

Orientation

Bachelor of Science (Honours)
and Postgraduate Diploma
in Computer Science

Prof Jim Warren

School of Computer Science



Welcome!

- You've made a great choice!
- This is a highly research-active school
 - Largest concentration of CS academics in New Zealand
 - World class – you can go anywhere from here!
 - We love what we do, and really look forward to you joining us!

Who we are

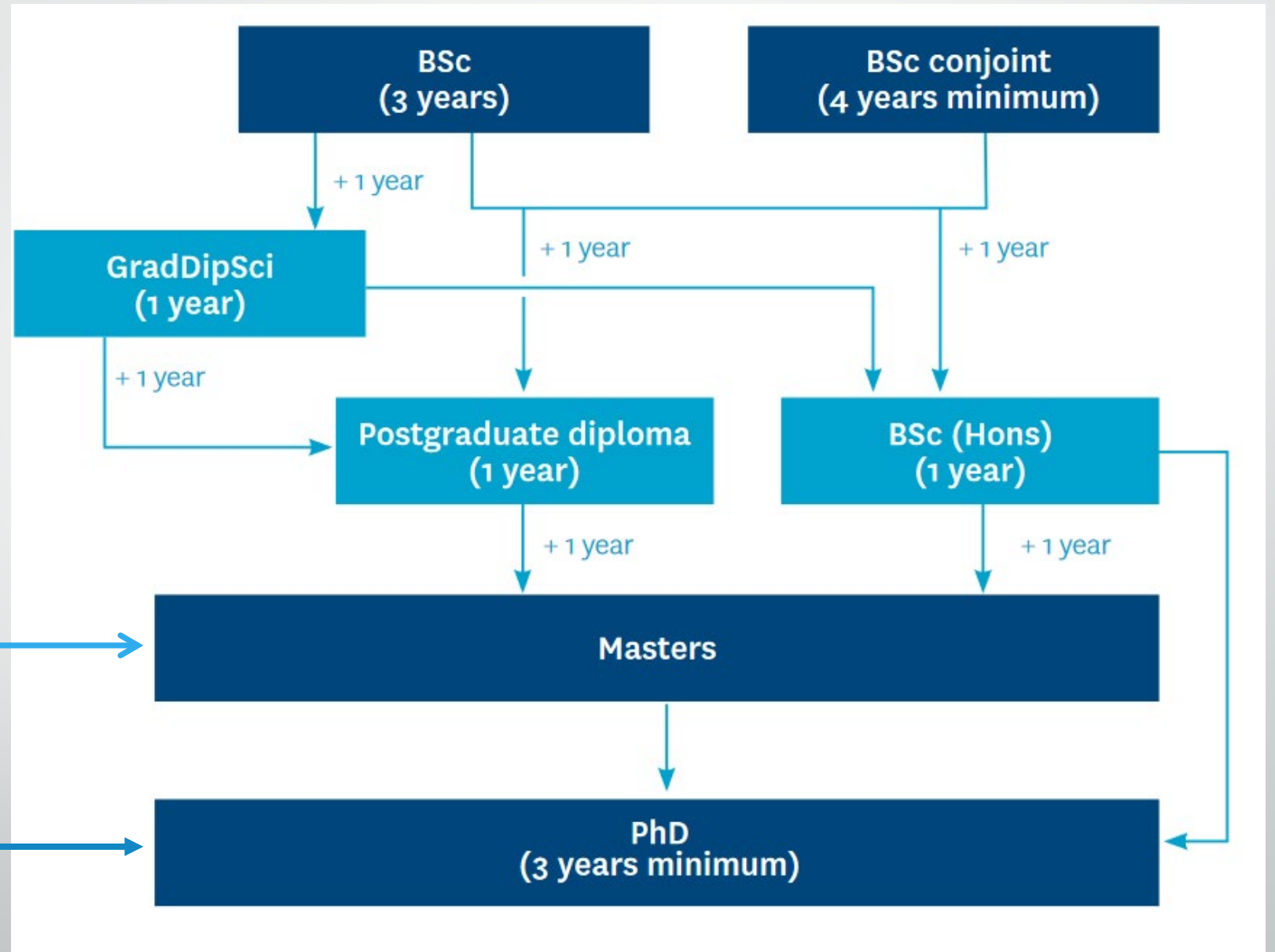
- We're here to help with any questions and guide you through the process of doing honours year
- We do the official sign-off on your supervision-and-electives schedule, and dissertation results
- We monitor progress through the year

Marc Vinyals,
deputy coordinator



Jim Warren, coordinator

Bachelor of
Advanced
Science Honours,
BASH
(4 years, includes
honours)



Getting the right information

- We aim to keep the information at <https://www.cs.auckland.ac.nz/courses/compsci789as1c/> up to date
 - Who's the coordinator?
 - What courses can I take?
 - How do I find a supervisor?
 - Where's the supervision confirmation form?
 - What is due when?
 - How do I submit my dissertation?

The course of study

- One-year study (Full Time), Two-year study (Part Time)
- BSc(Hons) Dissertation COMPSCI789A and COMPSCI 789B **in consecutive semesters**
- Six other COMPSCI 700-level papers from COMPSCI701-716, 720–777, BIOSCI700
 - Note COMPSCI 717-719 are NOT part of that list!
 - Currently COMPSCI 764 and 769 are reserved for Master of AI students
- May substitute one or two 700-level papers from other related disciplines
- Make sure you have not taken any paper listed as a restriction
 - Some stage 3 papers overlap with their 700 level counterparts
- If you don't have the recommended preparation for a course you really want, talk to the course lecturer, but also talk to your dissertation supervisor about alternatives

Supervision confirmation form

- You must get sign-off from an academic staff member
 - For your dissertation topic (i.e. they agree to supervise you, although the precise name/title of your topic is not binding)
 - For your schedule of electives (six courses, at least four of which are COMPSCI [or BIOSCI 700])
- You can't enroll until that is done
- Happy to help you with finding a supervisor
 - You have to find a willing supervisor for an agreed topic – this may require some compromise. We have over 50 research-active staff, but that still doesn't cover every possible Computer Science topic.

Postgraduate Diploma

- Very similar to honours, except
 - You don't need to do a dissertation
 - And so you don't necessarily have a supervisor, and you don't need a supervisor to sign off your plan of electives
 - You can do a 30-point dissertation (COMPSCI 691a and COMPSCI 691b)
 - Same expectations as for honours dissertation
 - Or you can do one 15-point project, COMPSCI 780
 - 691a/b and 780 are subject to an academic staff member wanting to supervise you
 - Or you can just take coursework electives (that's the most usual option)
 - Two of your electives can be outside COMPSCI with our approval (e.g. STATS, INFOSYS)
 - INFOSYS 735 Cloud Computing Architecture is a cool semester 2 option

Bachelor of Advanced Science (Honours) – BASH

- Unlike Bach Sci (Hons) students, as a BASH student you may well have already done some 700-level coursework prior to your dissertation
- However, please file the Supervisor Confirmation Form just prior to the semester that you start the dissertation
 - It's helpful if we have on record who your supervisor is and know that they've signed off on a topic (And it's still good to have reflected on your electives for the year; and perhaps how they complement the dissertation.)
 - Note. The pre-populated portions of the elective schedule might not fit all BASH study patterns – just specify as well as possible, particularly for the 700-level COMPSCI courses you plan to take this year

Expectations for the dissertation

- Research proposal
 - To make sure you've gotten started
- Seminar presentation
 - Arrange with your supervisor – opportunity to share results and get late-stage feedback
- Research diary
 - To promote and document consistent work pattern
- Dissertation
 - The final deliverable

Proposal

Deadline 5pm Monday on week 5 of your first semester

- Submit by email to jim@cs.auckland.ac.nz
- Length: 2-5 pages
- Contains
 - **Preliminary title** of your dissertation.
 - Research questions and goals (What do you plan to investigate? What do you aim to achieve?)
 - Motivation and background (Why is the topic worth investigating? What others have done in this area?)
 - Research methods (How do you plan to complete your work? What theories/ideas/tools do you need to carry out your work?)
 - Plan (Specify the time for weekly meetings with your supervisor(s); expected activities/outcome for each month)
- **Important!** Make sure that the proposal is agreed on by both your supervisor and yourself. Get your **supervisor's signature** on the front page before submission (or they can send an email to me indicating their support)

Seminar Presentation

Due by the week 10 of your second semester of your enrolment in COMPSCI789B

- Length: Normally 20 minutes presentation (i.e., typically 8-15 slides) plus Q&A.
- To be arranged with your supervisor
- May be to the whole school, or to a more focused research group to which your supervisor belongs
- Opportunity to shares your experience
- Provides a chance for feedback just before you finish your dissertation write-up.

Research Diary

Due 5pm on Monday after the last day of lectures in the semester of your enrolment in COMPSCI789B

- Submit by email to jim@cs.auckland.ac.nz
- Record
 - Weekly activities (dated, 33 weeks)
 - Communications with supervisors
 - Progress on reading/programming
 - Examples/Sketches/Figures
 - Issues/Challenges
- The content of the research diary should justify that you spent 10 hours per week on the dissertation topic

Dissertation

Deadline 5PM on the last day of exams in the semester of your enrolment in COMPSCI789B

- Your supervisor sets the standard: format, length, writing style, references, contents, structures, etc.
- Submit by sending PDF file to sciencepg@auckland.ac.nz
 - Good idea to cc your supervisor and the honours coordinator
- No extension unless EXCEPTIONAL cases (and requires enrolment in the extension course, COMPSCI 789x) (apply via <https://www.auckland.ac.nz/en/science/current-students/postgraduate-students/extensions.html>)
 - It is **your** responsibility to meet this deadline and submit your work on time
 - Failing to meet the deadline can result in you **not getting the degree**

Dissertation: Style and Format

- Length: Length of dissertations varies and it is essential that you consult your supervisor
 - As a general guide the University specifies that a 30-point dissertation is around 10,000–12,000 words
 - This is only a general guide. Sometimes in CS we might express more with equations, or graphs and other figures, and have a lower word count
- The recommended page size is A4
 - Beyond this, any formatting and reference style that your supervisor is happy with is fine
- We only expect dissertations in electronic format - no printing or binding

Managing your relations with your supervisor

- Be proactive, Be communicative, Be respectful
 - Develop a long-lasting relationship
- **Set up a weekly meeting time**
- Keep your supervisor informed (plans, holidays, etc.)
- Ask your supervisor for course selection
- Create a shared workspace (e.g. dropbox and/or Overleaf project) with your supervisor

"I'm coordinating five different R&D projects,
but SURE, I can spare a minute."



Dissertation objectives

- **Show that:**
 - You can work independently on a significant project
 - Master a topic in detail
 - Work in a methodical and scientific manner
 - Present your results or findings in a professional manner
 - (...training for more research ... e.g. PhD)

Facilities

- You will get access to a shared or 'hot' desk (any specialized computing is up to arranging with your supervisor)
 - Probably will take a few weeks to sort the desk allocation – let me know if you are or are NOT especially interested in desk space (and New Market or City/303S)
- Access to the 303 level 4 common area
 - Space to meet, eat or just loiter
 - Use of refrigerator, microwave, boiling water, sink for wash up (sorry, you have to bring all your own cups, dishes, cutlery)



Enjoy the journey!

- Forge lasting relationships with your classmates, labmates, supervisor and other staff
- Learn skills to launch your career, and that you'll return to and build upon throughout your career