Module code	BUS750	**Level**	7
Module title	Business Analytics	**Credit value**	10
Programme(s) on which the module is taught	MA Management MA Entrepreneurship	**ECTS Credits**	5
		Notional learning hours	100

1. Pre-requisite modules

None

2. Module aims and objectives

Business analytics has become a crucial strategic tool for organisations of all sizes in identifying market trends and patterns and optimising business processes and decision-making. This module is designed to develop the students business-level understanding of the key technologies involved in managing business information needed for decision-making process. This module will equip students with the ability to interpret, conceptualise and convert data into useful information that improves organisations' performance. This module includes a practical component to develop analytical skills using SAS software, a world leader company in analytics. This software is a graphical interface, menu and wizard-driven tool that empower users to analyse data and publish results. These skills are more vital than ever in large and SMEs organisations and, as such, graduates with an understanding of business analytics are increasingly in-demand in the job market.

3. Learning outcomes

Knowledge and understanding

Upon successful completion of this module:

A1 The student will demonstrate a systematic understanding and knowledge of management and other relevant business disciplines required to be an effective manager.

A2 The student will demonstrate an understanding of current management theoretical and methodological approaches and how these affect the way business management knowledge and thinking are interpreted in managerial practice.

Skills

Upon successful completion of this module:

B2 The student will demonstrate the ability to analyse, distil and solve practical business management problems, in complex situations, through critical evaluation and sound judgement.

C1 Competency in essential practical skills to autonomously adapt performance and capabilities in multiple contexts.
D1 Develop the ability for critical self-evaluation and reflection based on constructive feedback.
D3 Further develop skills associated with working and delivering as part of a team.

4. Indicative content

This module will cover the business analytics evolution, concepts, models and techniques. An overview of data management concepts such databases, big data, structured and unstructured data will be discussed. Students will also learn techniques to understand and visualise data to develop relevant business questions for the context and the data available. SAS software would be used to conduct data exploration and visualisation, further descriptive, prescriptive and predictive task will be introduced to answer business questions. Finally, this module discusses analytical process management such as roles and responsibilities, analytics organisational structure and data-driven decision making culture.

5. Learning and teaching methods

The module will have a main theme or topic each week and this will be delivered through lectures for discussing the topic and seminars/labs to for further discussion and investigation of the given topic. Seminar and labs will be in small groups of students to develop practical and transferable skill through exercises that promote the use of technology as a learning tool and also to emulate business scenarios.

10 credit module – 100 learning hours	
Directed learning	**28 hours**
Lectures	11
Seminars	17
Other	
Collaborative Learning	**5 hours**
Tutorials (1:1 and group)	5
Self-directed learning	**67 hours**
Preparation for class	20
Self-study after class	20
Preparation for assessments	15
Assessment	12
Total	100

6. Assessment and relative weightings

Group Case Study Report – 100% of the Total Module Mark

Rationale for Assignment
Students will be required to develop and submit a case study report that will be focused on the practical application of business analytics concepts from lectures, lab sessions and case studies. Students will undertake individual formative assessments during the lab sessions to consolidate learning of analytical tools that would enable them to contribute to the summative assessment. Additionally, a formative group presentation will be conducted to discuss individual contributions and provide feedback in week 7.
The summative assessment will allow the student to develop analytical skills to enable them to be a valuable team member for the group. The report will contain as well individual contribution component and will be submitted in week 11.

7. Mapping of assessment tasks for the module

Assessment tasks	A1	A2	B2	C1	D1	D3
Summative case study report	x	x		x		x
Formative individual lab exercises			x	x		
Formative group presentation			x		x	x

8. Key reading

Core Textbook

SHARDA, R., DELEN, D. & TURBAN, E. (2018) Business Intelligence, Analytics, and Data Science: A Managerial Perspective, 4TH Ed., Pearson.

Supplementary references

FAWCETT, T. & PROVOST, F. (2013) Data Science for Business: What you need to know about data mining and data-analytic thinking. O'Reilly Media, Inc. Sebastopol, CA, USA. CARVER, R. (2014) Practical Data Analysis with JMP. SAS Institute Inc., Cary, NC, USA. TERPENING, W. (2011) Statistical Analysis for Business Using JMP: A student's guide. SAS Institute Inc., Cary, NC, USA.
Journals: Journal of Decision Analytics. MIS Quarterly. Journal of Strategic Information Systems. International Journal of Data Analysis Techniques and Strategies. Business Intelligence Journal. Sloan Management Review

Websites: www.sas.com www.jmp.com www.business2community.com
www.ibm.com/Business_Analytics www.research.ibm.com/journal
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