



UWA 2018/19 Summer School

Relational Database Management Systems (CITS1402)

Welcome

Thank you for your interest in UWA's annual Summer School, an additional teaching period for students and an opportunity for people to pursue an area of interest or up-skill and progress their career to the next level.

This year's UWA Summer School runs from late November 2018 until early February 2019 and includes nearly 60 units.

Our Summer School units cover a range of engaging topics across various disciplines and embed practical application and experiential learning.

I encourage you to visit study.uwa.edu.au/summer, the UWA Summer School website for more information about all units on offer, the enrolment process and available services.

We look forward to welcoming you to the UWA Community this summer.

Professor Graham Brown
(Dean of Coursework Studies (Acting))



THE UNIVERSITY OF
**WESTERN
AUSTRALIA**

**SUM
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SCHOOL**

Your Unit

Unit Name: Relational Database Management Systems (CITS1402)

Location: Perth Campus

Non-assessed Fee: \$1148 (Enjoy the complete educational experience but without the stress of assignments)

Assessed Fee: \$1148 (Enjoy the complete educational experience, including assignments/ exams and receive a final mark. The earned credit can be counted towards a future qualification at UWA)

Dates: 7 January- 1 February 2019

Time: Mondays, Wednesdays, and Fridays, 10am-3pm

Explore data modelling through the theory and practice of database design, and examine critical issues surrounding the design and implementation of query languages such as SQL.

Description:

In this unit, you'll explore data modelling through the theory and practice of database design, implementation and use. Several database models are addressed, with a strong focus on the relational model and its theoretical grounding in sets and relational algebra. The process of problem decomposition into entity-relations, the design of appropriate relational schemas, and their refinement through normalisation underlies the unit. Critical issues surrounding the design of query languages and their implementation are addressed, and information retrieval is practised using a specific query language.

Learning outcomes:

In this unit, you will:

- learn about existing database implementation and how to create refinements and improvements through analysis;
- discover how to take business requirements into account when designing a database;
- learn how to refine the database to improve and ensure correctness and reliability; and
- practise correctly programming structured query language (SQL) queries and reports.

Lecturer:

Dr Jianxin Li

Dr Jianxin Li received his PhD from Swinburne University of Technology in 2009 and is now a Senior Lecturer in the School of Computer Science & Software Engineering at UWA. His research interests include social computing, graph database management system, query processing and optimization, big data processing, and transport data analytics. His social computing research has been granted an Australian Research Council (ARC) Discovery Project in 2016-2018. He is an active researcher in database and data mining communities and has published more than 60 high-quality research papers in top international conferences and journals.

Contact details:

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Summer School Logistics:

- All external applicants will receive a parking permit to allow them to park on-campus, free of charge. See transport.uwa.edu.au for information about parking areas, and check your permit for more details when you receive it.
- All students will receive a PHEME account and access to the online learning system (LMS), online library and course materials.
- Free on-campus WIFI will be available through your PHEME account.
- The UWA Summer School Precinct includes a number of cafes with extended opening hours during Summer School. Visit the Student Guild website for more information. www.uwastudentguild.com
- Summer School students will have access to the Reid Library and all its facilities: computers, charging stations, electrical outlets, printers/copiers, rest areas, group study facilities, private study areas, and of course, the librarians and library staff.
- Lockers and change rooms are available in the Reid Library. Bike racks are located throughout campus. End-of-journey shower facilities are available at the Fitness Centre.
- Information about public transport and cycling to UWA can be found at study.uwa.edu.au/summer
- Further information, including course materials, detailed timetable information, PHEME details, and campus maps, will be provided prior to commencement of the unit.