ISYS30008 Business Analytics

Credit Points:	12.5
Level:	3 (Undergraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours, comprising of one 2 hour lecture and one 1 hour practical per week Total Time Commitment: 170 hours
Prerequisites:	Achieving at least 75% in a programming competency test OR one of the following:

Subject	Study Period Commencement:	Credit Points:
ISYS10001 Foundations of Information Systems	Semester 2	12.50
COMP10001 Foundations of Computing	Semester 1, Semester 2	12.50
ACCT10003 Accounting Processes and Analysis	Semester 1, Semester 2	12.50
INFO20003 Database Systems	Semester 2	12.50

Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry. It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability
Coordinator:	Dr Sean Maynard
Contact:	Dr Sean Maynard Email: **sean.maynard@unimelb.edu.au (mailto:sean.maynard@unimelb.edu.au)**
Subject Overview:	**Aims** Business analytics involves the use of data to support business decision-making. Topics covered include business decision-making, evidence-based management, data warehouse design and implementation, data sourcing and quality, on-line analytical processing (OLAP), dashboards and data mining, case studies of business analytics practice. This subject is a 3rd year breadth subject in information systems, and forms one of the elective subjects for the Diploma of Informatics. **Indicative Content** This subject introduces the concepts of business analytics, decision making, data warehouse design, data warehouse modelling, data quality, data warehouse implementation - including the ETL process, and data warehouse use in supporting business analytics – including decision

	making tools and OLAP. Readings are provided for all topics that introduce real world cases on business analytics and related areas and include the use of business analytics in organisations.
Learning Outcomes:	**Intended Learning Outcomes (ILOs)** On completion of this subject the student is expected to: 1 Be familiar with business analytics and its relationship to decision-making 2 Understand the main concepts underlying data warehouse design and implementation, data quality and retrieval and analysis of data 3 Be familiar with the use of business analytics in practice
Assessment:	One group based case study in data warehouse design (25%) with two group members of approximately 2000 words due mid-semester, requiring approximately 26-28 hours of work per student. Intended Learning Outcome (ILO) 2 is addressed in the case study. One team based analytical report based on a case study (25%) with 2 team members of approximately 2000 words, requiring approximately 26-28 hours of work per student. ILOs 1 and 3 are addressed in the analytical report. One written 2 hour closed book end of semester (50%). ILOs 1 to 3 are addressed in the examination. The examination is a hurdle and must be passed to pass the subject. Hurdle requirement: To pass the subject, students must obtain: at least 50% of the marks available in the non examination based assessment at least 50% of the marks available in the examination.
Prescribed Texts:	None
Breadth Options:	This subject potentially can be taken as a breadth subject component for the following courses: # **Bachelor of Biomedicine (https://handbook.unimelb.edu.au/view/2016/B-BMED)** # **Bachelor of Commerce (https://handbook.unimelb.edu.au/view/2016/B-COM)** # **Bachelor of Environments (https://handbook.unimelb.edu.au/view/2016/B-ENVS)** # **Bachelor of Music (https://handbook.unimelb.edu.au/view/2016/B-MUS)** # **Bachelor of Science (https://handbook.unimelb.edu.au/view/2016/B-SCI)** # **Bachelor of Engineering (https://handbook.unimelb.edu.au/view/2016/B-ENG)** You should visit **learn more about breadth subjects (http://breadth.unimelb.edu.au/breadth/info/index.html)** and read the breadth requirements for your degree, and should discuss your choice with your student adviser, before deciding on your subjects.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	On completion of this subject, students should have developed the following generic skills: # High level of development: collaborative learning; problem solving; team work; interpretation and analysis; critical thinking # Moderate level of development: oral communication; written communication
Notes:	**Learning and Teaching Methods** The subject will be delivered through a combination of lectures and labs. Students will also complete two assignments which will reinforce the material covered in class. **Indicative Key Learning Resources** All required readings are available via the LMS. **Careers/Industry Links** This subject is relevant to careers in data warehousing, data analysis, data mining, and information management.