KAPLAN PROFESSIONAL

Subject Outline

DFSE 205 Foundations of Data Analytics

Section 1 — General information

1.1 Administrative details

Duration	Credit points	Level
One study period (12 weeks)	3	AQF5

1.2 Core or elective subject

This is an elective subject for the Diploma of Financial Services.

1.3 Delivery mode

This subject is delivered online.

1.4 Assumed knowledge

Whilst there are no prerequisites for this subject, Kaplan assumes students have previously acquired knowledge of relevance in accordance with the entry requirements, specifically via a prior qualification and/or equivalent work experience.

1.5 Course transition subject equivalence

Students may not be required to complete this subject if they have transitioned from a SIA/Finsia/Kaplan course and have completed the following subjects:

- there are no equivalences for this subject.

1.6 Work integrated learning

There are no placements, internships or work experience requirements associated with undertaking this subject.

1.7 Other resource requirements

Students do not require access to specialist facilities and/or equipment to undertake this subject.

Section 2 — Academic details

2.1 Subject overview

Advances in technology are impacting all industries in a myriad of ways. Data analytics is used for a range of purposes in financial services organisations, including risk detection and management, improving operational efficiencies, and developing new business models and sources of revenue.

This subject provides an introduction to data analytic concepts and techniques required for business decision making. It explores the data analytics life cycle and the use of quantitative techniques for generating meaningful visualisation of digital data.

Students will discuss ethical considerations and future trends in the development of the field of business analytics.

2.2 Subject learning outcomes

On successful completion of this subject, students should be able to:

1. Examine the principles of data analytics and their relation to business intelligence
2. Discuss the data analytics life cycle and review each stage of the cycle
3. Explain appropriate quantitative techniques for business decision making
4. Explore future trends and ethical concerns in business analytics

2.3 Topic learning outcomes

Topic 1: Introduction to data analytics

On successful completion of this topic, students should be able to:

- describe what data analytics means and its relation to business intelligence
- explain the uses of data analytics and its importance in decision making
- compare data analytics, statistical analysis, and data science
- explore analytics in the workplace including emerging careers and related skills.

Topic 2: Data analytics life cycle: Discovery and data preparation

On successful completion of this topic, students should be able to:

- explain the stages of data analytics life cycle
- describe data discovery and its importance
- identify data collection tools and discuss their applications
- describe how to align business goals with data analytics context
- identify appropriate data sources for data analytics projects
- describe the purpose and importance of data cleaning.

Topic 3: Data analytics life cycle: Modelling and data analysis

On successful completion of this topic, students should be able to:

- describe the characteristics of an effective analytics model and its role in decision-making
- explain the steps in model planning and why they are important
- discuss the uses of statistical information
- interpret results from statistical techniques.

Topic 4: Data analytics life cycle: Meaningful visualisation

On successful completion of this topic, students should be able to:

- describe the importance and key issues of data visualisation
- identify common data visualisation types and explain their use in analytics tasks
- interpret data visualisations to identify key patterns, trends, and insights.

Topic 5: The future of work and business analytics

On successful completion of this topic, students should be able to:

- describe the role that business analytics will perform in Industry 5.0
- identify and describe the role of data ethics and potential challenges for business
- summarise viewpoints of leading consultancies about the future role of analytics.

Topic 6: Data analytics for finance

On successful completion of this topic, students should be able to:

- explain the role and importance of data analytics in finance
- identify and describe key applications of data analytics in finance
- outline common challenges in applying data analytics to financial decisions
- understand the role of data analytics in supporting regulatory compliance in finance
- describe how data analytics is transforming the finance and superannuation industry.

2.4 Assessment schedule

Assessment	Description	Week	Topics	Weighting	Subject learning outcomes assessed
Quiz	The quiz contains twenty (20) multiple-choice questions worth 1 mark each.	4	1 - 2	10%	LO1, LO2
Oral assignment	Case study analysis: Short/long answer questions	8	1 - 4	40%	LO1, LO2
Assignment	Case study analysis: Written report and Excel model – Project financing proposal.	12	1 - 6	50%	LO1, LO2, LO3, LO4

Please refer to our website <www.kaplanprofessional.edu.au> to review student policies relating to your assessment, including the Kaplan *Assessment Policy* and *Academic Integrity and Conduct Policy*.

2.5 Prescribed text

There is no prescribed text for this subject. Refer to the required readings and recommended resources in the 'Learning' tab of this subject room.

2.5 Study plan

Week	Topic	Hours
1	Topic 1: Introduction to data analytics	10
2	Topic 2: Data analytics life cycle: Discovery and data preparation	10
3	Study for the Quiz	10
4	**Quiz (10% Weighting)**	10
5	Topic 3: Data analytics life cycle: Modelling and data analysis	10
6	Topic 4: Data analytics life cycle: Meaningful visualisation	10
7	Work on Oral assignment	15
8	**Oral Assignment (40% Weighting)**	8
9	Topic 5: The future of work and business analytics	10
10	Topic 6: Data analytics for finance	7
11	Work on Assignment	10
12	**Assignment (50% Weighting)**	10
Total hours		**120**

Additional study hours (if required), dependent on knowledge and personal commitments	30 hours
Total study load, including additional study hours	**150 hours**