



UNSW Course Outline

COMP9993 Research Project C - 2024

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General Course Information

Course Code : COMP9993

Year : 2024

Term : Term 2

Teaching Period : T2

Is a multi-term course? : No

Faculty : Faculty of Engineering

Academic Unit : School of Computer Science and Engineering

Delivery Mode : Multimodal

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Postgraduate

Units of Credit : 12

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

Students who have satisfactorily completed COMP9991 in their penultimate term of study in MIT (8543) have to, in their last term of study, complete either COMP9992 or COMP9993. Which of COMP9992 or COMP9993 is appropriate has been determined following the COMP9991 seminar.

COMP9993 has been chosen for projects such that completing them successfully requires a workload that is roughly equivalent to that of two standard courses, though it can be expected that a research project, being more open ended and tackled by very motivated students, turns out to be more time consuming.

Meeting the expectations of COMP9991 + COMP9993, or even better, exceeding them with a piece of work that can result in a conference or journal publication, can make applications for a research degree stronger. COMP9991 has also been appealing to students who wanted to modestly improve on the state of the art in a particular discipline and be exposed to the various aspects of conducting research, working on a specific problem; COMP9993 completes that journey.

Course Aims

COMP9991 + COMP9993 is for high achievers who can and want to maximise the exposure to research that a Masters by coursework has to expose students to. It exceeds the aims of COMP9900 in doing more than "putting everything together": it aims at letting students tackle a genuine piece of research and improve on the state of the art, be it by making an algorithm more effective, or combining algorithms in new ways, or applying and adjusting particular techniques to new problems. Though projects can be purely theoretical, most projects will be applied at least to some extent and they will have an experimental component, thanks to which it is often possible to compare the proposed approach with existing ones.

By the end of the term, students must give a seminar, inviting at least supervisor and assessor, with a presentation that is roughly 45 minutes long, and submit a final report, that goes over all aspects of the work completed in both COMP9991 and COMP9993. Both seminar and report should demonstrate that the plan exposed in the COMP9991 seminar has been successfully completed. The main aim is to provide evidence that the student has acquired the skills that are necessary to successfully conduct a piece of research, in all aspects of the work, from producing a literature review to comparing one's results with those of other researchers, having brought some kind of innovation to the field.

Course Learning Outcomes

Course Learning Outcomes
CL01 : Apply existing methods to a problem for an in-depth understanding of how they work and of their limitations.
CL02 : Analyse and compare various approaches and experimental results, to identify their key strengths and weaknesses.
CL03 : Evaluate the proposed new concept, techniques or designs, ideally demonstrating that they improve on the state of the art.
CL04 : Create new concepts, techniques or designs, thereby demonstrating a capacity for innovation.
CL05 : Exchange ideas with a supervisor to boost creativity and develop critical thinking
CL06 : Give an oral presentation that is as pedagogical, clear, technically precise and insightful as possible.
CL07 : Write a report that articulates all aspects a research project, including comparison with existing work, that is of the highest standards technically.

Course Learning Outcomes	Assessment Item
CL01 : Apply existing methods to a problem for an in-depth understanding of how they work and of their limitations.	<ul style="list-style-type: none"> • Second Term Seminar • Final Report
CL02 : Analyse and compare various approaches and experimental results, to identify their key strengths and weaknesses.	<ul style="list-style-type: none"> • Second Term Seminar • Final Report
CL03 : Evaluate the proposed new concept, techniques or designs, ideally demonstrating that they improve on the state of the art.	<ul style="list-style-type: none"> • Second Term Seminar • Final Report
CL04 : Create new concepts, techniques or designs, thereby demonstrating a capacity for innovation.	<ul style="list-style-type: none"> • Second Term Seminar • Final Report
CL05 : Exchange ideas with a supervisor to boost creativity and develop critical thinking	<ul style="list-style-type: none"> • Second Term Seminar • Final Report
CL06 : Give an oral presentation that is as pedagogical, clear, technically precise and insightful as possible.	<ul style="list-style-type: none"> • Second Term Seminar
CL07 : Write a report that articulates all aspects a research project, including comparison with existing work, that is of the highest standards technically.	<ul style="list-style-type: none"> • Final Report

Learning and Teaching Technologies

TMS (CSE Thesis Management System)

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Second Term Seminar Assessment Format: Individual	25%	
Final Report Assessment Format: Individual	75%	

Assessment Details

Second Term Seminar

Assessment Overview

A seminar should be held in week 11, between Monday 9am and Friday 6pm, at a day and time that is suitable to all. The student should organise it, either online or physically depending on the circumstances and what is possible or best for everyone at the time. The seminar will be attended by at least the supervisor and the assessor. It is strongly advisable to advertise the seminar to the research students in the School (via email sent to research-students@cse.unsw.edu.au) to

- give a chance to every PhD and Master by research student who is interested in the topic to find out more,
- make sure that maximal feedback is received,
- practice giving presentations to a larger audience.

TMS will invite supervisor and assessor to assess the seminar, by awarding marks and providing comments using the following marking scheme, distributed over 2 criteria.

- Project outcomes (70%)
 - FL (0-49%): Most of the work that was planned for COMP9993 as presented during the COMP9991 seminar failed to be completed.
 - PS (50-64%): Most of the work that was planned for COMP9993 as presented during the COMP9991 seminar has indeed been successfully completed, though some significant goals have not been reached.
 - CR (65-74%): Almost all of the work that was planned for COMP9993 as presented during the COMP9991 seminar has indeed been successfully completed, except for a few minor goals.
 - DN (75-84%): All the work that was planned for COMP9993 as presented during the COMP9991 seminar has indeed been fully completed, the project is successful.
 - HD (85-100%): All of the work and beyond that was planned for COMP9993 as presented

during the COMP9991 seminar has indeed been fully completed, the results of the project are, be it modestly, beyond expectations.

- Quality of presentation (30%)

- FL (0-49%): Sloppy presentation.
- PS (50-64%): Presentation has been well prepared and is reasonably clear and well structured.
- CR (65-74%): Presentation has been very well prepared; provided that it has the assumed background, the audience follows it easily.
- DN (75-84%): Presentation has been polished, it is very well structured, with good and insightful examples and illustrations.
- HD (85-100%): Remarkable presentation, the student demonstrates that he or she was determined to be as pedagogical as possible, with a sense of perfectionism, and he or she fully succeeded.

Course Learning Outcomes

- CL01 : Apply existing methods to a problem for an in-depth understanding of how they work and of their limitations.
- CL02 : Analyse and compare various approaches and experimental results, to identify their key strengths and weaknesses.
- CL03 : Evaluate the proposed new concept, techniques or designs, ideally demonstrating that they improve on the state of the art.
- CL04 : Create new concepts, techniques or designs, thereby demonstrating a capacity for innovation.
- CL05 : Exchange ideas with a supervisor to boost creativity and develop critical thinking
- CL06 : Give an oral presentation that is as pedagogical, clear, technically precise and insightful as possible.

Final Report

Assessment Overview

A research report should be uploaded to the Thesis Management System (TMS) in week 11, between Monday 9am and Friday 6pm.

TMS will also invite supervisor and assessor to assess the research report, by awarding marks and providing comments using the following marking scheme, distributed over 3 criteria.

- Literature review (15%)

- FL (0-49%): Fails to review part of the literature that is directly relevant, or what is being reviewed is not always relevant.
- PS (50-64%): A decent literature review though it might have a few gaps or it might not always

be fully relevant.

- CR (65-74%): A good literature review with no significant gap and that is always relevant.
- DN (75-84%): A comprehensive literature review that identifies very well its limitation and where the problem fits.
- HD (85-100%): A comprehensive literature review that demonstrates that the student has mastered the field and has an in-depth understanding of the state of art and where the research fits.

- The work that has been conducted and the results that have been obtained (60%)
 - FL (0-49%): What has been achieved is below expectations, not only has the project not delivered on its promises; there is nothing significant to learn from what has been attempted.
 - PS (50-64%): The project can be considered to have successful outcomes, though with more dedication, more could and should have been achieved.
 - CR (65-74%): Thanks to good work, the project is fully successful, it has delivered on its promises, or when it has not, there are good reasons why and lessons to be learnt from it.
 - DN (75-84%): The project required to meet significant challenges, genuine difficulties have been overcome, thanks to creative thinking or by running complex experiments.
 - HD (85-100%): The project improved on the state of the art, the work is publishable.

- Quality of presentation (25%)
 - FL (0-49%): Report is sloppy, poorly structured, almost always lacks clarity.
 - PS (50-64%): An acceptable report, that has been prepared carefully enough, reasonably well structured, reasonably clear.
 - CR (65-74%): A good report, carefully written, always clear with good illustrations, that reads easily.
 - DN (75-84%): A very good report, carefully designed and very well structured, with attention brought to details, always very clear in its explanations.
 - HD (85-100%): An excellent report, that provides true insights, professionally presented, thanks to a writing style that is always very effective.

The mark will be awarded to COMP9993 and retrospectively to COMP9991 as well.

Course Learning Outcomes

- CL01 : Apply existing methods to a problem for an in-depth understanding of how they work and of their limitations.
- CL02 : Analyse and compare various approaches and experimental results, to identify their

key strengths and weaknesses.

- CLO3 : Evaluate the proposed new concept, techniques or designs, ideally demonstrating that they improve on the state of the art.
- CLO4 : Create new concepts, techniques or designs, thereby demonstrating a capacity for innovation.
- CLO5 : Exchange ideas with a supervisor to boost creativity and develop critical thinking
- CLO7 : Write a report that articulates all aspects a research project, including comparison with existing work, that is of the highest standards technically.

General Assessment Information

A research report should be uploaded to the Thesis Management System (TMS) in week 11, between Monday 9am and Friday 6pm.

Supervisor and assessor will assess independently both seminar and final report. The final mark will be the arithmetic mean of the 4 marks, weighted as follows:

(Second term) Seminar 25% Research report 75%

Grading Basis

Standard

Course Schedule

Attendance Requirements

Not Applicable - as no class attendance is required

General Schedule Information

Student and supervisor to meet at least once a week, following common agreement.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
	Eric Martin					Yes	Yes

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's [Special Consideration page](#).

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and policies. In particular, students should be familiar with the following:

- [Attendance](#)
- [UNSW Email Address](#)
- [Special Consideration](#)
- [Exams](#)
- [Approved Calculators](#)
- [Academic Honesty and Plagiarism](#)
- [Equitable Learning Services](#)

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convener prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: <https://www.unsw.edu.au/engineering/student-life/student-resources/program-design>.

Note: This course outline sets out the description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published.

Moodle or your primary learning management system (LMS) should be consulted for the up-to-date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific Information

[Engineering Student Support Services](#) – The Nucleus - enrolment, progression checks, clash requests, course issues or program-related queries

[Engineering Industrial Training](#) – Industrial training questions

[UNSW Study Abroad](#) – study abroad student enquiries (for inbound students)

[UNSW Exchange](#) – student exchange enquiries (for inbound students)

[UNSW Future Students](#) – potential student enquiries e.g. admissions, fees, programs, credit transfer

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

School Contact Information

CSE Help! - on the Ground Floor of K17

- For assistance with coursework assessments.

The Nucleus Student Hub - <https://nucleus.unsw.edu.au/en/contact-us>

- Course enrolment queries.

Grievance Officer - grievance-officer@cse.unsw.edu.au

- If the course convenor gives an inadequate response to a query or when the courses convenor does not respond to a query about assessment.

Student Reps - stureps@cse.unsw.edu.au

- If some aspect of a course needs urgent improvement. (e.g. Nobody responding to forum queries, cannot understand the lecturer)

You should **never** contact any of the following people directly:

- Vice Chancellor
- Pro-vice Chancellor Education (PVCE)
- Head of School
- CSE administrative staff
- CSE teaching support staff

They will simply bounce the email to one of the above, thereby creating an unnecessary level of indirection and a delay in the response.