PROGRAMME SPECIFICATION – POSTGRADUATE PROGRAMMES

KEY FACTS

Programme name	Aircraft Maintenance Management
Award	MSc
School	Science and Technology
Department or equivalent	Engineering
Programme code	PSPAMM
Type of study	Part Time
Total UK credits	180
Total ECTS	90
Partner (partnership programmes only)	
Type of partnership	
HECoS Code	100198

PROGRAMME SUMMARY

MSc Aircraft Maintenance Management is for experienced aviation industry personnel who wish to enhance their career progression in the maintenance management field, by improving their knowledge of the complex disciplines required to enable full understanding of the various technical, operational and financial pressures impacting on flight operations.

This is a mid-career education for those involved in the air transport industry. It aims to provide those employed in a professional capacity in aircraft maintenance and wishing to move into management 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 Aircraft Maintenance Management and ***Postgraduate Diploma in Aircraft Maintenance 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 one topic and wish to add a specialisation.

The PG Certificate in Aircraft Maintenance 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 maintenance management.

MSc in Aircraft Maintenance Management
For an MSc, students must pass eight modules and the Induction Workshop 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 Aircraft Maintenance Management gives students a thorough

background to the worldwide air transport industry providing an opportunity to explore an aspect of Aircraft Maintenance 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 Air Safety Management Course, the MSc in Air Transport Management, the MSc in Airport 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 you may take managerial responsibility with confidence and with the ability to succeed.
- To provide employers with suitable talent for managerial positions in aircraft engineering and related organisations.
- To satisfy the requirements of the Royal Aeronautical Society Approval.

WHAT WILL I BE EXPECTED TO ACHIEVE?

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

Knowledge and understanding:

- Critically evaluate and apply relevant theories within the airline maintenance domain
- Discuss critically the interaction of all the major components of the airline maintenance industry (e.g. organisations, governments, airlines, alliances, manufacturers, staff, unions, regional and national governments)
- Discuss, examine, synthesise and apply conceptual understanding and knowledge of various processes within the airline maintenance domain.

Skills:

- Critically appraise information during the module
- Formulate and test concepts and hypotheses using a range of materials with limited guidance, on defined problems
- Critically appraise regulatory, economic, professional and political information from various sources throughout the airline maintenance industry
- Develop and apply various strategies for an airline maintenance operation
- Propose airline maintenance operation and management strategies using computer simulation tools.
- Assess safety as the over-riding objective within the airline maintenance industry
- Produce reports to a professional standard for readers from a range of backgrounds
- Conduct academic research
- Apply appropriate academic writing to course papers and a dissertation
- Present information in oral and written form to all levels and backgrounds throughout an international organisation
- Work both independently and as a member of a team.

Values and attitudes:

- Formulate solutions to problems within a multi-disciplinary and multicultural society
- Value communication as a central requirement for an efficient and safe organisation
- Critically analyse and demonstrate the need to take account of ethical issues when conducting research within a multi-cultural industry where the performance must transcend national barriers
- Explore how qualities and knowledge of an airport professional are readily transferable worldwide
- Value the contribution made by each professional group.

This course has been developed in accordance with the QAA Subject Benchmark for Generic Masters Level Courses

HOW WILL I LEARN?

The course involves a variety of teaching methods including lectures and tutorials requiring attendance plus breakout sessions. These will involve group work and presentations. Case studies may be handed out for study in the evening and discussion the next day. A leading lecturer and a number of specialist lecturers from the aviation industry teach each module over an intensive 3-day period. During each module, you are required to work in a small team to examine the relevant issues and to present results. Each module has been designed to develop a specific skill. There is a significant amount of independent study within each module for you to read literature related to the module you are studying. The online module page also provides blogs and forums, to interact with the Lecturer and other students.

For every Module, there is a University website with many interactivities, blogs and other communication platforms; you will be given the PowerPoint presentations, relevant papers, reading lists and other material. Each of the substantial module webpages contains information relevant to that module and you are expected to use the material after the module. In all, you will have 8 Module webpages and the Induction webpage. Our library website provides most of the standard textbooks as e-books, our large University library in London provides thousands of books as loaners; some text books you might want to buy for your future career.

It is a required that you attend, in full, all hours of each taught module, unless given specific dispensation by the Course Director.

WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

Assessment of the taught modules is undertaken through a combination of the following elements:

1. Coursework "A" is a 2500 +/- 10% word academic paper on a topic choice related to the module. You will have to research substantially for the writing of this coursework. Some Modules have simulations/models which you have to manage and write about the outcomes you have found.
2. For Elective Modules Only: Coursework "B" aims to demonstrate the application of the work of the specific module to your own organisation (or, if this is not possible, another organisation with which you are familiar). Your critical abilities are developed, in particular to understand why organisation may have strengths and weaknesses and how these can reasonably be improved or strengthened. Typically, the Lecturer will ask for a presentation, video or podcast to present a solution or proposal for the topic.
3. For Compulsory Modules Only: Examinations, for each compulsory module, each lasting 90 minutes, are specifically designed to test:

- The knowledge gained in the module
- Your ability to distil large quantities of information into succinct but correct format
- The ability to produce correct results under time pressure.

This is an - induction workshop, - eight-module and - project course, where you need to take four compulsory modules (the induction workshop is also compulsory) and the balance (four modules) coming from an elective module list. The course is designed to take advantage of the existing MSc Air Safety Management (ASM), Air Transport Management (ATM) and Airport Management (APM) degrees, both by following their structure, and by using some of their existing modules.

The Project/Dissertation is undertaken by all students of the MSc Aircraft Maintenance Management Course and must focus on an Aircraft Maintenance Management topic. This is a substantial piece of writing deriving from academic research that you will undertake. The Dissertation is the result of your independent work, carried out under the guidance of an appointed supervisor. Non-timetabled supervisor / student contact is encouraged during the project and it is normal for you to involve your present or possibly future employer. After a mandatory Project Webinar and a graded 2500 word Project Proposal, the dissertation of 10-15,000 words is assessed by two Examiners through a Viva/Defence. It tests your ability to academically research and write, and to defend your findings to the questioning of the assessors.

<u>Assessment and Assessment Criteria</u>

Assessment Criteria are descriptions, based on the intended learning outcomes, of the skills, knowledge and 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 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 (e.g. Moodle) or attached to a specific assessment task.

Feedback on assessment

Feedback is provided on all coursework to help you improve your marks on later assignments.

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 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 the Course, the student 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 15 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 Course, 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	66.7
Dissertation	7	60	33.3

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

Postgraduate Diploma:

Part	HE Level	Credits	Weighting (%)
Taught	7	120	100

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

Postgraduate Certificate:

Part	HE Level	Credits	Weighting (%)
Taught	7	60	100

Class	% required

WHAT WILL I STUDY?

Taught

You must pass an Induction Workshop, then pass the 4 core modules of 15 credits each and choose 4 electives of 15 credits each to the total required credit of 120 for the taught modules.

The following elective modules run every two years on rotation:

Module	Year running
EPM821 Airline Commercial Management	A
EPM833 Safety Management – Tools and Methods	A
EPM966 Psychology in Aviation	A
EPM970 Aircraft Accident Investigation	A
EPM971 Leadership in Organisations	A
EPM982 Airline Training Management	A
EPM824 Airline Finance	B
EPM972 Revenue Management	B
EPM978 Aviation Law	B
EPM980 Future Aviation Challenges	B
EPM983 Business Aviation	B

All modules not listed above run annually.

All modules listed below have their own specification which you will find in the Course Handbook.

This structure ensures that you achieve the required credit, depth and breadth of knowledge and understanding but provides you with a flexibility to deepen your knowledge in areas most suitable to your needs.

You must have passed 6 of the 8 modules before progressing to the dissertation (i.e. Project Module) with the mandatory Project Workshop/Project Webinar and the Project Proposal. You must attend the Project Workshop/Project Webinar and finish the Project Proposal latest in your fourth year of study. All Modules must be completed latest before the Viva. The Project module accounts for 60 credits to reflect the development of the dissertation topic which must be about an aircraft maintenance related subject.

Module Title	**SITS Code**	**Module Credits**	**Compulsory/ Elective**	**Can be Compensated?**	**Level**
Induction Workshop	EPM977	0	C	N	7

Project	EPM860	60	C	N	7
Airline Operational Regulatory Compliance	EPM825	15	C	Y	7
Airworthiness	EPM897	15	C	Y	7
Airline Maintenance	EPM906	15	C	Y	7
Airline Operations	EPM820	15	C	Y	7
Airline Commercial Management	EPM821	15	E	Y	7
Human Resource Management	EPM822	15	E	Y	7
Air Transport Economics	EPM823	15	E	Y	7
Airline Finance	EPM824	15	E	Y	7
Crisis Management	EPM828	15	E	Y	7
Fleet Planning	EPM829	15	E	Y	7
Active Safety Management	EPM836	15	E	Y	7
Psychology in Aviation Management	EPM966	15	E	Y	7
Airline Strategy and Business Planning	EPM969	15	E	Y	7
Air Accident Investigation	EPM970	15	E	Y	7
Leadership in Organisations	EPM971	15	E	Y	7
Safety Risk Management	EPM973	15	E	Y	7

General Principles of Human Factors	EPM974	15	E	Y	7
Sustainable Aviation	EPM975	15	E	Y	7
Aviation Law	EPM978	15	E	Y	7
Future Aviation Challenges – from Unmanned to Spaceflight Vehicles	EPM980	15	E	Y	7
Airport Strategy Management	EPM981	15	E	Y	7
Airport Business Management	EPM979	15	E	Y	7
Airline Training Management	EPM982	15	E	Y	7
Business Aviation	EPM983	15	E	Y	7

TO WHAT KIND OF CAREER MIGHT I GO ON?

Graduate Destinations

- Licensed Engineer, Emiri Flight Abu Dhabi
- Project Superintendent, Kuwait Airways
- Engineering Manager, Air Canada
- Performance Engineer, Air Botnia, Finland
- Chief Engineer, Flying Wing, Bahrain
- Dept. Head Eng Licensing, CAA, Gatwick
- Engineer, Air Zimbabwe
- Shift Manager, BA, Gatwick
- Quality Engineering Manager, Shannon Aerospace
- De-icing Superintendent, Finnair

- Dept Head, Uganda CAA
- Chief Engineer, United Eagle Airways, Shuangliu, China
- Senior Investigator, Airclaims, LHR
- Superintendent Engineer, Tanzania Airways
- SVP Tech. Ops, GE Commercial Finance Aviation, Asia
- Engineering Manager, Precisionair, Tanzania
- Dept Head of Safety, Tanzania CAA
- Engineering Consultant, Portugal
- Head Engineering Licensing CAA, Gatwick
- Service Engineer Rolls Royce Commercial Engines
- Chief Engineer, Cyprus Police Air Wing
- Airbus Manager, Emirates
- Inspector, Tanzanian CAA
- Manager Quality and Standards, CAA
- Engineer, Kenya Airways, Amsterdam
- Engineering Consultant, Nigeria
- Licensed Engineer, Cyprus Airways
- Engineering Manager Cathay Pacific Express , Hong Kong
- Safety Engineer, RAF
- Powerplant Engineer, Thomas Cook Airlines , Manchester
- Engineering Analyst, Boeing, Seattle, USA
- Air Safety Inspector, BA
- Engineering Manager, Netherlands
- Chief Engineer, Brunei Shell

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?

Approving Body: Royal Aeronautical Society

Nature of Accreditation:

Continuous and detailed review is by the Royal Aeronautical Society.

HOW DO I ENTER THE COURSE?

Relevant degree 2:2 or above (normally) or a professional qualification such as Air Transport Pilots Licence (ATPL) or Engineer license or Air Traffic Control Licences. Other academic qualifications will be considered. In all cases, it is a normal requirement of entry that you 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 you have relevant experience but have lost your licence for medical reasons.

You will start the Course with an Induction Workshop (EPM977), available 4 times per calendar year. Every candidate must pass the IW so that the Course Director can assess your suitability and whether you will be able to devote enough effort to complete the course. The assessment is by attendance of the Induction Workshop (EPM977) and completion of one Coursework on a general aviation topic. The marks from this coursework do not count towards the final award.

Recognition of Prior Learning (RPL): Students who have pursued appropriate studies in this or another institution or who possess appropriate qualifications and experience may be exempted from a part of the period of academic study. RPL can be awarded for up to 30 credits in total for a Postgraduate programme. RPL will also exempt students from taking the IW. Decisions concerning RPL are decisions of academic judgement; they depend on an assurance that the previous learning (experiential and/or certificated) is equivalent to the learning that would be gained if students followed the normal programme of study. Please get in touch for further information.

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