



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

Dr Ali Ahmed (Coordinator)

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Dr Michael Homer

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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

Dates (trimester, teaching & break dates)

- Teaching: 05 July 2021 - 08 October 2021
- Break: 16 August 2021 - 29 August 2021
- Study period: 11 October 2021 - 14 October 2021
- Exam period: 15 October 2021 - 06 November 2021

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_2021T2/TeachingSchedule

Communication of Additional Information

All online material for this course can be accessed at https://ecs.wgtn.ac.nz/Courses/SWEN502_2021T2/

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: [28341](#)

Points: 45

Prerequisites: SWEN 501 (with B or better)

Duration: 05 July 2021 - 07 November 2021

Starts: Trimester 2

Campus: ICT Graduate School (NEC)