Overview

Computability: formal languages and problems, Turing Machines (TMs), computability, (semi-)decidability, universal TMs, Church-Turing thesis, halting problem, reduction and undecidability proofs, examples; Complexity: run time, space, complexity classes, non-determinism and NP, polynomial reductions and NP completeness, optimisation problems and approximation, randomisation; Languages and Automata: regular expressions and languages, finite automata, determinisation, context-free grammars and languages (CFLs), Chomsky normal form, word problems, pumping lemma, push-down automata, decidability problems for CFLs; Semantics and Correctness: while programs, assertions and program correctness, Hoare logic, loops and loop invariants, relative completeness of Hoare logic (and its role in a proof of Gödel's incompleteness result)
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<th>Faculty of Engineering</th>
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<td><strong>School</strong></td>
<td>School of Computer Science and Engineering</td>
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<td><strong>Study Level</strong></td>
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<td><strong>Offering Terms</strong></td>
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<td><strong>Campus</strong></td>
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<td><strong>Delivery Mode</strong></td>
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Conditions for Enrolment

Prerequisite: COMP9020 and COMP9024
Course Outline

To access course outline, please visit:

COMP4141 Course Outline
Fees

Commonwealth Supported Students $1191
Domestic Students $4470
International Students $5910

DISCLAIMER
Please note that the University reserves the right to vary student fees in line with relevant legislation. This fee information is provided as a guide and more specific information about fees, including fee policy, can be found on the fee website.

For advice about fees for courses with a fee displayed as "Not Applicable", including some Work Experience and UNSW Canberra at ADFA courses, please contact the relevant Faculty.

Where a Commonwealth Supported Students fee is displayed, it does not guarantee such places are available.
Pre-2019 Handbook Editions

Access past handbook editions (2018 and prior)

Pre-2019 Handbook Editions
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Authorised by Deputy Vice-Chancellor (Academic)
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ABN: 57 195 873 179