

# SINF90001 Database Systems & Information Modelling

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
<b>Time Commitment:</b>	Contact Hours: Three contact hours per week, in the following general pattern: One lecture, of approximately 1 hour Immediately followed by one tutorial or lab of approximately 1 hour Immediately followed by one discussion/lecture of approximately 1 hour Total Time Commitment: Not available
<b>Prerequisites:</b>	None.
<b>Corequisites:</b>	None.
<b>Recommended Background Knowledge:</b>	None.
<b>Non Allowed Subjects:</b>	None.
<b>Core Participation Requirements:</b>	For the purposes of considering requests for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements for this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: <a href="http://www.services.unimelb.edu.au/disability/">http://www.services.unimelb.edu.au/disability/</a>
<b>Coordinator:</b>	Mr Steve Goschnick
<b>Contact:</b>	Email: <a href="mailto:stevenbg@unimelb.edu.au">stevenbg@unimelb.edu.au</a>
<b>Subject Overview:</b>	The subject introduces key topics in modern information organization, particularly with regard to structured databases. The well-founded relational theory behind modern structured query language (SQL) engines, has given them as much a place behind the web site of an organization and on the desktop, as they traditionally enjoyed on corporate mainframes. Topics covered include: the managerial view of data, information and knowledge; entity relationship (ER) and extended entity relationship (EER) modelling; normalization and denormalization; database modelling in UML; the SQL language; data integrity; transaction processing and data warehousing. In addition to traditional database applications, alternative technologies such as XML, web services, data mining and organizational memory technologies such as groupware will be briefly surveyed.
<b>Objectives:</b>	-
<b>Assessment:</b>	The first assignment (10%) requires a conceptual database design, due around the fifth week of semester (three conceptual diagrams in ER and CASE notation, and 1000 words in a data dictionary format). The second assignment (15%) requires answers to 24 set questions against a known database with fixed data contents - requiring the formulation of 24 SQL Select commands, which is due around the seventh week of semester (requires 24 SQL commands). The third assignment (25%), like the first, requires a conceptual database design for a real-world project (students are given the Requirements document) done in teams of two students, and is due around the tenth week of semester (requires three conceptual diagrams in ER and CASE notation, and 1000 words in a data dictionary format). A two-hour open book examination (part multiple choice, part ER diagrams in graphical notation) in the examination period (50%). Satisfactory completion of the examination and assignment components is necessary to pass the subject.

<b>Prescribed Texts:</b>	There are no prescribed texts for this subject. An extensive set of subject notes will be available from the University Bookshop.
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	The student will acquire skills in Information Modelling - a generic skill that will serve the student well throughout a career in Information Systems. Scoping within analysis is also a valuable cross-discipline skill honed during this subject.
<b>Links to further information:</b>	<a href="http://www.dis.unimelb.edu.au/current/postgrad/subjects/">http://www.dis.unimelb.edu.au/current/postgrad/subjects/</a>
<b>Related Course(s):</b>	Bachelor of Information Systems (Degree with Honours) Master of Information Systems Master of Information Technology Master of Science (Information Systems)