Modelling Complex Systems (CITS7211)

6 points / Semester 1
Location: UWA (Crawley)

Handbook Description

Topics in this unit include modelling in computer science; the significance of concurrency; what a complex system is; why systems are complex; appropriate mathematical formalisms for modelling; establishing system correctness; correctness property specification; simulation; and managing system complexity.

Prerequisites: Students must be enrolled in honours or a higher degree by coursework in computer science and software engineering.
Corequisites:

Unit Aims

Students gain an understanding of the principles necessary to model complex concurrent systems; create models of such systems using appropriate formalisms; and gain an understanding of the role of such models for the design, analysis and understanding of complex concurrent systems.

Teaching Staff

Unit Co-ordinator: Dr Tim French

Textbook

Contact Hours

lectures: 20 hrs

Assessment

The assessment consists of two projects worth 20% each, and a 60% exam.

Unsatisfactory Progress
Any student who does not demonstrate satisfactory progress in this unit, as defined in the FECKM Policy on Assessment Practices and Procedures, may be refused admission to the final examinations. The final deadline for notification of unsatisfactory progress is the last day of Week 10.

Penalties

The School of Computer Science and Software Engineering has adopted a policy on minimum penalties for late items of assessment. This is the default policy of all units unless indicated otherwise, in writing, by the specific unit coordinator.

This policy shall apply to all items of continuous assessment, whether submitted either physically or electronically. Immediately after the submission deadline for an item of continuous assessment, a penalty of 20 percent will be applied PER DAY or PART THEREOF. The minimum mark possible for late submission is zero. The percentage is based on the item’s total contribution to the unit’s assessment. For example, a project contributing 40% to the unit’s assessment will incur a penalty of 8 marks for each day late until it is submitted or a mark of zero results.

A more detailed description is given in this School’s Policy on Late Submission. The Faculty does have an appeals procedure, the details of which can be found at the Policy for Appeals.

Plagiarism

Plagiarism is broadly defined to be when any portion of the work presented for assessment, can be attributed to another party. The student making the submission should acknowledge what aspects of the presented work is not directly derived by them. For the purposes of plagiarism it is irrelevant that you have been given permission by someone to copy their work and present it as your own.

You are directed to the School of Computer Science and Software Engineering Policy on Plagiarism and the Faculty of Engineering, Computing and Mathematics Policy on Plagiarism.

Academic Conduct Essentials (ACE)

All students who have not previously been enrolled at UWA are required to complete a short compulsory online module called Academic Conduct Essentials (ACE) within the first 10 weeks of semester. ACE introduces students to essential knowledge regarding ethical scholarship, helps prepare them for the expectations of their university career and informs them of correct academic conduct.

The unit can be accessed via WebCT. The final unit quiz must
be completed with a mark of 80% or greater. Students may attempt the quiz as many times as they wish to gain the required pass mark. Completion of the unit will be recorded as an Ungraded Pass (UP) on students’ academic records. Non-completion (NC) within the required timeframe will also be documented on formal academic records. More information on ACE is available at ace.uwa.edu.au

Special Consideration

Applications for consideration, deferral of tests or exams or extensions of time for assignments on medical, personal or other grounds must be lodged with the faculty office no later than three working days after the due date for the assessment in question. This rule will apply to all students, except in exceptional circumstances.

Faculty Marks Adjustment Policy

Final assessment is subject to the Faculty Scaling Policy.

Supplementary Examinations

Supplementary examinations will be awarded in accordance with Faculty Policy on supplementary assessment.

Student Rights

The University's charter of student rights is available at http://www.secretariat.uwa.edu.au/home/policies/charter

Academic misconduct

The University of Western Australia strongly supports teaching and learning that promotes academic literacy and ethical scholarship for all students. As part of this commitment, UWA has recently developed new guidelines relating to Academic Misconduct (including plagiarism). It is also developing a range of resources for students and staff to further strengthen academic literacy and ethical scholarship at UWA. Further details are available on the Teaching and Learning website.