Template C4

Kingston University London

Programme Specification

Title of Course: *BSc (Hons) Aviation Operations with Commercial Pilot Training*

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Version number	9
Faculty	Faculty of Engineering, Computing and the Environment
School	School of Engineering
Department	Department of Aerospace and Aircraft Engineering
Delivery Institution	Kingston University

This Programme Specification is designed for prospective students, current students, academic staff and employers. It provides a concise summary of the main features of the programme and the intended learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. More detailed information on the learning outcomes and content of each modules can be found in the course VLE site and in individual Module Descriptors.

SECTION 1: GENERAL INFORMATION

Award(s) and Title(s): ***Up to 10 pathways***	BSc (Hons) Aviation Operations with Commercial Pilot Training
Intermediate Awards(s) and Title(s): ***There are 4 Intermediate awards for each pathway***	Cert HE Aviation Operations with Commercial Pilot Training Dip HE Aviation Operations with Commercial Pilot Training
Course Code ***For each pathway and mode of delivery***	UFAOC1AOC20
UCAS code ***For each pathway***	H464 H465 (with Sandwich Year)

RQF Level for the Final Award:	Level 6 - BSc (Hons) Degree
Awarding Institution:	Kingston University
Teaching Institution:	Kingston University
Location:	Kingston University, Roehampton Vale / Penrhyn Road CampusesHurn Airport, Bournemouth, England
Language of Delivery:	English
Modes of Delivery:	Full-time With Professional Placement
Available as:	Full field
Minimum period of registration:	Full-time - 3 With Professional Placement - 4
Maximum period of registration:	Full-time - 6 With Professional Placement - 8
Entry Requirements:	The 'typical offer' entry qualifications for the programme are: • 96 UCAS tariff points from at least three A-levels or equivalent. Any subjects accepted and General Studies accepted at half points. • 96 UCAS tariff points (grades MMM) from a suite of BTEC National QCF qualifications in an engineering, science or technology subject. • 96 UCAS tariff points from access course with pass required in an engineering, science or technology subject. • Successful completion of a Foundation Degree in Engineering/Science.

	• European Baccalaureate with an average mark of 70% or above. • International Baccalaureate with a score 24 points and a minimum of grade 5 at standard level in Mathematics and English Language. • Welsh Baccalaureate with a grade C or above. However other qualifications, preferably in an Engineering or Science must be combined to achieve a UCAS point score of 96 points. • Scottish Highers with a UCAS point score of 96 points from a maximum of five subjects. • Irish Leaving Certificate with a UCAS points score of 96 points from Higher Level subjects. Plus: GCSE: Candidates are normally required to hold five GCSE subjects grades A*-C (or comparable numeric score under the newly reformed GCSE grading) including Mathematics and English Language and a Science or technology subject. Accelerated entry into year 3 will be considered should you already be in possession of an ATPL and hold a Level 5 Higher Education qualification (HND or foundation degree). Applicants will need to attend an open day and may be required to take an induction test. You may also be required to attend an interview. The option to study Year 3 part-time is only available to continuing students who have progressed through Years 1 and 2. The course is only open to Home and EU students at present. Language proficiency: International English Language Testing System (IELTS) score of Band 6 -7 per subject headings (Reading, Listening, Speaking and Writing) or; Testing of English as a Foreign Language (TOEFL) score of 22 per subject headings (Reading, Listening, Speaking and Writing) or equivalent is required for those for whom English is not their first language. Non-standard entry qualifications are permitted but will be dealt with on a case by case basis.
Programme Accredited by:	Not Accredited
QAA Subject Benchmark Statements:	Engineering
Approved Variants:	There are no approved variations of this course.
Is this Higher or Degree Apprenticeship course?	

For Higher or Degree Apprenticeship proposals only	
Higher or Degree Apprenticeship standard:	n/
Recruitment, Selection and Admission process:	n/a
End Point Assessment Organisation(s):	n/a

SECTION 2: THE COURSE

A. Aims of the Course

The aims of the programme are to:

- Provide all students with a thorough understanding of the principles and practice of aircraft operation and of aviation operations in general so that they are fully prepared for the EASA ATPL theory examinations and a career as a commercial pilot.
- Equip students with the knowledge and practical skills necessary for them to gain graduate employment in the air transport industry.
- Provide students with the opportunity to develop their written and oral communications skills.
- Prepare students to undertake research, further study and continue with lifelong learning by developing their intellectual, problem solving and key (transferable) skills.

Satisfactory completion of the BSc (Hons) Aviation Operations with Commercial Pilot Training gives students an possibility of post graduate study on a suitable Air Transport Management MSc course.

B. Intended Learning Outcomes

The programme provides opportunities for students to develop and demonstrate knowledge and understanding, skills and other attributes in the following areas. The programme outcomes are referenced to the Framework for Higher Education Qualifications in England, Wales and Northern Ireland (2008), and relate to the typical student.

The programme learning outcomes are the high-level learning outcomes that will have been achieved by all students receiving this award. They must align to the levels set out in the 'Sector Recognised Standards in England' (OFS 2022).

Programme Learning Outcomes					
	Knowledge and Understanding On completion of the course students will be able to:		**Intellectual Skills** On completion of the course students will be able to		**Subject Practical Skills** On completion of the course students will be able to
A4	Understand aviation regulations, human factors and safety management systems and meteorology.	B1	Apply acquired knowledge to commercial piloting, including the planning, execution and post flight debriefing.	C5	Effectively and safely applying transferable skills in the management of individuals, with continual analysis and evaluation of outcome, and appropriate modification of intervention.
A3	Demonstrate an awareness of technical and non-technical subjects associated with piloting.	B2	Synthesise information from a number of sources in order to gain a coherent understanding of theory and practice.	C4	Make evaluative judgements on system failure, carry out appropriate immediate corrective action to ensure safe flight and to report the findings accordingly.
A2	Apply the ATPL regulatory compliant knowledge base that is internationally and nationally recognised.	B3	Analyse, evaluate and interpret the evidence underpinning practice and initiate changes in practice appropriately.	C3	Recognise the importance of professional bodies, the professional conduct expected of Commercial Pilots and their obligations to society.
A1	Understand the fundamental theoretical principles that underpin Commercial Piloting.			C2	Use standard tools, complete flight plans and associated pre-flight documentation.
				C1	Undertake skilled competent, safe, reflective practice.
				C6	Contribute effectively to the safety of aircraft within the framework of a professional team and understand and value the contributions of others.

In addition to the programme learning outcomes, the programme of study defined in this programme specification will allow students to develop the following range of Graduate Attributes:

1. Creative Problem Solving
2. Digital Competency
3. Enterprise
4. Questioning Mindset
5. Adaptability
6. Empathy
7. Collaboration
8. Resilience
9. Self-Awareness

C. Outline Programme Structure

Each level is made up of four modules each worth 30 credit points. Typically a student must complete 120 credits at each level. All students will be provided with the University regulations and specific additions that are sometimes required for accreditation by outside bodies (e.g. professional or statutory bodies that confer professional accreditation). Full details of each module will be provided in module descriptors and student module guides.

BSc (Hons) Aviation Operations with Commercial Pilot Training

Level 4							
BSc (Hons) Aviation Operations with Commercial Pilot Training							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Aviation Mathematics	AE4005	15	4	1	None	1	
Aviation Science	AE4006	30	4	1 and 2	none	1	
Introduction to Flight Operations	AE4100	15	4	2	None	1	
Introduction to Human Factor and Aviation Safety	AE4101	30	4	1 and 2	None	1	
Introduction to the Aviation Industry	AE4009	15	4	2	None	1	
Navigate for the Professional Engineer	AE4021	15	4	1	none	1	
Optional Modules							

Progression to Level 5

requires the completion of 120credits in level 4.

Level 5							
BSc (Hons) Aviation Operations with Commercial Pilot Training							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Air Law and Operational Procedures	AE5035	15	5	2	none	2	
Aircraft Systems and Navigation	AE5036	30	5	1 and 2	None	2	
Exploring Engineering Project Management	EG5016	15	5	TB2		2	
Flight Operations and Meteorology	AE5037	30	5	1 and 2	None	2	
Instrumentation, Mass and Balance	AE5038	15	5	2	none	2	
Professional Development for Pilots	AE5040	15	5	1	None	2	
Optional Modules							

Progression to Level 6

This course permits progression from level 5 to level 6 with 90 credits at level 5 or above. The outstanding 30 credits from level 5 can be trailed into level 6 and must be passed before consideration for an award or progression to level 7 (if appropriate).
Students exiting the programme at this point who have successfully completed 120 credits at level 5 or above are eligible for the award of Diploma of Higher Education in Aviation Operations with Commercial Pilot Training.

Level 6							
BSc (Hons) Aviation Operations with Commercial Pilot Training							
Core modules	**Module code**	**Credit Value**	**Level**	**Teaching Block**	**Pre-requisites**	**Full Time**	**Part Time**
Individual Project (Aviation Studies)	AUG25-AEd	30	6	1 and 2	None	3	
Air Transport Economics	AUG25-07003	15	6	TB2		3	
Aircraft Performance	AUG25-AE6x	15	6	1	None	3	
Airline Operations	AUG25-AE6y	30	6	1 and 2	None	3	
Applied Business Management	EG6026	15	6	TB1		3	
Aviation Group Project	AUG25-AE6z	15	6	2	None	3	
Optional Modules							

Level 6 requires the completion of

all modules.

Level 7 information

n/a

D. Principles of Teaching, Learning and Assessment

All teaching on this BSc Degree programme is delivered by Kingston University lecturers and specialist ATO ground school instructors who have between them many years' experience as practicing aviators as well as training. The breadth of material being delivered closely matches the requirements of the UK CAA ATPL theory examinations but its depth is significantly enhanced compared with that of the training on most modular or integrated ATPL courses. This not only ensures that graduates from this course are well prepared for those examinations but also provides the opportunity to learn and practice the transferable skills expected of an HE course.

The majority of the teaching will be classroom based using traditional techniques. The CAA have directed that the maximum class size on any ATPL theory course should be 24 students; the student staff ratio on this course is therefore significantly lower than the faculties traditional 1st & 2nd year engineering courses. Where appropriate, use will be made of simulators or visits to aircraft to reinforce the modules being taught; all of this using technology which the students will become very familiar. Students will have time for continuation flying (at their own expense) during the teaching programme so should have the opportunity to observe/practice some aspects of the course for real.

Module guides set out clear expectations for guided independent learning. Students will be directed to reading and Technology Enhanced Learning (TEL) packages to prepare for individual topics or sessions and also to problem sets or exercises to consolidate and test their learning afterwards. This will be introduced at level 4. The Virtual Learning Environment (VLE) at Kingston will support learning throughout the course through a variety of TEL objects such videos, screencasts, on-line MCQs, discussion boards and interactive teaching packages. It will also deliver teaching material such as lecture notes/presentations, problems sets, and worked examples.

A feature of the learning, teaching and assessment strategy in the School of Engineering and the Environment is that many instructional lectures have been replaced by collaborative, problem solving or enquiry-based learning workshops and tutorials. These require students to prepare for, and participate in, the classroom activities, rather than passively listening to the lecturer. Students are expected to engage with the guided learning to prepare for these teaching sessions and consolidate their learning after the session. These interactive sessions also provide students with opportunities for peer learning, group work and presentation practice. In these sessions the lecturer facilitates learning by supporting students in creating their own knowledge and understanding. Lecturers may also introduce and summarize key concepts with short mini-lectures.

Each of the twelve modules on the course will be assessed by a mixture of coursework and short answer question final examinations. Some of the coursework will take the shape of time limited multiple-choice tests identical in format to the UK CAA ATPL exams and so will act as very useful revision for those. Other elements of coursework will include written essays and presentations, thus giving opportunities to practice and assess students' abilities in the non-subject specific key skills. Verbal communication is given some priority in the

assessment strategy as commercial pilots do need to be able to communicate with confidence, especially in high stress situations. The use of regular question and answer sessions at the start of lectures will be used to assess learning and allow formative feedback to be given.

The UK CAA ATPL exams themselves do not form part of the assessment for the BSc course but practice for them adds to the formative assessment opportunities offered. The fact that all those ATPL exams must be passed within 6 visits to the assessment centre and a total elapsed time of 18 months does impose constraints on the students' ability to retake certain elements of the course; this will be fully explained to students before the need arises.

Active and collaborative learning is also incorporated in traditional lectures which may have question-and-answer sessions, brief student discussions, clicker activities integrated into the lecture. These methods ensure that valuable contact time is focussed on the application and critical analysis of knowledge and the development of key skills such as problem-solving, communication, and group-work.

The high percentage use of active learning sessions in the teaching hours is aimed at improving student engagement, creativity, confidence, and self-reliance. The course endeavours to further secure student engagement by making students feel part of a community and increasing their sense of belonging which is supports to improve retention and progression. This is achieved by providing opportunities to interact with staff and students both socially and academically. In addition, to the active learning sessions and group work, this is achieved through: the PT scheme, field work, industrial visits, extra-curricular seminars, research internships, course representative system, student ambassador work, peer mentoring, PAL civic engagement and outreach opportunities.

E. Support for Students and their Learning

Student support is provided at Kingston University and is available online when students are in second year. This permits students to raise concerns, queries or ask advice which can usually be answered on-site although referral is made to Kingston University Student Support when required.

Student support recognises that the student experience is unique to each student. A key part of our approach to an inclusive curriculum is that we acknowledge and where possible accommodate their individual circumstances. The personal tutor scheme is central to the efforts to provide a personalised learning experience. (See PT section of programme specification) At level 4 and 5 a core set of problems for each engineering module are issued to students. These cover the whole curriculum for a particular level. Students are required to work through these formative assessment problems as they cover the relevant curriculum. This allows students to test their learning and measure their progress. Discussion of progress on these problem sets will be a key part of the personal tutor scheme. Students are required to upload their progress on these activities onto the Learning Log created on the University VLE system. The Learning Log will be available to the relevant personal tutors for further discussion during one-to-one meetings. There will be milestones for students to meet at every level, and it will be one of the personal tutor's roles to monitor the students' progress and give appropriate advice. Where difficulties are encountered PTs will be able to help or direct students to available support including peer mentoring schemes, PAL, Maths aid and on-line resources etc.

Students are supported by:

- A Module Leader for each module
- A Course Leader to help students understand their programme structure and provide academic support
- A Personal Tutor (PT) to provide academic and personal support
- There is a Student Support and Engagement Team to help students with any problem that is affecting their studies.
- A dedicated Undergraduate Course Administrator
- An induction programme and study skills sessions at the start of each academic year
- Academic Success Centre is a one-to-one drop-in Study Skills session for students every weekday. Help is available on a range of academic skills from writing reports, note-taking, to exam revision, referencing, programming and mathematical skills.
- VLE – a versatile on-line interactive intranet and learning environment accessible both on-site and remotely
- Course Representative scheme
- Talent A University Careers and Employability Service
- Comprehensive University support systems including the provision of advice on finance, regulations, legal matters, accommodation, international student support, disability, and equality support.
- The Students' Union
- An Academic Team that seeks to maintain an open door policy in the spirit of supporting students.

Personal Tutor Scheme (PTS) in the School of Engineering and the Environment

The following provides the aims and structure of the Personal Tutor Scheme (PTS) for the School of Engineering and the Environment. It is intended that the PTS be embedded within the provision of the BEng/BSc programme.

Overall Aims

- To build a rapport between staff and students and contribute to personalising students' experience within the School of Engineering
- To support students in the development of their academic skills providing appropriate advice and guidance to students throughout their time at Kingston, while monitoring their progress, helping to identify individual needs and referring students to other University services as appropriate
- To help students to develop the ability to be self-reliant and confident self-reflective learners who use feedback to their best advantage
- To encourage students to reflect on how their learning relates to a wider context and their personal career progression

Allocation of Personal Tutors

- Personal tutors will be allocated during induction week
- Tutors will be allocated on a course basis where appropriate with student numbers being equally divided amongst the staff within the school
- Students will keep the same tutor throughout their course of study
- If they change discipline at the end of TB1 a change of PT is likely to occur to allow comprehensive support through the programme.

There are specific aims and outcomes for each level, as the PTS is progressive and cumulative students will find that they are building on the skills developed in previous levels. Formative assessment will be provided in the form of regular feedback during meetings.

This needs to reference specific modules linked to the PTs and activities expected of students.

F. Ensuring and Enhancing the Quality of the Course

The University has several methods for evaluating and improving the quality and standards of its provision. These include:

- External examiners - Annually
- Boards of study with student representation – Bi-annually
- Annual review and development
- Periodic review undertaken at the subject level
- Student evaluation – Mid and end of module
- Moderation policies – After every summative assessment

G. Employability and work-based learning

This course has a pronounced employability focus in that its principal aim is to present students with the theoretical training required to be a commercial pilot in the worldwide air transport industry. Having passed the UK CAA ATPL theory examinations and all the associated flying, graduates will be fully prepared to start flying with an airline. Some airlines prefer their junior pilots to do elements of the flying in their own training programmes and so graduates are advised to start looking for jobs at the earliest opportunity.

Our approved providers of the ATPL ground school have considerable experience in preparing all their students for employment as commercial pilots. Staff have therefore formed good links with some of the major airlines and are able to assist students in making applications.

Having finished the course not all students go straight into airline employment. Some find jobs as flying instructors and other in-flight operations; this course prepares them equally well for these and similar opportunities. It should be stressed, however, that students should not consider starting this course unless it is their intention to work as a commercial pilot within 5 years of completing the course.

Work-based learning, including sandwich courses and higher or degree apprenticeships

Work placements are actively encouraged – although it is the responsibility of individual students to source and secure such placements. This allows students to reflect upon their own personal experience of working in an applied setting, to focus on aspects of this experience that they can clearly relate to theoretical concepts and to evaluate the relationship between theory and practise.

H. Other sources of information that you may wish to consult

Full details of this programme can be found at www.kingston.ac.uk.

I. Development of Course Learning Outcomes in Modules

This table maps where course learning outcomes are **summatively** assessed across the modules for this course. It provides an aid to academic staff in understanding how individual modules contribute to the course aims, a means to help students monitor their own learning, personal and professional development as the course progresses and a checklist for quality assurance purposes.

Module Code		Level 4						Level 5						Level 6					
		AE4021	AE4005	AE4006	AE4101	AE4100	AE4009	AE5035	AE5037	AE5036	AE5038	AE5040	EG5016	AUG25-	EG6026	AUG25-	AUG25-	AUG25-	AUG25-
Knowledge & Understanding	A4							S	S	S	S					S			S
	A3								S	S	S					S			S
	A2																		S
	A1	S		S	S	S	S	S											
Intellectual Skills	B1							S								S			S
	B2			S			S	S	S	S						S			S
	B3	S			S	S		S	S	S	S					S			S
Practical Skills	C5								S	S	S					S			
	C4							S	S	S	S					S			
	C3							S								S			S
	C2	S																	S
	C1	S		S	S	S	S	S											S
	C6	S			S				S	S	S								S

Students will be provided with formative assessment opportunities throughout the course to practise and develop their proficiency in the range of assessment methods utilised.