



## Module Specification

Key Information			
Module title	Risk Management and Decision-making		
Level	7	Credit value	15
Lead College	QMUL	Notional study hours and duration of course	150
Module lead author/ Subject matter expert	Dr Leone Leonida		
Module co-author(s)	None		
Notice to students	None		

Rationale for the module
<p>The module takes an applied perspective, concentrating on decision-making in risky environments, which is of paramount importance to the finance industry. Apart from identification of risk sources, the module offers a detailed analysis of tools and processes designed to manage these risks which are used by the financial industry. The latter is highly sought after in the financial industry.</p>

Aims of the module
<p>The module is divided into three main components. The first introduces students to the use of the Value at Risk (VaR) approach in risk management and decision-making. The approach is then used to assess and measure the different forms of risk faced by financial institutions, including market risk, credit risk and operational risk. The module provides a complete discussion of the calculation of VaR, its underlying assumptions and illustrates its use with practical examples drawn from actual case studies. The second component of the module relates to the management of the risk portfolio through the analysis and applications of the ARCH(p) and GARCH(p,q) models. The models will be developed in detail, and applications and examples will be presented. The final component of the module is about decision-making, and the analysis of why firms tend to take biased decisions.</p>

## Topics covered in this module:

1. The Capital Asset Pricing Model;
2. Value at Risk;
3. Volatility, Correlations and Copulas;
4. Regulatory Risk;
5. Market Risk;
6. Credit Risk;
7. Scenario Analysis, Stress Testing and Operational Risk;
8. Liquidity Risk;
9. Model Risk; and,
10. ABSs, CDOs and, the Credit Crunch of 2007.

*The topics covered may be revised to ensure currency and relevance. Students will be advised of any changes in advance of their study.*

## Learning outcomes for the module

### A. Knowledge, Understanding and Cognitive Skills

By the end of this module learners should be able to:

1. Describe and critically assess the processes through which companies make decisions in risky environments
2. Explain how financial instruments can be used to manage portfolio risk
3. Illustrate the following types of risk: credit, market, operational, reputational and regulatory
4. Compare risk databases and their management
5. Reason critically with respect to alternative risk management strategies
6. Assess best strategies according to an available set of information and adapt appropriate strategies once a set of information changes
7. Create the most suitable set of information for the decision-making process
8. Measure the following types of risk: credit, market, operational, reputational and regulatory

### B. Practical, Professional and Key Skills

At the end of this module, learners will have developed:

1. Professional financial tool skills and case study interpretation skills to support decisions
2. The ability to work both independently and in teams to create and manage financial strategies
3. The skills to present highly technical financial material to non-practitioners simply and clearly
4. Utilise real-time data to estimate the different sources of risk
5. Utilise financial tools and case studies to support strategic decisions
6. The ability to synthesise and use information and materials from a variety of different sources to support an argument
7. Research skills into risk management problems and the application of these in business decision-making

## Learning and Teaching Strategy and Methods

In addition to the core principles of the learning & teaching strategy and methods for this programme provided in the Programme Specification, Regulations and programme induction, the learning resources for this module are designed by a team supporting the module author with instructional design, learning technology and project management skills.

All students receive comprehensive learning materials in a variety of e-formats for use with different electronic devices. Online learning activities and formative assessments are a key feature of this framework and are linked to the online materials with a Student Progress Log illustrating the level of progress against learning outcomes and syllabus progress. Students can see their skills development through a 'Skills Portfolio', which evolves through the student's completion of formative and summative assessment.

Students will demonstrate their learning through a variety of activities. Moderated peer group exercises will help students demonstrate achievement of learning objectives from conceptual understanding to critical analysis. Students will demonstrate critical analysis skills through participation in discussions to review business models with which they were familiar and others of which they were unaware. Module tutors and programme Student Relationship Managers will be a useful resource for students looking for support with their online discussion and engagement.

Self-assessment exercises will provide students with the opportunity to gauge their learning against topic and module learning objectives as well as against confidence level in their own understanding. This will allow students to identify which content areas require further work on their part.

Learning materials are divided into topics of 10-12 hours of student effort to support student's time management and motivation for study. The learning content is a mixture of video, text, learning activities and formative assessments, with allocated time for preparation, revision and review relating to each item of summative assessment.

## Assessment strategy, assessment methods

### Pass Mark

The pass mark is 50% for each element of assessment.

*Compensation between elements of assessment is available on this module for marginal fails between 45%-49%.*

### Assessment Elements

#### 1. Coursework (30% weighting)

There is one item of coursework for this module which contributes to the final assessment mark for this module:

Coursework: an essay of 2500 words in length (maximum) (deadline - weeks 9-12)

The coursework is designed to check student progress, extend and reinforce concepts covered and also test individual performance.

#### 2. Examination (70% weighting)

The final piece of assessment will be an unseen written examination of two hours' duration.

## Learning resources

### Learning materials

Learning activities and formative assessments for this module are designed and developed by the Lead Author/Module Leader and incorporate the following:

- Short videos.
- Learning activities (including discussion forum activities)
- Formative assessments (multiple-choice and True/False quizzes, short answer self-assessments and matching exercises)
- Learning content.

### E-resources

All students can access the e-resources of the University of London which include a wide range of finance and economics journals. Students will be directed to journals within each topic of study and given online resources to enhance their information literacy skills as part of the student induction.

### Core text(s)

The learning content will be drawn from two key texts (see below).

Author: J.C. Hull

Title: *Risk Management and Financial Institution*

Publisher: John Wiley and Sons

Year: 2015

Author: S.L. Allen

Title: *Financial Risk Management*

Publisher: John Wiley and Sons

Year: 2013

Author: P. Jorion

Title: *Value at Risk*

Publisher: McGraw-Hill

Year: 2006

### Other references

The following is an illustrative list of the sources that will be referred to in the module:

*The Financial Times*;

*The Economist*;

*The Wall Street Journal*.