1. **Title of the module**

BUSN9103 (CB9103) Business Analytics

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)**

Spring

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

None

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

MSc Management

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

8.1 Demonstrate an advanced and comprehensive knowledge and understanding of core concepts and analytical frameworks in business analytics.

8.2 Critically apply IT to solve complex business and management problems.

8.3 Critically apply relevant knowledge, skills and creativity in modelling and analysing business and management problem using quantitative techniques, such as optimization, project scheduling, network design, decision analysis and statistical models.

8.4 Evaluate arguments or propositions and make judgments that can guide the application of appropriate analytical approaches to complex business/management problems.

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

9.1 Select and critically apply a variety of problem solving techniques, both autonomously and collaboratively.

9.2 Propose solutions to complex business/management problems.

9.3 Effectively communicate information, arguments and analysis in a variety of forms.

9.4 Work effectively as part of a group, and use self-direction, initiative and planning in the context of independent learning and the management of assignments.

1. **A synopsis of the curriculum**

This module aims to provide an understanding of the importance of business and management modelling in practice and hand-on experience to apply current quantitative techniques and tools to a variety of problems encountered in business and management. Special emphasis will be given to the analysis of international case studies related to real-world business and management problems.

Indicative topics are:

* Introduction to Business Analytics
* Descriptive statistics and statistical inference.
* Probability theory and decision making under uncertainty.
* Sensitivity analysis.
* Markov processes.
* The use of statistical models in practice, such as regression, time series analysis and forecasting.
* Optimization and simulation techniques.
* Analysing complex decisions: How to determine optimal strategies in situations involving several decision alternatives.
* The applications of suitable techniques for analysing and solving business/management problems.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Albright, S.C. and Winston, W.L. (2014) Business Analytics: Data Analysis and Decision Making. (5th Ed.), Cincinnati, OH: South-Western College Publishing.

Anderson, D.R. Sweeney, D.J. Williams, T.A. and Martin, K. (2008) An Introduction to Management Science: Quantitative approaches to decision making. (12th Ed.) Cincinnati, OH: South-Western Cengage Learning

Hillier, F.S. and Hillier, M.S. (2013) Introduction to Management Science with Student CD and Risk Solver Platform Access Card: A Modeling and Cases Studies Approach with Spreadsheets. (5th Ed.), Columbus: OH: McGraw-Hill Higher Education.

1. **Learning and teaching methods**

Total contact hours: 37

Private study hours: 113

Total study hours: 150

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

Group Written Report (3000 words) (40%)

Examination, 2 hours (60%)

13.2 Reassessment methods

Like for like

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 | 9.1 | 9.2 | 9.3 | 9.4 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |
| Independent and group study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Lectures | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |
| Seminars | **x** |  | **x** | **x** | **x** | **x** | **x** | **x** |
| Computer workshops |  | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Revision session | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |
| **Assessment method** |  |  |  |  |  |  |  |  |
| Group written report | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Examination | **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**

Medway

1. **Internationalisation**

In the computer lab workshops, students are trained, among other things, to use on-line databases to access international datasets which can be used to analyse the international markets and the international business environment. Students can then perform an international analysis when working on the assessed group written report and assignments from other modules too. Finally, various empirical examples based on international datasets are analysed throughout the term.

**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) |
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Revised FSO Jan 2018