1. **Title of the module**

BUSN9088 (CB9088) Business Analytics

1. **Division 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 (7.5 ECTS)

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

Spring Term

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

N/A

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

Masters of Business Administration

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

8.1 Demonstrate a comprehensive understanding of the current state-of-the-art business analytics’ models and their importance for decision-making within a global context.

8.2 Critically identify the links between the tools and techniques of business analytics and the broader issues of innovation and sustainable organisational performance within a global context.

8.3 Demonstrate a comprehensive understanding of the use of modern scientific management techniques and how real-world systems may be represented and solved quantitatively using computer software such as Excel Solver.

8.4 Recognise and address complex managerial problems that can be modelled and analysed using quantitative techniques such as optimization, project scheduling, simulation, decision analysis and statistical models.

8.5 Demonstrate a practical understanding of Excel model-building and problem solving techniques to solve complex business problems and support ethical and responsible management decisions.

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

9.1. Demonstrate highly developed quantitative, critical and intellectual skills, which enable them to solve complex business problems in a rapidly changing environment.

9.2 Demonstrate an ability to select the most appropriate technique for a particular business/management/industrial problem.

9.3 Independently analyse the outcome of an analytical model and present their findings in a clear and rigorous manner.

9.4 Use creativity and independent thinking in building models to analyse complex situations and support decision making.

1. **A synopsis of the curriculum**

The use of data and analytics has become the corner stone for generating business value, supporting innovation and driving sustainable change in global companies. The aim of this module is to give students an intensive grounding in analytics modelling and hands-on experience in using industry-standard spreadsheet software (Microsoft Excel®) to structure, analyse and solve a variety of problems encountered in business and management.

Topics covered in the module include:

* Descriptive analytics: How to visualise, analyse and interpret data to gain business insights.
* Predictive analytics: Using statistical models, such as regression and forecasting, to make predictions about the future from historical data.
* Prescriptive analytics: How to determine optimal strategies in situations involving several decision alternatives using optimisation and decision analysis techniques.

Students will learn how to build analytics models for a variety of complex business problems, including problems in finance, marketing, human resources, production planning and project management among others.

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

Evans, J. R. (2017). Business Analytics, Global Edition, 2/E. Pearson Education.

Albright S.C. and Winston, W.L. (2020) Business analytics: data analysis and decision making. (7th Ed.) Cengage Learning.

Clemen, R.T. and Reilly, T. (2013) Making Hard Decisions with Decision Tools. (3rd Ed.) Cengage Learning.

Hillier, F.S. and Hillier, M.S. (2014) Introduction to Management Science: A Modelling and Case Studies Approach with Spreadsheets. (5th Ed.) New York: McGraw-Hill.

Winston, W.L. and Albright S.C. (2016) Practical Management Science. (5th Ed.) Duxbury: Thomson Learning.

Winston, W.L. (2019) Microsoft Office Excel 2019: Data Analysis and Business Modelling. O'Reilly Media.

1. **Learning and teaching methods**

Total contact hours: 42

Private study hours: 108

Total study hours: 150

1. **Assessment methods**

13.1 Main assessment method:

VLE Quiz (10%)

Group computer project (40%): Excel Model (15%), Report (1500-2000 words, 15%), Presentation (10%)

Individual computer project (50%): Excel model, Report (1500-2000 words)

13.2 Reassessment methods:

100% individual computer project

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 | 9.1 | 9.2 | 9.3 | 9.4 |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |  |
| Lectures & terminals | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  | **x** |
| Preparation | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Independent Study | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| **Assessment method** |  |  |  |  |  |  |  |  |  |
| VLE quiz | **x** | **x** | **x** | **x** | **x** | **x** | **x** |  |  |
| Group Project | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Individual Computer based Project including a report | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

1. **Inclusive module design**

The Division 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**

Examples of an international nature are incorporated into exercises covered in both lectures and terminals. Formal assessments also involve international examples (e.g., companies in the USA and abroad, international databases etc.). International case studies (e.g., Harvard case studies) are used to introduce business analytics concepts and techniques throughout the module.

**DIVISIONAL 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) |
|  |  |  |  |  |
|  |  |  |  |  |