FUNDAMENTALS OF BUSINESS ANALYTICS - 2024/5

Module code: MAN2188

Module Overview

This module provides an overall introduction to Business Analytics explaining methods used for descriptive, predictive, and prescriptive analytics as the main building blocks and phases of a typical business project within management and business contexts. In addition to generic introduction to business analytics phases, there will be more focus on the first two phases (i.e., descriptive and predictive small data analytics). This is mainly related to theories of probability and statistics. The module will also include general business skills needed to run a business analytics project such as how analytics professionals communicate with decision makers by using and interpreting analytic models.

Module provider

Surrey Business School

Module Leader

IOANNOU Athina (SBS)

Number of Credits: 15

ECTS Credits: 7.5

Framework: FHEQ Level 5

Module cap (Maximum number of students): N/A

Overall student workload

Independent Learning Hours: 85

Lecture Hours: 22

Laboratory Hours: 11

Guided Learning: 10

Captured Content: 22

Module Availability

Semester 1

Prerequisites / Co-requisites

N/A

Module content

The module will cover topics such as:

- Introduction to the module
- The Business Analytics lifecycle
- Descriptive Statistics
- Visualisation
- Probability Theory
- Descriptive Data Mining
- Inferential Statistics
- Regression Theories
- Regression Models
- Review of the module

Assessment pattern

Assessment type	Unit of assessment	Weighting
Coursework	Coursework	100

Alternative Assessment

N/A

Assessment Strategy

The assessment strategy is designed to provide students with the opportunity to demonstrate:

- Understanding of the basic concepts of Business Analytics.
- Interpretation and synthesis data for decision making.
- Ability to present data to decision makers in an understandable way.
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Thus, the summative assessment for this module consists of:

- Coursework

A final written report of applying statistical analyses on a dataset using computer package

Formative assessment & Feedback

Students will be given the opportunity to apply the theory taught in the lectures and practice them in the labs as well as receive feedback. Every week, a set of exercises will be provided to students.

Students will have the opportunity to practice these exercises in the weekly computer labs. Also, the solutions to the exercises will be provided to students.

During the weekly labs, students will receive feedback on their attempts on the exercises in-class.

Formative assessment and feedback is accomplished by a Feedback section in Surreylearn, as well as with individualized written comments, and general feedback in class.

Module aims

- Introduce key theories and concepts relevant to the field of Business Analytics and how it is applied for decision making.
- Recognise the main stages of a typical business analytics and project how to successfully manage analytics projects.
- Explore the different approaches and methods used for business analytics in terms of processes and types of output produced.

Learning outcomes

		Attributes Developed
001	Demonstrate and apply the basic concepts of Business Analytics and explain their importance within the organisation	KCT
002	Apply statistical and probabilistic data analytics methods on business problems.	CP
003	Interpret and synthesise data to enhance decisions and conclusions.	KCP
004	Present data and analytics results.	KPT

Attributes Developed

C - Cognitive/analytical

K - Subject knowledge

T - Transferable skills

P - Professional/Practical skills

Methods of Teaching / Learning

The learning and teaching strategy is designed to:

Encourage critical understanding of the role played by data analytics for business decision making. Learning will be directed, supported and reinforced through a combination of lectures, computer labs, and online discussion groups, plus directed and self-directed study. The course is research-led and offers a mix of theoretical insights and case study material that will be delivered both online and offline where appropriate.

Indicated Lecture Hours (which may also include seminars, tutorials, workshops and other contact time) are approximate and may include in-class tests where one or more of these are an assessment on the module. In-class tests are scheduled/organised separately to taught content and will be published on to student personal timetables, where they apply to taken modules, as soon as they are finalised by central administration. This will usually be after the initial publication of the teaching timetable for the relevant semester.

Reading list

https://readinglists.surrey.ac.uk
Upon accessing the reading list, please search for the module using the module code: MAN2188

Other information

This module allows students to develop digital capabilities in the context of business management. Business analytics are key for any global cooperation and give insights into global trends and challenges and help us to make better more sustainable decisions.

Programmes this module appears in

Programme	Semester	Classification	Qualifying conditions
Accounting and Finance (Dual degree with SII-DUFE) BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module

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Accounting and Finance BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module
Business Management (Marketing) BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module
Business Management BSc (Hons)	1	Optional	A weighted aggregate of 40% overall and a pass on the pass/fail unit of assessment is required to pass the module
Business Management with Business Analytics BSc (Hons)	1	Compulsory	A weighted aggregate mark of 40% is required to pass the module
Business Management with Entrepreneurship and Innovation BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module
Business Management with Human Resource Management BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module
International Business Management (Dual degree with SII-DUFE) BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module
International Business Management BSc (Hons)	1	Optional	A weighted aggregate mark of 40% is required to pass the module