

PROGRAMME SPECIFICATION – POSTGRADUATE PROGRAMMES

KEY FACTS

Programme name	Air Safety Management
Award	MSc
School	Mathematics, Computer Science and Engineering
Department or equivalent	Mathematics, Computer Science and Engineering
Programme code	PSASFM
Type of study	Part Time
Total UK credits	180
Total ECTS	90
Partner (partnership programmes only)	
Type of partnership	

PROGRAMME SUMMARY

MSc Air Safety Management is for experienced aviation industry personnel who wish to enhance their career progression in the safety management field.

The objective of safety management is to maintain an acceptable level of safety within the context of increasing air traffic growth, wider commercial competition and greater focus on cost consciousness. Successful safety management involves staff at all levels in aircraft operators, aircraft design and manufacture, airports, air traffic control, ground handling and maintenance and private flying.

The implementation of professional safety management principles in the aviation industry not only helps to reduce incident rates through effective risk management, but also reduces the financial impact of such incidents.

Air safety management is a major challenge, largely because of the rapidly changing regulatory requirements in response to current air safety trends and the forecast of future growth in the aviation industry. There is also the need for businesses to understand the financial implications of improving, or not improving, safety performance. This is just as true for a private owner of a high performance historic aircraft as it is for the captain of a state of the art Boeing 777 or Airbus A380.

As senior aerospace industry executive teams tackle the big strategic issues of the moment, from the global economy through the challenges to growth and ever-fiercer competition, they need to remember that the vital safety management function does not stop at the boardroom door. Safety Management will only succeed in the business if employees at every level understand the corporate goals and work to achieve them. Safety Management principles must permeate the whole industry from the designer to the cockpit and the air traffic control centre.

The MSc in Air Safety Management is a mid-career education for those involved in

the air safety industry. It aims to provide those who are employed in a professional capacity in air safety and wish to move into management so as to enable them to make a greater contribution to their organisation. A key feature of the course is the development of shared values since, for many students, it is the first time in their careers that they will meet and work with other professions within the industry.

Postgraduate Certificate in Air Safety Management and ***Postgraduate Diploma in Air Safety Management*** PG Certificate or PG Diploma may be awarded to students who do not wish to complete the MSc Course but have gained sufficient credit as defined by the Assessment Regulations (see below). This is most usually taken by students who have completed an MSc in the family and wishes to add further to their education.

The PG Certificate in Air Safety Management gives students a background to the worldwide air transport industry. PG Diploma gives students an extended repertoire of skills needed enabling them to move productively and effectively onto the first steps of commercial or safety management.

MSc Air Safety Management For an MSc, students must pass nine modules over one to five years. Students are also required to undertake a project in an air transport related subject as a part of Project module EPM860.

The full MSc in Air Safety Management gives students a thorough background to the worldwide air transport industry providing an opportunity to explore an aspect of Air Transport Management in depth through the literature and empirical evidence and to make related and well founded recommendations.

This MSc course has close links with the MSc Aircraft Maintenance Management Course (PASM) and the MSc in Air Transport Management and many modules are common. Students who have already completed one of the MSc are eligible to further study for the Postgraduate Diploma by completing 120 credits from the taught Programme (Modules already taken may not be taken again or counted towards the second Degree).

Aims

- To educate the professional so that they may take safety responsibility with confidence and with the ability to succeed.
- To provide employers with suitable talent for safety managerial positions.
- To satisfy the requirements of the Royal Aeronautical Society Accreditation and to satisfy the requirements of The Honourable Company of Air Pilots who take an active interest in the quality of graduates produced.

WHAT WILL I BE EXPECTED TO ACHIEVE?

On successful completion of this course, you will be expected to be able to:

Knowledge and understanding:

- Evaluate the safety management processes, regulations and developing trends within all the major components of the aviation industry and their interplay (e.g. interactional organisations, governments, airlines, alliances, airports Regulatory Authorities, suppliers, manufacturers, staff, unions, armed forces etc)

Skills:

- Propose safety management strategies for airline operations using computer simulation tools
- Understand issues of Air Safety, including how to set-up an effective Safety Management System, including the performance of risk assessment
- Produce notes to a professional standard for readers from all background
- Critically appraise regulatory, economic, professional and political information from various sources throughout the air transport industry
- Recognise that the qualities and knowledge of an aviation professional are readily transferable worldwide
- Present information in oral and written form to all levels and backgrounds throughout an international organisation.
- Assess safety as the over-riding objective within the Air Transport Industry
- Formulate solutions to problems within a multi disciplinary and multicultural society
- Value communication as a central requirement for an efficient and safe organisation
- Critically appraise the information during the module

Values and attitudes:

- Value the contribution made by each professional group to Safety.
- Recognise that this is the largest multi-cultural industry in the world and that the Safety performance must transcend national barriers

This course has been developed in accordance with the QAA Subject Benchmark for Generic Master's Level Programmes.

HOW WILL I LEARN?

The course involves a variety of teaching methods including lectures, tutorials, breakout sessions, projects and literature review from web pages. A leading lecturer and a number of specialist lecturers from industry teach each module over an intensive 3-day period. Identical modules run in Dubai, Bahrain and Frankfurt as well as London. During each module, students are required to work in small teams to examine the relevant issues and to present results. Each module has been designed to develop a specific skill in the students.

For every Module, you are given a Module Handbook containing the PowerPoint presentations, relevant papers and other material. There is space for you to annotate your own notes. Each of the substantial module handbooks contains information relevant to that module and you are expected to re-read the material after the module. In all, you will have 9 Module Handbooks and can buy text books as required.

It is a requirement of this Course that you attend, in full, all hours of each taught module unless given specific dispensation by the Course Director. Assessment of the taught modules is undertaken through a combination of the following elements:

1. Coursework "A" evaluates the core knowledge of the student in the module topic.
2. Coursework "B" aims to demonstrate the application of the work of the specific module to their own organisation (or, if this is not possible, another organisation with which they are familiar). The student's critical abilities are developed, in particular to understand why organisation may have strengths and weaknesses and how these can reasonably be improved or strengthened.
3. Examinations, each lasting 90 minutes, are specifically designed to test:
 - The knowledge gained in the module.
 - The ability of the student to distil large quantities of information into succinct but correct format.
 - The ability to produce correct results under time pressure.

This is an eight module plus project course, with students taking three compulsory modules, and the balance (five modules) coming from an elective module list. The course is designed to take advantage of the existing MSc AMM/ATM degrees, both by following their structure, and by using some of their existing modules.

The major dissertation is also undertaken by all students on the MSc Air Safety Management Course. It is assessed by three Examiners reading the report and by holding a Viva. It tests your ability to bring together and understand information from many sources and to respond and defend to intense questioning from senior industry staff. Non-timetabled lecturer / student contact is encouraged during the project and it is normal for students to involve their present or future employer.

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessment and Assessment Criteria

You are assessed by completing a 1,500 to 2,000-word piece of individual coursework for every module you take. Compulsory modules are assessed by the completion of one piece of coursework plus an examination. Elective modules are assessed by two pieces of coursework. All students taking the MSc must also complete an individual project in an appropriate subject, totalling between 10,000 and 15,000 words. This is examined by the written submission and by a Viva for all students.

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge or attitudes that you need to demonstrate in order to complete an assessment successfully, providing a mechanism by which the quality of an assessment can be measured. Grade- Related Criteria are descriptions of the level of skills, knowledge or attributes that you need to demonstrate in order to achieve a certain grade or mark in an assessment, providing a mechanism by which the quality of an assessment can be measured and placed within the overall set of marks. Assessment Criteria and Grade-Related Criteria will be made available to you to support you in completing

assessments. These may be provided in course handbooks, module specifications, on the virtual learning environment or attached to a specific assessment task.

Feedback on assessment

Feedback will be provided in line with our Assessment and Feedback Policy. In particular, you will normally be provided with feedback within three weeks of the submission deadline or assessment date. This would normally include a provisional grade or mark. For end of module examinations or an equivalent significant task (e.g. an end of module project), feedback will normally be provided within four weeks. The timescale for feedback on final year projects or dissertations may be longer. The full policy can be found at:

https://www.city.ac.uk/_data/assets/pdf_file/0008/68921/assessment_and_feedback_policy.pdf

Assessment Regulations

In order to pass your Course, you should complete successfully or be exempted from the relevant modules and assessments and will therefore acquire the required number of credits.

The pass mark for each module is 50%.

If you fail an assessment component or a module, the following will apply:

1. Compensation: where you fail up to a total of 20 credits at first or resit attempt, you may be allowed compensation if:
 - Compensation is permitted for the module involved (see the What will I Study section of the programme specification), and
 - It can be demonstrated that you have satisfied all the Learning Outcomes of the modules in the Programme, and
 - A minimum overall mark of no more than 10% below the module pass mark has been achieved in the module to be compensated, and
 - An aggregate mark of 50% has been achieved overall.

Where you are eligible for compensation at the first attempt, this will be applied in the first instance rather than offering a resit opportunity.

If you receive a compensated pass in a module you will be awarded the credit for that module. The original component marks will be retained in the record of marks and your original module mark will be used for the purpose of your Award calculation.

2. Resit: Where you are not eligible for compensation at the first attempt, you will be offered one resit attempt.

If you are successful in the resit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a resit will be capped at the pass for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the components that you passed at first attempt.

If you do not meet the pass requirements for a module and do not complete your resit by the date specified you will not progress and the Assessment Board will require that you be withdrawn from the Programme.

If you fail to meet the requirements for the Programme, the Assessment Board will consider whether you are eligible for an Exit Award, as per the table below. If you would like to know more about the way in which assessment works at City, please see the full version of the Assessment Regulations at:
http://www.city.ac.uk/_data/assets/word_doc/0003/69249/s19.doc

WHAT AWARD CAN I GET?

Master's Degree:

	HE Level	Credits	Weighting (%)
Taught	7	120	67
Dissertation	7	60	33

Class	% required
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With Distinction	70
With Merit	60
Without classification	50

Postgraduate Diploma:

	HE Level	Credits	Weighting (%)
Taught	7	120	100

Class	% required
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With Distinction	70
With Merit	60
Without classification	50

Postgraduate Certificate:

	HE Level	Credits	Weighting (%)
Taught	7	60	100

Class	% required
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WHAT WILL I STUDY?

Taught

Students must take a total of eight modules and an induction workshop as follows:

Induction Workshop – assessed by coursework only – no credits. Students are required to pass this assessment in order to be admitted on to the programme.

Three 'Compulsory' modules. - Compulsory modules are assessed by examination and Coursework 'A' – 15 credits

Five 'Elective' modules – Elective modules are assessed by coursework A and coursework B – 15 credits.

This structure ensures that each student achieves the required credit, depth and breadth of knowledge and understanding and all the skills but yet provides the student with a flexibility to deepen their knowledge in areas most suitable to their needs.

The course is designed to take advantage of the existing MSc AMM/ATM degrees, both by following their structure, and by using some of their existing modules.

Module Title	SITS Code	Module Credits	Compulsory/ Elective	Can be Compensated?	Level
Induction Workshop	EPM977	0	C	N	7
Airline Operational Regulatory Compliance	EPM825	15	E	N	7
Project	EPM860	60	C	N	7
Airworthiness	EPM897	15	E	N	7
Airline Maintenance	EPM906	15	E	N	7
Airline Operations	EPM820	15	E	N	7
Marketing	EPM821	15	E	N	7
Human Resource Management	EPM822	15	E	N	7
Air Transport Economics	EPM823	15	E	N	7
Financial Accounting	EPM824	15	E	N	7
Crisis Management	EPM828	15	C	N	7
Airline Fleet Planning	EPM829	15	E	N	7
Airline Business	EPM831	15	E	N	7
Safety Management - Tools and Methods	EPM833	15	E	N	7
Active Safety Management	EPM836	15	C	N	7
Psychology in Aviation Management	EPM966	15	E	N	7
Airports & Ground Handling	EPM968	15	E	N	7
Developing a Business Plan	EPM969	15	E	N	7
Air Accident Investigation	EPM970	15	E	N	7
Leadership in Organisations	EPM971	15	E	N	7
Airline Revenue Management and Finance	EPM972	15	E	N	7
Safety Risk Management	EPM973	15	C	N	7
Sustainable Aviation	EPM975	15	E	N	7
Review of Quality, Safety and Aviation Business Functions	EPM976	15	E	N	7
Future Aviation Challenges – from Unmanned to	EPM980	15	E	N	7

Spaceflight Vehicles					
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Dissertation

Module Title	SITS Code	Module Credits	Compulsory/ Elective	Can be Compensated?	Level
Project	EPM860	60	C	N	7

You are not normally required to pass all taught modules before progressing to the dissertation.

TO WHAT KIND OF CAREER MIGHT I GO?

The courses have been very successful in helping graduates with their careers as shown below:-

Graduate Destinations

This is a mainly a vocational Course and as such its success can be judged by the subsequent career progression of students and alumni. A high percentage of the alumni remain in contact, sending information on their career developments. Recent information includes the following:

- A Captain with a major international oil-support helicopter operation was promoted to Flight Safety Officer.
- A member of the UK Civil Aviation Authority Safety Regulation Group who was promoted to Head of Quality and Risk and said “The work I have been doing during my MSc module studies and dissertation has contributed greatly to influencing my selection to this new role.”
- A serving member of the Cypriot National Guard who stated that the MSc played a critical role in his selection to man the new established Airworthiness Office in the Ministry of Defence.
- The Safety Manager of a UK charter airline who gained her position as a result of being awarded the MSc and has since gone on to win an international award for innovation in safety management
- The Flight Safety Officer of a Finnish airline whose MSc project on a new method of implementing airline safety controls has been supported by their national regulator for wide adoption

If you would like more information on the Careers support available at City, please go to: <http://www.city.ac.uk/careers/for-students-and-recent-graduates>.

WHAT STUDY ABROAD OPTIONS ARE AVAILABLE?

All students have the option to take Modules in any of the overseas locations in which they are run

WILL I GET ANY PROFESSIONAL RECOGNITION?

Accrediting Body: Royal Aeronautical Society

Nature of Accreditation

The course has been visited by the Royal Aeronautical Society and they accept the completion of the course as part exemption for corporate membership.

Continuous and detailed review is by the Education Committee of The Honourable Company of Air Pilots (formerly known as GAPAN).

HOW DO I ENTER THE COURSE?

Relevant degree 2:1 or above (normally) or Air Transport Pilots Licence (ATPL) under EASA or FAA regulations or Aircraft Licenced Engineer (ALE) under EASA regulations or Air Traffic Control Licences (normally training and/or Area Licences required). A relevant HND usually at merit level may be accepted as an alternative to the other entry qualifications. In special cases, candidates with employer support of significant work place responsibility, other academic qualifications will be considered. In all cases, it is a normal requirement of entry that students are currently employed in the Aviation industry (e.g. airlines, maintenance organisations, regulators ATC, air forces, airports etc). Exceptions can be made: for example where an applicant with relevant experience has lost his/her licence for medical reasons.

Candidates will first complete an Induction Workshop (EPM977) with entry points 4 times per calendar year. Every candidate must take an entry assessment so that the Course Director can assess their suitability and they can assess whether they will be able to devote enough effort to complete the course. The entry assessment is by attendance of the Induction workshop (EPM977) and completion of one piece of Coursework on a general aviation topic. The marks from this coursework do not count towards the final award but those who pass, will be admitted on to the MSc programme.

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