

# School of Engineering and Computer Science

Te Kura Mātai Pūkaha, Pūrorohiko



## Prescription

The course addresses a range of software development skills and builds an understanding of technical and software engineering concepts and techniques. Students will work on a variety of industry relevant group projects which address a range of topics in software development and computer science. The course will teach teamwork skills, professional practice skills, and communication skills in the context of software development.

## Course learning objectives

Students who pass this course should be able to:

1. Demonstrate competence in the practical art of software engineering through the design and development of moderately-sized programs.
2. Work cooperatively in a team to produce a moderately-sized software project.
3. Construct effective design documentation and related reports, and communicate a software design in an oral presentation.
4. Evaluate the limitations of different solutions when designing programs, with respect to Design Patterns and Design-by-Contract.
5. Apply knowledge of networks, web systems, databases, and other computer science concepts to software design.

## Course content

Students will study a range of topics and then work on two main projects which address a range of topics in software development and computer science. Topics include Databases, Networking, Cybersecurity, HCI, Mobile Apps, and web applications. Each of these topics will take 1 week, and there will be two projects that cover the material from the proceeding topics.

## Required Academic Background

Acceptable performance in SWEN 501

## Withdrawal from Course

Withdrawal dates and process:

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

## Lecturers

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## Karsten Lundqvist (Coordinator)

karsten.lundqvist@vuw.ac.nz 04 4635233 ext 8018

252 Cotton, Kelburn

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## Ali Ahmed

ali.ahmed@vuw.ac.nz

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## Michael Homer

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130 Cotton, Kelburn

## Teaching Format

The course is taught as a set of seminars and interactive class exercises and labs.

## Student feedback

Student feedback on University courses may be found at:  
[www.cad.vuw.ac.nz/feedback/feedback\\_display.php](http://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

## Set Texts and Recommended Readings

### Required

There are no required texts for this offering.

## Mandatory Course Requirements

There are no mandatory course requirements for this 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
6 programming and development assignments, each worth 10% of your final grade (approximately 1 week each)	TBC	CLO: 1,2,3,4,5	60%
1 Project Report, including code and documentation (approximately 3 weeks)	TBC	CLO: 1,2,3,4,5	20%
1 Group Presentation	TBC	CLO: 2,3,4	10%
1 Professional Seminars Report (3-5 pages)	TBC	CLO: 2,3,4,5	10%

## Penalties

Unless excused, late work will be penalised at 10% per day late, up to 5 days maximum lateness.

## Extensions

Depending on the cause - extensions can be negotiated on a case-by-case basis.

## Submission & Return

Work will either be marked by demonstration in class, or submitted via the ECS marking system. Work submitted via the online system will be returned electronically once marked.

## Marking Criteria

There are a combination of marking criterias that depend on the assessment item. Most in-class exercises are marked by demonstration - some elements are submitted, in which case they are marked for correctness and style.

## Workload

This is a full time block course.

## Teaching Plan

See [https://ecs.wgtn.ac.nz/Courses/SWEN502\\_2020T2/TeachingSchedule](https://ecs.wgtn.ac.nz/Courses/SWEN502_2020T2/TeachingSchedule)

## Communication of Additional Information

All online material for this course can be accessed at [https://ecs.wgtn.ac.nz/Courses/SWEN502\\_2020T2/](https://ecs.wgtn.ac.nz/Courses/SWEN502_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/](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-enrol/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:** [28341](#)

**Points:** 45

**Prerequisites:** SWEN 501 (with B or better)

**Duration:** 13 July 2020 - 25 October 2020

**Starts:** Trimester 2

**Campus:** ICT Graduate School (NEC)