with an Operations Manual, specific to each course and its operational arrangements as agreed between the university and the ATO, details how the University and the ATO interact on a number of matters including quality assurance (Indicator 2 Quality Code – Chapter B10: Managing Higher Education Provision with Others – Dec, 2012). Feedback on student progression is provided by the respective ATOs to the Head of Academic Department and/or Course Coordinators on a regular basis and in particular when CAA examination results are received or when there is concern in relation to the progress or commitment of a particular student. Annual statistics of student achievement and employment are available from the respective ATOs.

In the event that an ATO partner were to withdraw from an arrangement, or that the university were to decide to terminate an agreement, or that the ATO were unable to continue to deliver the relevant elements of the pilot training degree, the university would arrange for the transfer of the students affected to another of its partner organisations (Indicator 9 Quality Code Chapter B10: Managing Higher Education Provision with Others – Dec, 2012). Where a student wishes to withdraw from a particular ATO, the university will similarly arrange their transfer to an alternative ATO partner in order to enable the student to complete the pilot training element of the degree.

Student Feedback

Students are afforded the opportunity to provide feedback on the programme structure, organisation and content through the completion of feedback forms. Student feedback is collected bi-annually at mid-year and year-end. Consolidated analysis of feedback is incorporated into the Programme Report and the Departmental Report and Action Plan. Additional feedback is collected by student representatives from their respective student body prior to the bi-annual Programme Committees. Issues arising from the student representatives are fed back to the Student Experience Committee. Details of actions undertaken and the resolution of problems as a result of student feedback at Programme Committees are communicated to student representatives for dissemination to their student body. Student feedback and Programme Committee actions form an integral part of the annual Programme Review and Enhancement process.

Student Representatives

A student representative is elected to represent their respective cohort of trainee pilot students. The Course Coordinators maintain regular contact with the representatives of those students who are not located at the university and report any matters of concern to the Head of Academic Department. Student feedback is also collected by the designated officers at the respective ATOs and fed back to the Course Team.

Personal Tutoring

Buckinghamshire New University has the responsibility for ensuring that all students receive both pastoral care and academic tutoring as they progress through the programme. The Head of Department has overall responsibility for ensuring the personal and academic tutoring system adopted provides students with the necessary academic and pastoral care. All students are required to communicate directly with the Module Lecturers in relation to issues they may have concerning the delivery and assessment of the programme. Module Lecturers communicate with the Course Leader regarding any matters in relation to the academic and personal tutoring system.
Personal tutors are assigned to students in Year 1 (L4) and students maintain these academic tutors for the duration of their programmes. In Years 1 and 3 a one-hour timetabled slot is allocated on a weekly basis on student and tutor timetables. This may be used either as a group activity, in which the tutor schedules special sessions for the assistance of students, or may be used for one-to-one consultations between tutor and student which take place at least twice during the academic year. Where tutors are not qualified to assist students with personal problems they will refer them either to the disability unit or to the university counselling service. Students experiencing academic difficulty are referred to the Learning Development Unit for assistance.

The Course Coordinators and/or the Head of Academic Department hold regular meetings with all pilot trainees in relation to a variety of academic, pastoral and employability issues. In Year 2, two visits are made annually either by the Head of Academic Department, or his/her designated representative, to commercial pilot students studying away from the university at ATOs. Where part of the practical training is undertaken abroad, one visit will be made to students whilst undertaking the ATPL theory in the UK and the second visit will be made to students during their period of study abroad. Where the partner ATO is located abroad and both the ATPLH theory and CPLH practical training are undertaken at the ATO, two visits will be made annually to students studying in that location. During each visit meetings are arranged with individual students seeking feedback, assistance or clarification of issues. The aforementioned activities ensure that the necessary oversight is sustained and problems or issues requiring management identified at the outset (Indicator 1 Quality Code Chapter B10: Managing Higher Education Provision with Others – Dec, 2012).

Every student has a Course Mentor at their respective ATO who is the main interface between the student and the Course Management Team. The ATO Manager Pilot Programmes and the Chief Ground School Instructor are generally responsible for overseeing the mentoring system, which provides ongoing support and guidance to students and relates specifically to the training and education programme. ATOs also utilize Customer Service staff at their pilot training centres. These staff members are employed to provide students with support and guidance (in confidence) on any pastoral,

accommodation, welfare and or other non-training-related matters. Effective communication between the ATO and the University is maintained by the Course Coordinators and a designated ATO member to ensure that the tutoring/mentoring system provides a high standard of support as required by students on the programme.

Course Fees
Student fees for the academic elements of the degree are covered by the Student Loan which is available to all EU students. Costs of both the PPLH and ATPLH theory and practical training are set by the individual ATOs (Approved Training Organisations). Costs of the PPLH; ATPLH and CPLH are made available to prospective students at Open Days and in Programme Promotional Materials with the caveat that costs for the following year are only updated by ATOs in January of the year in which students will commence the specific element of the training. ATO partners who deliver the ATPLH elements of the training are invited to the university to meet with students in November of the 1st Year of study to provide them with information in relation to the programmes. Students who are interested in visiting partner ATOs are afforded the opportunity to do so in either January or February of the 1st year of study. Whilst part funding of visits is supported by the university, students will be required to self-fund any shortfall or to self-fund a visit to a 2nd ATO should they wish to participate in such a visit. These visits are arranged by the Year 1 Course Coordinator. Applications to the ATO of choice should normally be made in March of the 1st year of study. Students are also given the opportunity to speak to 3rd year pilot students who have completed elements of their training in order to obtain advice and "feedback" from those who have experienced the various ATOs.

GLOSSARY:
ATO   Approved Training Organisation
ATPLH Air Transport Pilot Licence Theory (Helicopters)
CPLH   Commercial Pilot Licence (Helicopters)
PPLH   Private Pilot Licence (Helicopters)
EASA   European Aviation Safety Agency
CAA   Civil Aviation Authority

APPENDIX: OTHER AWARDS AVAILABLE

The following Exit Awards are available on this programme:
- Certificate of Higher Education (CertHE)
- Diploma of Higher Education (DipHE)
- Bachelor of Science (Ordinary degree)

Exit Award Programme Learning Outcomes

Certificate of Higher Education
On successful completion of a **Certificate of Higher Education (CertHE)**, a graduate will be able to:
- Demonstrate knowledge, understanding and the ability to apply the theoretical knowledge acquired in order to obtain a Private Pilot Licence (Helicopters) (PPLH)
- Demonstrate an in-depth understanding of the importance of human factors and their impact on aviation safety
- Demonstrate knowledge and understanding of the structure, systems of regulation and business models adopted by airline and airport operators
- Demonstrate a sound knowledge of ground service processes and interactions at airports as applied by airline and airport operators
- Demonstrate understanding of the principles of marketing and product development within the airline and airport environment

A **Certificate of Higher Education (CertHE)** will be awarded to a student who has completed the programme learning outcomes specified above. This is measured by achievement of 120 credits at Level 4. The following modules will count towards achievement of this award:
- PL405H Private Pilot Licence (PPLH) Theory

- PL410H Private Pilot Licence (PPL) Practical Training (H)
- AI408Structure of the Air Transport Industry
- AI403 Air Transport – Security & Safety
- AI405 Airport Operations
- AI407 Developments of the Air Transport Sector
- PL401H Human Performance and Limitations
- PL402H Communications
- PL403H Aircraft General Knowledge
- PL404H Air Law

Diploma of Higher Education

On successful completion of a **Diploma of Higher Education (DipHE)**, a graduate will be able to:
- Demonstrate the specialist knowledge and understanding of pilot theory and its application in order to obtain a Commercial Helicopter Pilot Licence (CPLH)
- Explain specialist knowledge of the management and commercial operations of the air transport industry
- Analyse and evaluate an airline operation's economic requirements and performance
- Evaluate and apply leadership and management theory in the context of the aviation industry

A **Diploma of Higher Education (DipHE)** will be awarded to a student who has completed the programme learning outcomes specified above. This is measured by achievement of a combined total of 240 Credits comprising 120 credits at Level 4 **and** 120 Credits at Level 5. All modules at Level 4 and the following modules at Level 5 will count towards achievement of this award:
- PL501H Radio Navigation
- PL502H Principles of Flight: Aeroplanes
- PL503H Operational Procedures
- PL504H Meteorology
- PL505H Instruments
- PL506HGeneral Navigation
- PL507H Aircraft Performance and Planning
- PL510H Aircraft Performance and Planning
- AI507 Airline Crisis and Continuity Management
- AI503 Airline Management
- AI506 Management, Leadership and Change

Ordinary degree

On successful completion of a **Bachelor of Science (Ordinary degree)**, a graduate will be able to:
- Critically evaluate the challenges confronting the aviation industry in the global context and the regulatory framework and strategies deployed to overcome such challenges
- Critically analyse and evaluate the issues and principles of sustainability and social responsibility in the context of aviation

An **Ordinary degree** will be awarded to a student who has completed the programme learning outcomes specified above. This is measured by achievement of a combined total of 300 Credits comprising 120 credits at Level 4, 120 Credits at Level 5, **and** 60 Credits at Level 6. All modules at Levels 4 and 5 and the following modules at Level 6 will count towards achievement of this award:
- AI605 Aviation Finance and Economics
- AI606 Sustainability Management
- AI604 Aviation in the Global Context

NB: because of the structure of the course, the above means that a student can only be considered for an exit award at the end of their second year of study.