1. **Title of the module**

BUSN8022 (CB8022) Quantitative Methods

1. **School or partner institution which will be responsible for management of the module**

Kent Business School

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 7

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Autumn

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

MSc Finance (Financial Markets); MSc Finance (Finance, Investment and Risk)

1. **The intended subject specific learning outcomes.
On successfully completing the module students will be able to:**

8.1 Demonstrate knowledge and understanding of the use of quantitative techniques for application to problems in a finance context.

8.2 Demonstrate an ability to undertake statistical investigation of financial data.

8.3 Identify and select appropriate statistical techniques to apply to issues within a finance context.

8.4 Apply quantitative techniques for solving problems within a finance context.

8.5 Analyse and interpret results derived from statistical models.

8.6 Demonstrate proficiency band competency in numeracy skills.

1. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**

9.1 Analyse compare, discuss, and critically evaluate various statistical methods.

9.2 Plan work, use relevant sources and study independently.

9.3 Work in groups, listen, respond to different points of view and negotiate outcomes. Ability to receive and use criticism and advice.

9.4 Select appropriate formats for presentation of work, which includes the acknowledgement and reference of sources.

9.5 Analyse structured and unstructured problems.

1. **A synopsis of the curriculum**

This module provides a general introduction to the quantitative methods used in financial applications and topics may include:

* Statistical concepts
* Probability distributions
* Statistical inference, estimation and hypothesis testing
* Correlation, spurious correlation and general dependence measures
* Linear regression
* Multiple linear regression
* Logistic regression
* Monte Carlo simulation
* Modelling in Excel
1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

*Required Reading:*

* Brooks, C. (2008) *Introductory Econometrics for Finance*, 2nd edition, Cambridge University Press
* Gujarati, D.N. (2009) *Basic Econometrics*, 5th Edition, McGraw-Hill, New York and London

*Supplementary Reading:*

* Anderson, D.R., Sweeney, D.J., Williams, T.A., Freeman, J. and Shoesmith, E. (2010), *Statistics for Business and Economics* (2nd edition), London: Cengage
* Green, W.H. (2011) *Econometric Analysis* (7th edition), Harlow: Pearson
* Watsham, T. and Parramore, K. (2007), Quantitative Methods in Finance, London: Thomson Learning
1. **Learning and teaching methods**

Total contact hours: 37

Private study hours: 113

Total study hours: 150

1. **Assessment methods**
	1. Main assessment methods

Individual Empirical Report (1500 words) (30%)

Examination, 2 hour (70%).

13.2 Reassessment methods

100% examination

1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *8.5* | *8.6* | *9.1* | *9.2* | *9.3* | *9.4* | *9.5* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |  |  |
| ***Private Study*** | x | x | x | x | x | x | x | x | x | x | x |
| ***Lectures*** | x | x | x | x | x | x | x | x | x |  | x |
| ***Seminars/Labs*** | x | x | x | x | x | x | x | x | x | x | x |
| ***Revision session*** | x | x | x | x | x | x | x | x | x |  | x |
| **Assessment method** |  |  |  |  |  |  |  |  |  |  |  |
| ***Exam*** | x | x | x | x | x | x | x | x |  | x | x |
| ***Empirical Report*** | x | x | x | x | x | x | x | x | x | x | x |

1. **Inclusive module design**

The School recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Canterbury

1. **Internationalisation**

Finance is an international language and associated quantitative techniques will reflect this. With regard to the intended learning outcomes, in particular 8.1-8.6, the target learning outcomes within this module are applicable worldwide as part of the universal principles of Finance. With regard to subject content, the material within the syllabus has been developed for use within an international educational setting for students who will apply the theories of Maths in a wide range of international contexts. The reading list also has references to international research. Our international teaching team is also diverse and international. Our support for students in KBS is also internationally attuned, given our international student body.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
| 22/11/2017 | Minor | September 2018 | 8, 12, 14 | 22/11/2017 |
|  |  |  |  |  |

Revised FSO Jan 2018