

<https://courseoutline.auckland.ac.nz/dco/course/COMPSCI/399/1213>

# COMPSCI 399 : Capstone: Computer Science

2021 Semester One (1213) (15 POINTS)

## Course Prescription

Students work in small groups to complete a substantial problem applying the knowledge learnt from the different courses in the Computer Science major. Teams are expected to reason on a problem, devise a solution, produce an artefact and present their work. The capstone provides an opportunity for students to further develop their technical and communication skills.

## Course Overview

Capstone courses are generally seen to have three main aims: integrating the knowledge and skills gained in the programme, reflecting on prior learning and transitioning into the workplace.

Using this as a starting point, this computer science capstone is seen as an opportunity to integrate the knowledge gained on the entire programme through problem-based learning and development of a professional identity. Students will be allocated into groups of a minimum of five students who will take on a group project for an entire semester and are required to design, develop, and produce a software artefact that will demonstrate the cumulation of what they have learnt.

This capstone course is designed to permit the student to exhibit judgement, critical thinking and communication skills, and ability to use relevant technology; all skills developed throughout the programme. Students can demonstrate their understanding in complex problem identification and solution to solve the given problem. This enables them to become 'business ready' for their eventual engagement with companies in their future employment.

## Course Requirements

Prerequisite: 30 points at Stage III in Computer Science and COMPSCI 210, 220, 230

## Capabilities Developed in this Course

- Capability 1: Disciplinary Knowledge and Practice
- Capability 2: Critical Thinking
- Capability 3: Solution Seeking

Capability 4: Communication and Engagement

Capability 5: Independence and Integrity

Capability 6: Social and Environmental Responsibilities

Graduate Profile: [Bachelor of Science](#)

### Learning Outcomes

By the end of this course, students will be able to:

1. Demonstrate the ability to apply the knowledge and skills learnt in previous courses to a concrete problem. (Capability 1, 2 and 3)
2. Develop time management, organizational and problem-solving skills. (Capability 1 and 4)
3. Develop analytical and communication skills (Capability 4)
4. Demonstrate the ability to communicate effectively both orally and in writing (Capability 4)
5. Be able to work as an effective member of a team and develop interpersonal skills. (Capability 1 and 4)
6. Demonstrate awareness of ethical issues when working in culturally-diverse groups (Capability 5 and 6)
7. Demonstrate awareness of the responsibilities of a Computer Scientist (Capability 6)

### Assessments

Assessment Type	Percentage	Classification
Project Proposal	10%	Group Coursework
Presentation (Stand Ups)	10%	Individual Coursework
Reflection	20%	Individual Coursework
Project	30%	Group Coursework
Report	20%	Group Coursework
Showcase Presentation	10%	Individual Coursework
6 types	100%	

Assessment Type	Learning Outcome Addressed						
	1	2	3	4	5	6	7
Project Proposal	✓	✓	✓	✓	✓		
Presentation (Stand Ups)				✓	✓		
Reflection	✓	✓	✓	✓	✓	✓	✓
Project	✓	✓	✓	✓	✓		
Report	✓	✓	✓	✓	✓		

Showcase Presentation	✓	✓	✓	✓	✓	✓	✓
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### Special Requirements

None

### Workload Expectations

This course is a standard 15 point course and students are expected to spend 10 hours per week involved in each 15 point course that they are enrolled in.

For this course, you can expect 12 hours of lectures, and 138 hours of work on assignments.

### Delivery Mode

Campus Experience

Attendance is expected at scheduled activities including stand-up meetings to complete components of the course.

Lectures will be available as recordings. Other learning activities including presentations may not be available as recordings.

The course may include live online events including office hours and group discussions.

The activities for the course are scheduled as a standard weekly timetable.

### Learning Resources

None

### Student Feedback

During the course Class Representatives in each class can take feedback to the staff responsible for the course and staff-student consultative committees.

At the end of the course students will be invited to give feedback on the course and teaching through a tool called SET or Qualtrics. The lecturers and course co-ordinators will consider all feedback.

Your feedback helps to improve the course and its delivery for all students.

### Digital Resources

Course materials are made available in a learning and collaboration tool called Canvas which also includes reading lists and lecture recordings (where available).

Please remember that the recording of any class on a personal device requires the permission of the instructor.

### Academic Integrity

The University of Auckland will not tolerate cheating, or assisting others to cheat, and views cheating in coursework as a serious academic offence. The work that a student submits for grading must be the student's own work, reflecting their learning. Where work from other sources is used, it must be properly acknowledged and referenced. This requirement also applies to sources on the internet. A student's assessed work may be reviewed against online source material using computerised detection mechanisms.

### Copyright

The content and delivery of content in this course are protected by copyright. Material belonging to others may have been used in this course and copied by and solely for the educational purposes of the University under license.

You may copy the course content for the purposes of private study or research, but you may not upload onto any third party site, make a further copy or sell, alter or further reproduce or distribute any part of the course content to another person.

### Inclusive Learning

All students are asked to discuss any impairment related requirements privately, face to face and/or in written form with the course coordinator, lecturer or tutor.

Student Disability Services also provides support for students with a wide range of impairments, both visible and invisible, to succeed and excel at the University. For more information and contact details, please visit the [Student Disability Services' website](http://disability.auckland.ac.nz) <http://disability.auckland.ac.nz>

### Special Circumstances

If your ability to complete assessed coursework is affected by illness or other personal circumstances outside of your control, contact a member of teaching staff as soon as possible before the assessment is due.

If your personal circumstances significantly affect your performance, or preparation, for an exam or eligible written test, refer to the University's [aegrotat or compassionate consideration page](https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html) <https://www.auckland.ac.nz/en/students/academic-information/exams-and-final-results/during-exams/aegrotat-and-compassionate-consideration.html>.

This should be done as soon as possible and no later than seven days after the affected test or exam date.

### Learning Continuity

In the event of an unexpected disruption we undertake to maintain the continuity and standard of teaching and learning in all your courses throughout the year. If there are unexpected disruptions the University has contingency plans to ensure that access to your course continues and your assessment is fair, and not compromised. Some adjustments may need to be made in emergencies. You will be kept fully informed by your course co-ordinator, and if disruption occurs you should refer to the University Website for information about how to proceed.

Under Covid-19 situations:

Level 1: Delivered normally as specified in delivery mode.

Level 2: You will not be required to attend in person. All teaching and assessment will have a remote option. The following activities will also have an on campus / in person option: Stand-Up Meetings.

Level 3 / 4: All teaching activities and assessments are delivered remotely.

### Student Charter and Responsibilities

The Student Charter assumes and acknowledges that students are active participants in the learning process and that they have responsibilities to the institution and the international community of scholars. The University expects that students will act at all times in a way that demonstrates respect for the rights of other students and staff so that the learning environment is both safe and productive. For further information visit [Student Charter](https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html) <https://www.auckland.ac.nz/en/students/forms-policies-and-guidelines/student-policies-and-guidelines/student-charter.html>.

### Disclaimer

Elements of this outline may be subject to change. The latest information about the course will be available for enrolled students in Canvas.

In this course you may be asked to submit your coursework assessments digitally. The University reserves the right to conduct scheduled tests and examinations for this course online or through the use of computers or other electronic devices. Where tests or examinations are conducted online remote invigilation arrangements may be used. The final decision on the completion mode for a test or examination, and remote invigilation arrangements where applicable, will be advised to students at least 10 days prior to the scheduled date of the assessment, or in the case of an examination when the examination timetable is published.