Module Specification

Foundation of Business Analytics

Version: 2023-24, v3.0, 16 Jan 2023

Contents

Part 1: Information

Module title: Foundation of Business Analytics

Module code: UFCFKM-30-2

Level: Level 5

For implementation from: 2023-24

UWE credit rating: 30

ECTS credit rating: 15

Faculty: Faculty of Environment & Technology

Department: FET Dept of Computer Sci & Creative Tech

Partner institutions: None

Field: Computer Science and Creative Technologies

Module type: Module

Pre-requisites: None

Excluded combinations: None

Co-requisites: None

Continuing professional development: No

Professional, statutory or regulatory body requirements: None

Part 2: Description

Overview: Not applicable

Features: Not applicable

Educational aims: This module aims to introduce students to the major concepts of business analytics (supported by case studies and examples from various industries) and provide them with tools to solve simple business analytics problems. In order to achieve this, one needs to understand the underlying probability theory and

statistics. Thus this module also provides a basic knowledge of statistics and probability. It introduces such concepts as random variables and probability distributions, and it covers the basics of statistical analysis and inference.

Outline syllabus: Indicative Content:

Exploring Data - descriptive statistics, data visualisation

Probability and Modelling Uncertainty

Statistical Inference

Simulation Modelling

Introduction to Data Mining

Part 3: Teaching and learning methods

Teaching and learning methods: The module is delivered through weekly combined lecture and tutorial sessions. Each session will direct the course and introduce the new ideas and skills required. Then tutorial sessions will enable each student to carry out the study and research exercises described in the associated work-sheet under the guidance of a Tutor.

The teaching material will be made available from Blackboard. A course text is also recommended. Scheduled learning includes lectures and tutorials.

Independent learning includes time engaged with essential reading and assignment preparation and completion.

Module Learning outcomes: On successful completion of this module students will achieve the following learning outcomes.

MO1 Demonstrate an understanding of the core concepts of business analytics

MO2 Demonstrate knowledge and understanding of statistical analysis inference models

MO3 Demonstrate knowledge and understanding of the role of probability in modelling uncertainty

MO4 Identify, perform, and draw conclusions from appropriate statistical analyses of data sets using appropriate tools to solve business problems

MO5 Retrieve, evaluate and communicate information from a range of sources to underpin academic research activities

MO6 Develop a business analytics solution following a project brief and project plan

Hours to be allocated: 300

Contact hours:

Independent study/self-guided study = 228 hours

Face-to-face learning = 72 hours

Total = 300

Reading list: The reading list for this module can be accessed at readinglists.uwe.ac.uk via the following link https://uwe.rl.talis.com/modules/ufcfkm-30-2.html

Part 4: Assessment

Assessment strategy: Module assessment will be divided into:

Portfolio of exercises that are both summative and formative, which will be hosted on a online portfolio and personal learning platform (e.g. Pebblepad). These exercises will consist of short descriptions, statistical analysis/calculations, results using appropriate diagrams/graphs and a reflective element. They are designed to test the material covered in the lectures and practical sessions.

Group Project involving the investigation of a problem area and the development of a

potential solution. Groups will be presented with contextual evidence and/or sample datasets as guidance. They will also develop a project proposal as well as a project plan as part of the coursework. The deliverables will consist of documentation for (i) the research into their given topic, (ii) the project proposal and planning, (iii) a report detailing the business analytics techniques used to develop the solution and a presentation to defend their proposed solution during scheduled class time.

The referral coursework will be undertaken on (i) the portfolio of exercises and (ii) a group work exercise with individual elements involving a similar task to that set for the first sit assessment.

Assessment tasks:

Portfolio (First Sit)
Description: Portfolio of exercises
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4

Written Assignment (First Sit)
Description: Group Coursework (max. 3000 words) (with individual element)
Weighting: 50 %
Final assessment: No
Group work: Yes
Learning outcomes tested: MO4, MO5, MO6

Portfolio (Resit)
Description: Portfolio of exercises
Weighting: 50 %
Final assessment: No
Group work: No
Learning outcomes tested: MO1, MO2, MO3, MO4

Written Assignment (Resit)

Description: Group Coursework (max. 3000 words) (with individual element)

Weighting: 50 %

Final assessment: No

Group work: Yes

Learning outcomes tested: MO4, MO5, MO6

Part 5: Contributes towards

This module contributes towards the following programmes of study:

Business Computing [Frenchay] BSc (Hons) 2022-23

Business Computing {Foundation} [Sep][SW][Frenchay][5yrs] BSc (Hons) 2021-22

Business Computing {Foundation} [Feb][FT][GCET][4yrs] BSc (Hons) 2021-22

Business Computing {Foundation} [Oct][FT][GCET][4yrs] BSc (Hons) 2021-22

Business Computing {Foundation} [Sep][FT][Frenchay][4yrs] BSc (Hons) 2021-22