

COMP90050 Advanced Database Systems

Credit Points:	12.50											
Level:	9 (Graduate/Postgraduate)											
Dates & Locations:	This subject is not offered in 2012.											
Time Commitment:	Contact Hours: 36 hours, made up of 24 one-hour lectures (two per week) and 12 one-hour workshops (one per week) Total Time Commitment: 120 hours.											
Prerequisites:	<p>One of the following:</p> <table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>INFO20001 Informatics 3: Content Management</td> <td>Semester 1</td> <td>12.50</td> </tr> <tr> <td>SINF90001 Database Systems & Information Modelling</td> <td>Semester 1</td> <td>12.50</td> </tr> </tbody> </table> <p>AND</p> <p>Completion of 50 points of third year computing study or equivalent.</p> <p>GRADUATE</p> <p>Admission to Masters degree.</p>			Subject	Study Period Commencement:	Credit Points:	INFO20001 Informatics 3: Content Management	Semester 1	12.50	SINF90001 Database Systems & Information Modelling	Semester 1	12.50
Subject	Study Period Commencement:	Credit Points:										
INFO20001 Informatics 3: Content Management	Semester 1	12.50										
SINF90001 Database Systems & Information Modelling	Semester 1	12.50										
Corequisites:	None											
Recommended Background Knowledge:	None											
Non Allowed Subjects:	<table border="1"> <thead> <tr> <th>Subject</th> <th>Study Period Commencement:</th> <th>Credit Points:</th> </tr> </thead> <tbody> <tr> <td>COMP90010 Web Technologies and Applications</td> <td>Not offered 2012</td> <td>12.50</td> </tr> </tbody> </table> <p>433-421 Web Technologies and Applications 433-461 High Performance Database Systems 433-621 Web Technologies and Applications 433-661 High Performance Database Systems</p>			Subject	Study Period Commencement:	Credit Points:	COMP90010 Web Technologies and Applications	Not offered 2012	12.50			
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COMP90010 Web Technologies and Applications	Not offered 2012	12.50										
Core Participation Requirements:	<p>For the purposes of considering request 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 of 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:http://www.services.unimelb.edu.au/disability/</p>											
Contact:	<p>Associate Professor Tim Baldwin</p> <p>email: tbaldwin@unimelb.edu.au (mailto:tbaldwin@unimelb.edu.au)</p>											
Subject Overview:	<p>Many applications require access to very large amounts of data. These applications often require reliability (data must not be lost even in the presence of hardware failures), and the ability to retrieve and process the data very efficiently.</p> <p>The subject will cover the technologies used in advanced database systems. Topics covered will include: transactions, including concurrency, reliability (the ACID properties) and performance; and indexing of both structured and unstructured data. The subject will also cover additional topics such as: uncertain data; Xquery; the Semantic Web and the Resource Description Framework; dataspace and data provenance; datacentres; and data archiving.</p>											
Objectives:	On completion of this subject students should be able to:											

	<ul style="list-style-type: none"> # Describe the concepts and technologies underpinning new forms of Web data # Explain database transaction and recovery techniques and concepts
Assessment:	Two written assignments, due in approximately weeks 6 and 11, of approximately 1750 words each (20% each) And a 2-hour end-of-semester open-book written examination (60%).
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:	<p>On completion of the subject the student should have the:</p> <ul style="list-style-type: none"> # Ability to undertake problem identification, formulation, and solution # Ability to utilise a systems approach to complex problems and to design and operational performance # Ability to manage information and documentation # Capacity for creativity and innovation # Ability to communicate effectively, with the engineering team and with the community at large
Related Course(s):	Bachelor of Computer Science (Honours) Master of Engineering in Distributed Computing Master of Science (Computer Science) Master of Software Systems Engineering
Related Majors/Minors/Specialisations:	B-ENG Software Engineering stream Master of Engineering (Software)