

SOFT3410: Concurrency for Software Development - Course Information

Unit: SOFT3410: Concurrency for Software Development (6 CP)

Mode: Normal-Day

On Offer: Yes

Level: Senior

Faculty/School: School of Computer Science

Unit Coordinator/s: [A/Prof Scholz, Bernhard](#)

Session options: Semester 2

Campus: Camperdown/Darlington

Pre-Requisites: ([INFO1105](#) OR [INFO1905](#)) OR (([INFO1103](#) OR [INFO1113](#)) AND ([COMP2123](#) OR [COMP2823](#))).

Brief Handbook Description: The manufacturing industry has experienced a radical shift in the way they design computers, with the integration of multiple processors on the same chip. This hardware shift now requires software developers to acquire the skills that will allow them to write efficient concurrent software. Software developers used to wait for manufacturers to increase the clock frequency of their processors to see increases in the performance of their programs, the challenge is now to exploit, in the same program, more and more processing resources rather than faster processing resources. In this unit, you will learn how to tackle the problems underlying this challenge, including developing and testing concurrent programs, synchronizing resources between concurrent threads, overcoming fairness issues and guaranteeing progress, and ensuring scalability in the level of concurrency.

Assumed Knowledge: None.

Department Permissio: **Department permission is required for enrollment in this session.**