PROGRAMME SPECIFICATION

KEY FACTS

<table>
<thead>
<tr>
<th>Programme name</th>
<th>Actuarial Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Award</td>
<td>MSc</td>
</tr>
<tr>
<td>School</td>
<td>Cass Business School</td>
</tr>
<tr>
<td>Department or equivalent</td>
<td>Specialist Masters Programme</td>
</tr>
<tr>
<td>Programme code</td>
<td>PSACMA</td>
</tr>
<tr>
<td>Type of study</td>
<td>Full Time, Part Time</td>
</tr>
<tr>
<td>Total UK credits</td>
<td>185</td>
</tr>
<tr>
<td>Total ECTS</td>
<td>92.5</td>
</tr>
</tbody>
</table>

PROGRAMME SUMMARY

The degree is accredited by the Actuarial Profession and its structure mirrors that of the professional body qualifications.

The programme provides masters level education and also enables you to reach the highest possible level of professional qualification.

The two stages of professional qualification mirrored in the degree are these:

Stage One

This takes place in Terms I and II only and successful completion of Stage One requires achieving at least 125 credits. All students must complete three compulsory modules: SMM041 (15 credits), SMM042 (20 credits) and SMM043 (20 credits) and three elective modules at least two of which must be Specialist Technical modules. Electives should be taken from the following: SMM030, SMM031, SMM033, SMM034, SMM035, SMM036 and SMM037, each consisting of 25 credits. SMM040 (20 credits), SMM062 (20 credits), SMM064 (30 credits), SMM065 (30 credits), SMM066 (30 credits) and SMM068 (30 credits).

Stage Two

Successful completion of Stage Two requires achieving 60 credits. All students should complete the compulsory module SMM548 (10 credits) and either of the following: i) Five Term 3 electives (10 credits each) or ii) Three Term 3 electives (10 credits each) and SMM799 (20 credits) or iii) One Term 3 elective (10 credits) and SMM527 (40 credits).

Successful completion of both Stages One and Two leads to the award of the MSc in Actuarial Management (185 credits).
A compensatory Postgraduate Diploma is awarded for those students that achieve at least 125 credits from any of the Stages 1 and 2 modules, but must include the three compulsory modules SMM041, SMM042 and SMM043. A pass mark of 50% applies to all modules.

An alternative compensatory degree, Graduate Diploma, has the same requirements as the Postgraduate Diploma, but the pass mark is lowered to 40%.

No other compensation is allowed.

Aims

1. To give students the opportunity to study actuarial science, insurance, finance and investment both at a general level and in relation to specific areas of practice. This includes the opportunity of studying material directly relevant to the Core Technical, Core Application and Specialist Technical subjects of the examinations of the Institute and Faculty of Actuaries.

2. To provide suitable preparation for students wishing to proceed with postgraduate study or enter employment in financial services, both in traditional and wider fields.

3. To enable students to develop their own interests in the field of actuarial science either through the completion of a research-based project in a specialised subject of their own choice, or by completion of the required third term elective modules covering both current research topics in Actuarial Science and relevant issues from wider fields including, insurance, finance and management.

Throughout the course, where possible, lecturers will emphasise the many ethical issues that arise in the context of actuarial practice. In so doing you will be encouraged to share your views with your lecturers and with your class mates, where a diversity of opinion is to be expected and encouraged.

WHAT WILL I BE EXPECTED TO ACHIEVE?

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

Knowledge and understanding:

- Demonstrate knowledge and understanding of the main areas of actuarial practice.
- Demonstrate knowledge and understanding of the general commercial environment.
- Demonstrate knowledge and understanding of the use of the actuarial control cycle.
- Demonstrate knowledge and understanding of how to monitor measure and manage risk effectively.
- Demonstrate depth and breadth of understanding and the ability to apply this
understanding in these areas of knowledge.

Skills:

- Use mathematics to solve quantitative problems
- Apply actuarial, statistical and related methods to assess and manage risk.
- Present reasoned arguments in clear concise English.
- Apply the principles of the actuarial control cycle to the main areas of actuarial work
- Communicate effectively with non-specialists in the area.
  Read and understand specialist literature. Develop and present reasoned arguments, both in technical and non-technical language.

Values and attitudes:

- Display the professional integrity, conduct and responsibility required by the actuarial profession.

This programme has been developed in accordance with the QAA Subject Benchmark for Mathematics, Statistics and Operation Research.

HOW WILL I LEARN?

1. An intensive schedule of Lectures
2. Dedicated online material
3. Case Studies, real life exercises and contributions from outside speakers
4. Class discussion, tests and other interactive teaching methods
5. Computer laboratory-based work using latest software
6. Private study of professional and academic literature
7. Training in research management skills
8. Meeting with a supervisor

A range of teaching and learning strategies are used to meet different learning outcomes and to cater for the varied backgrounds of the students. Specific teaching and learning strategies, such as lectures and guided reading, are adopted for students to achieve an understanding of the current level of knowledge in the sphere of actuarial science.

In addition, case studies, real-life exercises and contributions from outside speakers are used to achieve integration between theory and practice. Students work both in small groups to benefit from peer interaction and carry out substantial pieces of individual work. The Business Research Project provides students with the opportunity to acquire research and report-writing skills on an individual basis.
Coursework provides on-going feedback on students' progress. Tests assess knowledge gained. Examinations are used to assess both the knowledge gained at an in-depth level and problem-solving ability.

The methods of teaching, learning and assessment are considered to be appropriate at present, but are reviewed regularly.

The MSc in Actuarial Management is designed and structured to allow for intellectual progression through core modules taught in Terms I and II. Modules taught in Term II normally build on the knowledge and skill acquired in Term I. Term III electives allow for further progression by choosing specialist elective modules or a dissertation/project, where students can apply knowledge and skills acquired earlier in the programme.

A minimum of 10 teaching and learning hours (both contact and non-contact) are required for each credit awarded. The precise weighting of different types of teaching and learning depends on the modules you take and the breakdown is therefore provided within the appropriate module specifications.

Non-contact hours are for self-directed study and account for the minimum amount of time you should spend studying independently, including subject research, reading, working in groups and completing assignments and other homework.

**Overall teaching and learning hours: approx 1850 hours**
**Contact hours: approx 288 hours**

**WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?**

**Assessment and Assessment Criteria**

The assessment methods used on the programme consist of:

1. Closed book examination
2. Class tests and online quizzes
3. Presentations on both an individual and group basis on a range of actuarial topics
4. Writing of mock articles and reports on specialist subjects for both a specialist and non-specialist audience.
5. Writing a project proposal and formal business report on a chosen topic of interest to an actuarial audience
Coursework, examinations and dissertation.

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 programme 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 and will be provided in a variety of ways throughout your course, both formally and informally, in order to support your learning.

You will normally be provided with coursework feedback within three weeks of the submission deadline or assessment date. This would normally include a provisional grade or mark. The timescale for feedback on final projects or dissertations may be longer. Examination grades will be provided once they have been agreed by an Assessment Board.

More details about the feedback you can expect from individual modules and assessments will be provided by your lecturers.

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

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In order to pass your Programme, you should complete successfully or be exempted from the relevant modules and assessments and will therefore acquire the required number of credits. The programme is weighted according to the number of credits awarded for each module. Pass / Fail modules are excluded from this calculation.

The pass mark for each module is 50% and there are no minimum qualifying marks for individual components.

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

Re-Sit: you will normally be offered one re-sit attempt.
If you are successful in the re-sit, you will be awarded the credit for that module. The mark for each assessment component that is subject to a re-sit will be capped at the pass mark for the module. This capped mark will be used in the calculation of the final module mark together with the original marks for the component(s) that you passed at first attempt.

If you do not meet the pass requirements for a module and do not complete your re-sit 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.

To be awarded a Postgraduate Diploma you need to achieve at least 120 credits from modules in terms 1, 2 and 3, which must include:

- SMM041 – Strategic Management and Marketing (15 Credits)
- SMM042 – Actuarial Risk Management (CA1) part 1 (20 credits)
- SMM043 – Actuarial Risk Management (CA1) part 2 (20 credits)

If you also fail to meet the requirements for the Postgraduate Diploma you may be considered for the award of Graduate Diploma. The requirements for the Graduate Diploma are the same as those for the Postgraduate Diploma, with the difference that the module pass mark is 40% rather than 50%.

If you fail to meet the requirements for the programme and are not eligible for the award of a lower qualification, the Assessment Board shall require that you withdraw from the programme.

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:

<table>
<thead>
<tr>
<th>HE Level</th>
<th>Credits</th>
<th>Weighting (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>7</td>
<td>185</td>
</tr>
</tbody>
</table>

Class | % required
--- | ---
With Distinction | 70
With Merit | 65
Without classification | 50

Postgraduate Diploma:

Students must achieve 120 credits, including SMM041, SMM042 and SMM043, with a minimum mark of 50%.

<table>
<thead>
<tr>
<th>HE Level</th>
<th>Credits</th>
<th>Weighting (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>7</td>
<td>120</td>
</tr>
</tbody>
</table>

Class | % required
--- | ---
With Distinction | 70
With Merit | 65
Without classification | 50

Graduate Diploma:

Students must achieve 120 credits, including SMM041, SMM042 and SMM043, with a minimum mark of 40%. Where students have previously achieved the standard for a graduate diploma, they may revert to this award if they subsequently fail to meet the standard for the MSc or Postgraduate Diploma.

<table>
<thead>
<tr>
<th>HE Level</th>
<th>Credits</th>
<th>Weighting (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree</td>
<td>6</td>
<td>120</td>
</tr>
</tbody>
</table>

Class | % required
--- | ---
With Distinction | 70
With Merit | 65
Without classification | 40

WHAT WILL I STUDY?

<table>
<thead>
<tr>
<th>Module Title</th>
<th>SITS Code</th>
<th>Module Credits</th>
<th>Core/ Elective</th>
<th>Can be Compensated?</th>
<th>Level</th>
</tr>
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<tbody>
<tr>
<td>Actuarial Risk Management (CA1) - Part I</td>
<td>SMM042</td>
<td>20</td>
<td>C</td>
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<tr>
<td>Actuarial Risk Management</td>
<td>SMM043</td>
<td>20</td>
<td>C</td>
<td>N</td>
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<tr>
<td>(CA1) - Part II</td>
<td>Course Code</td>
<td>Credit</td>
<td>ECTS</td>
<td>TN</td>
<td>Year</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>-------------</td>
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<td>------</td>
</tr>
<tr>
<td>Strategic Management and Marketing</td>
<td>SMM041</td>
<td>15</td>
<td>C</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Health and Care (ST1)</td>
<td>SMM030</td>
<td>25</td>
<td>E</td>
<td>N</td>
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<tr>
<td>Life Insurance (ST2)</td>
<td>SMM031</td>
<td>25</td>
<td>E</td>
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<tr>
<td>Pensions and Other Benefits (ST4)</td>
<td>SMM033</td>
<td>25</td>
<td>E</td>
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<tr>
<td>Finance and Investment A (ST5)</td>
<td>SMM034</td>
<td>25</td>
<td>E</td>
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<td>Finance and Investment B (ST6)</td>
<td>SMM035</td>
<td>25</td>
<td>E</td>
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<tr>
<td>General Insurance: Reserving and Capital Modelling (ST7)</td>
<td>SMM036</td>
<td>25</td>
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<td>General Insurance: Pricing (ST8)</td>
<td>SMM037</td>
<td>25</td>
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<tr>
<td>Finance and Financial Reporting (Subject CT2)</td>
<td>SMM062</td>
<td>20</td>
<td>E</td>
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<td>Model documentation, analysis and reporting (CA2)</td>
<td>SMM040</td>
<td>20</td>
<td>E</td>
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<tr>
<td>Modelling (Subject CT4)</td>
<td>SMM064</td>
<td>30</td>
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<tr>
<td>Contingencies (Subject CT5)</td>
<td>SMM065</td>
<td>30</td>
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<td>Statistical Methods (Subject CT6)</td>
<td>SMM066</td>
<td>30</td>
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<tr>
<td>Financial Economics (Subject CT8)</td>
<td>SMM068</td>
<td>30</td>
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<td>N</td>
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<tr>
<td>Research Methods for Actuarial Professionals</td>
<td>SMM540</td>
<td>10</td>
<td>C</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Applied Research Project</td>
<td>SMM799</td>
<td>20</td>
<td>E</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Business Research Project</td>
<td>SMM527</td>
<td>40</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Modelling and Data Analysis</td>
<td>SMM069</td>
<td>10</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Enterprise Risk Management</td>
<td>SMM050</td>
<td>10</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Topics in Quantitative Risk Management</td>
<td>SMM070</td>
<td>10</td>
<td>E</td>
<td>N</td>
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<tr>
<td>Alternative Risk Transfer and Risk Securitisation</td>
<td>SMM382</td>
<td>10</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Ethics, Society and the Financial Sector</td>
<td>SMM500</td>
<td>10</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Hedge Funds</td>
<td>SMM121</td>
<td>10</td>
<td>E</td>
<td>N</td>
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<tr>
<td>Mergers &amp; Acquisitions</td>
<td>SMM233</td>
<td>10</td>
<td>E</td>
<td>N</td>
<td>7</td>
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<tr>
<td>Intro to Python</td>
<td>SMM283</td>
<td>10</td>
<td>E</td>
<td>N</td>
<td>7</td>
</tr>
<tr>
<td>Technical Analysis and Trading Systems</td>
<td>SMM529</td>
<td>10</td>
<td>E</td>
<td>N</td>
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</tr>
</tbody>
</table>
During term three you will be able to choose from a range of electives to personalise your experience.

This list of electives is an indication of the range of modules that can be on offer and is subject to change due to circumstances such as: enhancing or updating the quality and content of educational provision; responding to student feedback; academic staffing changes; the number of students in each programme; a lack of student demand for certain modules; or factors beyond the institution’s reasonable control, such as meeting the latest requirements of a commissioning or accrediting body. For these reasons, not all the electives listed will be offered every year. New (additional or replacement) modules may also be added for these reasons.

There may also be pre-requisites for joining a module, and space and timetable availability restrictions may also apply.

The list of electives offered in a given year will be confirmed by February 1st.

TO WHAT KIND OF CAREER MIGHT I GO ON?

There is a continuous demand for capable postgraduate level executives in the actuarial profession. They work in fields such as; Insurance companies (life/non-life), consulting firms, government departments, banks and investment firms, teaching and research.

http://www.cass.city.ac.uk/more-about-cass/careers-services - Careers Service

http://www.cass.city.ac.uk/more-about-cass/alumni-services - Alumni Service

WHAT PLACEMENT OPPORTUNITIES ARE AVAILABLE?

Placements are not part of the programme.

WILL I GET ANY PROFESSIONAL RECOGNITION?

Accrediting Body: Institute and Faculty of Actuaries
Nature of Accreditation

There is a rolling accreditation agreement with the Institute and Faculty of Actuaries. For the MSc/Diploma in Actuarial Management, the agreement began in 2000-01 and is reviewed periodically.

On the basis of performance in the corresponding examination only, students who successfully complete the programme may be eligible for recommendation for exemptions from subjects CA1, CA3, ST1, ST2, ST4, ST5, ST6, ST7 and ST8 (as well as CT2, CT4, CT5, CT6, CT8)

HOW DO I ENTER THE PROGRAMME?

To be accepted on to a Cass MSc degree you will need a good Bachelors degree. This usually means a UK 2.1 or above, or the equivalent from an overseas institution. Some level of previous study in the specific subject area may be required.

Applicants will need to submit two references, one of which must be an academic reference if the candidate does not have previous work experience. Previous work experience is not a requirement of our full time MSc courses.

We require all students who have not previously studied at in English to take an IELTS exam. The IELTS requirement is 7.0 with a minimum of 6.5 in writing.

RPL/RP(E)L Requirements

Applicants with prior exemptions in CA1 part one or CA1 part two, corresponding to compulsory modules on MSc in Actuarial Management, do not have to pass the modules. However the corresponding number of credits needs to be obtained through passing other elective modules.

Version: 6.0
Version date: February 2017
For use from: 2017-18