

BIS320 Unit Outline

Unit Code and Title: BIS320 DATA VISUALISATION

Course(s): Bachelor of Business (Technology Management)

Core Unit: Elective

Credit Points: 10 credit points

Study Period: Year Three

AQF Level 7: One Quadmester

Study Load: Students should expect to spend approximately 130 hours on studying and completing assignments across the study period. This includes time spent attending scheduled weekly classes, Work Integrated Learning (WIL) activities (if any), undertaking private study, and preparing for assessments, and examinations.

Pre-Requisite: There is one prerequisite BIS100 Introduction to Business Information Systems.

Mode(s) of Delivery: This unit will be delivered predominantly face-to-face and online via Learning Management System (Canvas)/Zoom with recordings available for later viewing. Where appropriate, assessments MUST be submitted to Turnitin for authentication checking

Unit Description:

Business organizations today have unprecedented access to massive volumes of data, held both internally and externally. Traditional business systems are often unable to identify and extract the relevant information to support business decision making. This unit aims to provide an introduction to "Business Intelligence" (techniques for integration, analysis and presentation of information) and "Data Mining" (technology for processing large volumes of data to discover useful information) for decision support in business entities.

Prescribed Textbook:

Jeffrey D. Camm, James J. Cochran, Michael J. Fry, Jeffrey W. Ohlmann., 2021. Data Visualisation Exploring and Explaining with Data, 1st Edition, Cengage publishers.

Unit Learning Outcomes (ULOs): On successful completion of this unit, students will be able to:

[ULO1] Explain and demonstrate the significance of business intelligence and data mining in the contemporary context.

[ULO2] Describe the tools and techniques used in business intelligence and data mining and demonstrate how they may be used to support business processes.

[ULO3] Critically evaluate the impact of data mining and business intelligence to support decision making.



[ULO4] Apply and justify data mining and business intelligence tools in a simulated business environment.

[ULO5] Assess and discuss the social and technological issues which enable and constrain the collection and use of large volumes of data.

Assessment Requirements:

Assessment Type	Due	Weighting (% of total marks)
Assessment 1: Discussion Forum – On-Campus and Online	Week 1 to 8	10%
Assessment 2: Individual Data Visualisation Project:	Week 4	15%
The Individual Data Visualisation Project would require the students to sit for one knowledge test in week 3 in terms of preparing them to prepare and submit the project in week 4. This must explain and demonstrate the significance of business intelligence and data mining in the contemporary context, describe the tools and techniques used in business intelligence and data mining and demonstrate how they may be used to support business processes, critically evaluate the impact of data mining and business intelligence to support decision making. Word limit is 1,500.		
Assessment 3: Group Data Visualization Project and Presentation: In this exercise, students are required to apply their knowledge to analyze a scenario and produce a report in the form of a comprehensive document including both a narrative and analysis of material generated using Business Intelligence software. They must create an interactive data visualisation that enables users to discover and communicate data driven stories. Students are required to apply and justify data mining and business intelligence tools in a simulated business environment, assess and discuss the social and technological issues which enable and constrain the collection and use of large volumes of data and Presentation. Groups of three or four must provide a 6000-word written report with an individual reflective summary report of 1500 words from each group member. Variations of plus or minus 10% of word limitation are acceptable.	Week 8	25% (Report 20% plus presentation 5%)
Assessment 4: Final examination (Closed Book). The 3 hours invigilated examination is conducted in the week 10 following the week 9 of study break and exam revision	Week 10	50%

Note: It is your responsibility as a student to regularly check the academic policy documents available on the school website and unit materials available on the Learning Management System (LMS). *Failure to do so could lead to students taking a risk of failing to maintain satisfactory progress in the unit and completing the course on time. *A breach of academic integrity could lead to the imposition of penalties.