



## Prescription

The course will investigate tools, techniques and concepts for building interactive computer games, including software engineering techniques, HCI principles, AI methods and design strategies. The course will be co-taught with Media Design and will involve a substantial group project consisting of students from both disciplines.

## Course learning objectives

Students who pass this course should be able to:

1. Understand the range of design skills and activities required to develop computer games, and be able to interact knowledgably with experts with skills complementary to their own. (BSc graduate attributes 2, 5).
2. Understand and be able to apply a variety of programming and software engineering techniques to the design and implementation of computer games. (BSc graduate attribute 1).
3. Use integrated game development tools to build interactive computer games. (BE graduate attributes 1).
4. Work in a team with designers from other disciplines to design, develop, and evaluate an interactive computer game. (BE graduate attribute 5).
5. Reflect on the quality of their work and identify opportunities to learn and improve.

## Course content

The course is co-taught with MDDN 321. Lectures will be livestreamed and recorded with those students wanting to participate in person being part of the interactive lecture format.

## Withdrawal from Course

Withdrawal dates and process:

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

## Lecturers

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**Simon McCallum (Coordinator)**

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230 Cotton, Kelburn

# Teaching Format

This course will be offered in-person and online. For students in Wellington, the lectures on Monday will have in-person interaction and will be livestreamed and recorded. It will also be possible to take the course entirely online for those who cannot attend on campus.

# 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

## 13 July 2020 - 16 August 2020

- **Wednesday** 19:00 - 20:50 – LT001, Hugh Mackenzie, Kelburn

## 31 August 2020 - 18 October 2020

- **Wednesday** 19:00 - 20:50 – LT001, Hugh Mackenzie, Kelburn

# Other Classes

Lab times are 11:30am - 13:20pm on Monday and Thursday in Wigan WG401 on Te Aro Campus.

# Set Texts and Recommended Readings

## Required

There are no required texts for this offering.

## Recommended

There are no assigned texts for the course. There will be a list of readings and other resources that you may find helpful, and some Game Development books will be placed on closed reserve in the library.

# Mandatory Course Requirements

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

- get at least a 'D' in the individual assessment component of 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

There will be three assessed parts in COMP 313.

1. Learning to develop in a game engine (30 hours)
2. Game Development Project (60 hours)
3. Professional Game Development Documentation (30 hours)

Assessment Item	Due Date or Test Date	CLO(s)	Percentage
Assignment 1	06/08/2020	CLO: 1,2	30%
Group Project	15/10/2020	CLO: 1,2,3	40%
Professional Game Development Documentation	23/10/2020	CLO: 1,2,3,4	30%

## Penalties

Late submission will incur a penalty of 10% shrinking cap per day on that assessment item, unless previously negotiated. Shrinking cap reduces the maximum mark achievable per day - so for example after 3 days the maximum grade is 70%.

## Extensions

Individual extensions will only be granted when it benefits the student and in exceptional personal circumstances. Extensions 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.

## Group Work

A significant part of the course is a group project to design a game and implement a "Proof of Concept".

You will also be paired with a Media Design student (or potentially a Computer Science student, depending on numbers) for assignment two, although the assessment will largely be individually-based.

## Required Equipment

The practical work for the individual and group projects will be done using Unreal Engine , which runs on Windows and OSX. You will be using OSX labs at the School of Design. You may also use your own computers, although this is limited to Windows 7-10 and OSX based machines. There is a free version of Unreal Engine available at <https://www.unrealengine.com/en-US/>

## Workload

In order to maintain satisfactory progress in COMP 313, you should plan to spend ten hours per week on this course; A plausible and approximate breakdown for these hours would be:

- Lectures and labs: 4 hours per week.
- Independent and group work on assignments: 6 hours per week.

## Teaching Plan

See [https://ecs.wgtn.ac.nz/Courses/COMP313\\_2020T2/LectureSchedule](https://ecs.wgtn.ac.nz/Courses/COMP313_2020T2/LectureSchedule)

## Communication of Additional Information

Links to all online material for this course can be accessed at [https://ecs.wgtn.ac.nz/Courses/COMP313\\_2020T2/](https://ecs.wgtn.ac.nz/Courses/COMP313_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:** [25049](#)

**Points:** 15

**Prerequisites:** 30 pts from (COMP 261, NWEN 241, 243, SWEN 222, 225)

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

**Starts:** Trimester 2

**Campus:** Kelburn