



Prescription

This course develops a strong understanding of object-oriented design. Students will study modelling and programming techniques that support the analysis, design and development of large and maintainable programs. Students will work together in groups on an engineering problem and use a variety of best practices (e.g. Design Patterns) and notations (e.g. UML). Students will use specialized tools to apply these techniques in practical work.

Course learning objectives

Students who pass this course will be able to:

1. Competently analyse a software engineering problem and design and implement a solution, using appropriate tools.
2. Apply correctly a range of techniques and notations for designing extensible and reusable software.
3. Apply correctly techniques for ensuring and assessing the quality of software.
4. Work co-operatively in a team to solve a software engineering problem.

Withdrawal from Course

Withdrawal dates and process:

<https://www.victoria.ac.nz/students/study/course-additions-withdrawals>

Lecturers

Thomas Kuehne (Coordinator)

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233 Cotton, Kelburn

Jens Dietrich

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261 Cotton, Kelburn

Teaching Format

The course will be taught using two lectures per week and five fortnightly two-hour labs. The lectures and lab exercises will prepare students for the assignments and the group project.

Student feedback

Student feedback on University courses may be found at: www.cad.vuw.ac.nz/feedback/feedback_display.php

Dates (trimester, teaching & break dates)

- Teaching: 08 July 2019 - 13 October 2019
- Break: 19 August 2019 - 01 September 2019
- Study period: 14 October 2019 - 17 October 2019
- Exam period: 18 October 2019 - 09 November 2019

Class Times and Room Numbers

08 July 2019 - 18 August 2019

- **Tuesday** 13:10 - 14:00 – LT1, Te Toki a Rata, Kelburn
- **Thursday** 13:10 - 14:00 – LT1, Te Toki a Rata, Kelburn
- **Friday** 13:10 - 14:00 – LT1, Te Toki a Rata, Kelburn

02 September 2019 - 13 October 2019

- **Tuesday** 13:10 - 14:00 – LT1, Te Toki a Rata, Kelburn
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- **Friday** 13:10 - 14:00 – LT1, Te Toki a Rata, Kelburn

Other Classes

Five fortnightly two-hour labs.

Set Texts and Recommended Readings

Required

There are no required texts for this offering.

Mandatory Course Requirements

In addition to achieving an overall pass mark of at least 50%, students must:

- achieve at least a **D** grade in the final exam.
- make a reasonable attempt on the group project.

If you believe that exceptional circumstances may prevent you from meeting the mandatory course requirements, contact the Course Coordinator for advice as soon as possible.

Assessment

Assessment Item	Due Date or Test Date	CLO(s)	Percentage
Two Assignments	Week 5, 7	CLO: 1,2,3,4	20%
Five Labs	fortnightly	CLO: 1,2	10%
Group Project	Week 12	CLO: 1,2,3,4	20%
Final Exam	in the exam period	CLO: 2,3	50%

Penalties

You have a total of three "slip days" which you may use for any number of late submissions during the course. There will be no penalty applied as long as the sum of delays does not exceed three days. You do **not** need to apply for the use of slip days; any assignments submitted late, will automatically take away the respective amount of slip days from your slip day balance, provided you have any left. The slip days are intended to cover minor illnesses or other personal reasons for being late. You should only ask for extensions in the case of more significant or longer lasting problems (in which case you may need documentation). Once all slip days have been used, no marks will be awarded for any further late submissions.

Extensions

Individual extensions will only be granted in exceptional personal circumstances, and should be negotiated with the course coordinator before the deadline whenever possible. Documentation (eg, medical certificate) may be required.

Submission & Return

All work is submitted through the ECS submission system, accessible through the course web pages. Marks and comments will be returned through the ECS marking system, also available through the course web pages.

Workload

Although the workload will vary from week to week, you should expect to spend approximately 10–12 hours per week on the course to give a total of 150 hours study time for the course.

Teaching Plan

See: https://ecs.victoria.ac.nz/Courses/SWEN225_2019T2/LectureSchedule

Communication of Additional Information

All online material for this course can be accessed at https://ecs.victoria.ac.nz/Courses/SWEN225_2019T2/

Links to General Course Information

- Academic Integrity and Plagiarism: <https://www.victoria.ac.nz/students/study/exams/integrity-plagiarism>
- Academic Progress: <https://www.victoria.ac.nz/students/study/progress/academic-progress> (including

restrictions and non-engagement)

- Dates and deadlines: <https://www.victoria.ac.nz/students/study/dates>
- Grades: <https://www.victoria.ac.nz/students/study/progress/grades>
- Special passes: Refer to the Assessment Handbook, at <https://www.victoria.ac.nz/documents/policy/staff-policy/assessment-handbook.pdf>
- Statutes and policies, e.g. Student Conduct Statute: <https://www.victoria.ac.nz/about/governance/strategy>
- Student support: <https://www.victoria.ac.nz/students/support>
- Students with disabilities: https://www.victoria.ac.nz/st_services/disability/
- Student Charter: <https://www.victoria.ac.nz/learning-teaching/learning-partnerships/student-charter>
- Terms and Conditions: <https://www.victoria.ac.nz/study/apply-enrol/terms-conditions/student-contract>
- Turnitin: <http://www.cad.vuw.ac.nz/wiki/index.php/Turnitin>
- University structure: <https://www.victoria.ac.nz/about/governance/structure>
- VUWSA: <http://www.vuwsa.org.nz>

Offering CRN: [30043](#)

Points: 15

Prerequisites: SWEN 221;

Restrictions: SWEN 222

Duration: 08 July 2019 - 10 November 2019

Starts: Trimester 2

Campus: Kelburn