## SINF90004 Data Warehousing

| 12.50  |
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| 9 (Graduate/Postgraduate)  |
| This subject is not offered in 2014. Seminars  |
| Contact Hours: 3 hours per week. Total Time Commitment: Three hours of seminar discussion per week. Students should expect to devote 10-12 hours per week to a single semester unit, with up to 9 hours each week preparing for the class and completing assignments and 3 hours each week in class.   |
| None   |
| None   |
| None   |
| None   |
| For the purposes of considering request for Reasonable Adjustments under the Disability<br>Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic<br>requirements for this subject are articulated in the Subject Overview, Learning Outcomes,<br>Assessment and Generic Skills sections of this entry.It is University policy to<br>take all reasonable steps to minimise the impact of disability upon academic study, and<br>reasonable adjustments will be made to enhance a student's participation in the University's<br>programs. Students who feel their disability may impact on meeting the requirements of this<br>subject are encouraged to discuss this matter with a Faculty Student Adviser and Student<br>Equity and Disability Support: <a href="http://services.unimelb.edu.au/disability">http://<br/>services.unimelb.edu.au/disability</a> |
| email: <b>sean.maynard@unimelb.edu.au (mailto:seanbm@unimelb.edu.au)</b>   |
| AIMS   |
| Data warehouses are designed to provide organizations with an integrated set of high quality data to support decision-makers. They should support flexible and multi-dimensional retrieval and analysis of data. Topics covered include data warehousing and decision-making, data warehouse design, data warehouse implementation, data sourcing and data quality, on-line analytical processing (OLAP) and data mining, customer relationship management systems, and case studies of data warehousing practice. This subject is part of the Business Analytics stream within the Master of Information Systems.   |
| INDICATIVE CONTENT   |
| This subject introduces the compelling need for data warehousing, data warehouse architectures, decision making, data warehouse design, data warehouse modelling, data quality, data warehouse implementation - including the ETL process, and data warehouse use in supporting decision making – including decision making tools and OLAP. Readings are provided for all topics that introduce real world cases on data warehousing and related areas and include the use of data warehousing for competitive advantage, success and failure stories in Data Warehousing.   |
| INTENDED LEARNING OUTCOMES (ILO)   |
| Having completed this subjet the student is expected to:   |
| <ol> <li>Be familiar with data warehousing and its relationship to decision-making</li> <li>Understand the main concepts underlying data warehouse design and implementation, data quality and retrieval and analysis of data</li> <li>Be familiar with the role of data warehousing in customer relationship management systems</li> </ol>  |
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| Assessment:        | A data warehouse design case study paper (about 3000 words), completed in groups of 2, due mid-semester (25%). Addresses Intended Learning Outcome (ILO) 2. A written paper (essay) on a data warehousing topic (about 3000 words), completed in groups of 2, due anytime, at the students choosing, from week two to week twelve (25%) (addressing ILOs 1-3, depending on topic area selected) A 2-hour written examination in the examination period (50%) (addressing ILOs 1-3) Hurdle requirement: To pass the subject students must obtain at least: 50% of the marks available for the non-examination based assessment 50% of the marks available for the examination |
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| Prescribed Texts:  | None   |
| Breadth Options:   | This subject is not available as a breadth subject.  |
| Fees Information:  | Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees   |
| Generic Skills:    | On completion of this subject students should have the following skills:   |
|                    | # Students should develop skills in literature search and analysis, critical thinking and<br>independent learning.   |
| Notes:             | LEARNING AND TEACHING METHODS  |
|                    | The subject is delivered in 3 hour classes. Each class will be made up of a combination of lectures, discussions and tutorial type activities. Outside class students will study the various aspects of data warehousing through prescribed readings.  |
|                    | 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. A guest lecturer will present at least one week's worth of materials about data warehousing in industry.  |
| Related Course(s): | Master of Information Systems<br>Master of Information Systems<br>Master of Information Systems<br>Master of Information Technology<br>Master of Information Technology<br>Master of Information Technology<br>Master of Operations Research and Management Science<br>Master of Philosophy - Engineering<br>Master of Science (Information Systems)<br>Ph.D Engineering   |