

School of Engineering and Computer Science

Te Kura Mātai Pūkaha, Pūrorohiko



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.wgtn.ac.nz/students/study/course-additions-withdrawals>

Lecturers

Thomas Kuehne (Coordinator)

thomas.kuehne@vuw.ac.nz 04 4635443

233 Cotton, Kelburn

Jens Dietrich

jens.dietrich@vuw.ac.nz 04 4639514

261 Cotton, Kelburn

Teaching Format

This course will be offered in-person and online. For students in Wellington, there will be a combination of in-person components (labs and helpdesks) and web/internet based resources. It will also be possible to take the course entirely online for those who cannot attend on campus, with all the components provided in-person also made available online.

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: 13 July 2020 - 18 October 2020
- Break: 17 August 2020 - 30 August 2020
- Exam period: 19 October 2020 - 25 October 2020

Class Times and Room Numbers

13 July 2020 - 16 August 2020

- **Monday** 09:00 - 09:50 – LT205, Hugh Mackenzie, Kelburn
- **Wednesday** 09:00 - 09:50 – LT101, Maclaurin, Kelburn
- **Friday** 09:00 - 09:50 – LT101, Maclaurin, Kelburn

31 August 2020 - 18 October 2020

- **Monday** 09:00 - 09:50 – LT205, Hugh Mackenzie, Kelburn
- **Wednesday** 09:00 - 09:50 – LT101, Maclaurin, Kelburn
- **Friday** 09:00 - 09:50 – LT101, Maclaurin, 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:

- make a reasonable attempt on the group project, to demonstrate achievement of all the CLOs of the course.

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
Five Labs	fortnightly	CLO: 1,2	15%
Assignment 1	Week 5	CLO: 1,2,3,4	20%
Assignment 2	Week 7	CLO: 1,2,3,4	20%
Group Project	Week 13	CLO: 1,2,3,4	45%

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 (e.g., medical certificates) 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.

Group Work

Assignments and the project will be worked on in groups.

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.wgtn.ac.nz/Courses/SWEN225_2020T2/LectureSchedule

Communication of Additional Information

All online material for this course can be accessed at https://ecs.wgtn.ac.nz/Courses/SWEN225_2020T2/

Links to General Course Information

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

Offering CRN: [30043](#)

Points: 15

Prerequisites: SWEN 221;

Restrictions: SWEN 222

Duration: 13 July 2020 - 25 October 2020

Starts: Trimester 2

Campus: Kelburn