PROGRAMME DETAILS
Programme Code: F7QM-QFR
Department: Actuarial Maths & Statistics
Main Award: MSC - Master of Science
Full Award Title: Master of Science in Quantitative Financial Risk Management
Level: Postgraduate Taught

LOCATION OF STUDY
Edinburgh Y Scottish Borders N Orkney N
Dubai N Malaysia N Approved Learning Partner N
Independent Distance Learners N Collaborative Learning Partner N Other N

ASSOCIATED AWARDS
Programme Code | Award | Title
---|---|---
F7QC-ZZZ | PGCERT | Postgraduate Certificate in Quantitative Financial Risk Management
F7QD-QFR | PGDIP | Postgraduate Diploma in Quantitative Financial Risk Management
F7QM-QFR | MSC | Master of Science in Quantitative Financial Risk Management

ACCREDITATION
N/A

LEARNING OUTCOMES – SUBJECT MASTERY
Understanding, Knowledge and Cognitive Skills

- Extensive knowledge and critical understanding of many of the principal concepts, techniques and tools of contemporary quantitative risk management
- Expertise in using appropriate techniques and tools in the solution of realistic practical risk management problems
- Development of problem solving skills

Scholarship, Enquiry and Research (Research Informed Learning)

- Extensive, detailed and critical understanding of the core areas and issues in quantitative risk management
- Crucial comprehension of the probabilistic and statistical models that underlie quantitative risk management methods
- Understanding of the financial and economic concepts that have led to the development of quantitative risk management models and methods
- Awareness and understanding of current issues in quantitative risk management

LEARNING OUTCOMES – PERSONAL ABILITIES
Industrial, Commercial and Professional Practice

- Development of critical awareness of current practices within quantitative risk management
- Conceptual understanding of core areas and issues in quantitative risk management and the ability to apply these in a variety of financial mathematics contexts
• Understanding of the role of quantitative risk management within a financial enterprise
• Knowledge of the regulatory environment that has led to the development of quantitative risk management as a discipline

Autonomy, Accountability and Working With Others

• Demonstrate the ability to learn independently
• Development of planning and organisational skills through self-management and time-management
• Ability to negotiate issues arising in working as part of a team

Communication, Numeracy & Information and Communications Technology

• Demonstrate skills in communication, with peers and other colleagues, on general and specialised topics.
• Develop and demonstrate skills in communication in writing and giving presentations
• Develop and demonstrate skills in computer packages and languages in order to present and communicate ideas and to solve problems

APPROACHES TO TEACHING AND LEARNING

The overall approach in the programme is student focussed and is designed to encourage students to take responsibility for their own development and learning. It is offered in a traditional campus-based, cohort model. Some of the courses share classes with final year honours students; all such courses are of MSc level being differentiated from the corresponding undergraduate programmes by assessment.

The courses offer traditional lecture-based material, laboratory based practical's as well as guided reading programmes. All courses have an element of coursework ranging from traditional solution of mathematics problems to discursive type assignments and applications to real-life problems.

Approaches to learning and teaching are continuously reviewed.

EDUCATIONAL AIMS OF THE PROGRAMME

The principal aims of the programme are to:

• provide intensive and high-quality education in a postgraduate context in a wide range of subjects in quantitative risk management, including market and credit risk management and enterprise-wide risk management
• enable students to develop detailed knowledge and critical understanding, and acquire a
range of new skills, in central areas in quantitative risk management

- enable students to communicate and work effectively with peers and academic staff, demonstrating appropriate levels of autonomy, initiative, and responsibility
- provide a challenging period of study which enables students to test themselves against standards requiring intensive work and strong commitment in a demanding postgraduate environment
- enable students to plan and execute a significant research project or investigation in quantitative risk management, demonstrating extensive, detailed and critical understanding of the appropriate area

ASSESSMENT POLICIES

Student assessment is determined by a range of assessment methods.

All courses have a formative assessment component. Some courses have a coursework component, which is formative by nature, to enable students to achieve learning outcomes which cannot be appropriately tested in traditional examinations. Some courses are examined synoptically.

The guided reading course (Special Topics in Quantitative Risk Management) is assessed by a mixture of written essays and, presentation.

Dissertation projects are double-marked. Once these marks have been produced, if they are within an acceptable range of each other (that range has been determined by the Programme Committee for the programme), then both marks are forwarded to the External Examiner for consideration. If the marks difference is outside the range, then both academic markers are asked to agree on a mark. If they state that there is not enough flexibility in their marks to overcome this problem, then both marks are reported to the External Examiner. Final decisions are taken by the Board of Examiners.

PROGRAMME STRUCTURE

Mandatory Courses

<table>
<thead>
<tr>
<th>Edinburgh</th>
<th>SBC</th>
<th>Orkney</th>
<th>Dubai</th>
<th>HWUM</th>
<th>IDL</th>
<th>Coll. Partner</th>
<th>ALP</th>
<th>Other</th>
<th>Stage</th>
<th>Semester</th>
<th>Phase</th>
<th>Course Code</th>
<th>Course Title</th>
<th>SCQF Cr</th>
<th>SCQF Lvl</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C31FM</td>
<td>Financial Markets</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>X</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F71DV</td>
<td>Derivatives Markets and Pricing</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>X</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>F71ER</td>
<td>Enterprise Risk Management</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>X</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>C21FE</td>
<td>Financial Econometrics</td>
<td>7.5</td>
<td>11</td>
</tr>
</tbody>
</table>

Page | 3 of 5
### Credit Risk Modelling
- Course Code: F71CM
- Credits: 15
- Semester: 11

### Enterprise Risk Management II
- Course Code: F71EM
- Credits: 15
- Semester: 11

### Special Topics in Risk Management
- Course Code: F71SR
- Credits: 15
- Semester: 11

### Time Series Analysis
- Course Code: F71TS
- Credits: 7.5
- Semester: 11

### Dissertation
- Course Code: F71QD
- Credits: 60
- Semester: 11

### Optional Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>SCQF Cr</th>
<th>SCQF Lvl</th>
</tr>
</thead>
<tbody>
<tr>
<td>C31CF</td>
<td>Corporate Finance</td>
<td>15</td>
<td>11</td>
</tr>
<tr>
<td>F71SM</td>
<td>Statistical Methods</td>
<td>15</td>
<td>11</td>
</tr>
</tbody>
</table>

### Composition Notes (PG)

8 taught courses at 15 credits or equivalent plus dissertation.
7 mandatory taught courses at 15 credits or equivalent + 1 optional plus dissertation.

- Mandatory Credits: 105
- Optional Credits: 15
- Elective Credits: 0
- Dissertation Credits: 60
- Total: 180

### Awards, Credits and Criteria (PG)

<table>
<thead>
<tr>
<th>Award</th>
<th>Overall Credits</th>
<th>Specific Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters Degree</td>
<td>180</td>
<td>180 SCQF credits including a minimum of 150 credit at Level 11</td>
</tr>
<tr>
<td>Postgraduate Diploma</td>
<td>120</td>
<td>120 SCQF credits including a minimum of 90 credit at Level 11</td>
</tr>
<tr>
<td>Postgraduate Certificate</td>
<td>60</td>
<td>60 SCQF credits including a minimum of 40 credit at Level 11</td>
</tr>
</tbody>
</table>

### Award Requirements

<table>
<thead>
<tr>
<th>Award</th>
<th>Total Course Passes</th>
<th>Overall Mark</th>
<th>Overall Grade</th>
<th>Basis of Overall Mark/Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Master (Distinction)</td>
<td>8+Dissertation</td>
<td>70</td>
<td>A</td>
<td>Credit Weighted Average greater than or equal 70% over 8 courses at grades A-C plus a Dissertation at grade A.</td>
</tr>
<tr>
<td>Master</td>
<td>8+Dissertation</td>
<td>50</td>
<td>C</td>
<td>Credit Weighted Average greater than or equal 50% over 8 courses at grades A-D plus a Dissertation at minimum grade C.</td>
</tr>
<tr>
<td>Diploma (Distinction)</td>
<td>8</td>
<td>70</td>
<td>A</td>
<td>Credit Weighted Average greater than or equal 70% over 8 courses at grades A-C</td>
</tr>
<tr>
<td>Diploma</td>
<td>8</td>
<td>40</td>
<td>D</td>
<td>Credit Weighted Average greater than or equal 40% over 8 courses at grades A-E</td>
</tr>
<tr>
<td>Certificate</td>
<td>4</td>
<td>40</td>
<td>D</td>
<td>Credit Weighted Average greater than or equal 40% over 4 courses at grades A-E</td>
</tr>
</tbody>
</table>
DURATION OF STUDY

<table>
<thead>
<tr>
<th>IN MONTHS</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masters</td>
<td>12</td>
<td>24</td>
</tr>
<tr>
<td>Diploma</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Certificate</td>
<td>6</td>
<td>12</td>
</tr>
</tbody>
</table>

RE-ASSESSMENT (PG)

1. A student who has been awarded a Grade E or F in a course may be re-assessed in that course. A student who has been awarded a Grade D in a course may be re-assessed in that course in order to proceed to or be eligible to receive the award of Masters.
2. A student shall be permitted only one re-assessment opportunity in a maximum of three taught courses. The opportunity for re-assessment in four or more taught courses shall be at the discretion of the Progression Board.
3. Any further re-assessment opportunities in a course will require the approval of the Postgraduate Studies Committee.
4. A student may be permitted, at the discretion of the Progression Board, to be re-assessed in the dissertation, project or other supervised research component of the course of study.

PROGRESSION TO DISSERTATION/PROJECT

In accordance with University Regulations, to progress to Masters level a minimum of Grade C is required