



THE UNIVERSITY
OF AUCKLAND
FACULTY OF SCIENCE

Postgrad Orientation

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Postgraduate research

- Objectives are to 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)



From undergrad to postgrad

- (Possibly) 1st time you've not had
 - Regular lectures
 - Assignments
 - Hand-in deadlines
 - Exams
 - Class mates



Research as a postgrad

- Research as a postgrad can be
 - Lonely
 - Disorientating
 - Confusing
 - Frustrating
 - Very rewarding
 - ...



Thesis research

- To gain the most from the experience you need to
 - Structure
 - Plan
 - Discipline yourself
 - Motivate yourself
 - Support



How to be successful as a postgrad

For all types of research projects/theses

1. **Commitment**

- Work every day, “It’s like a job”, persistence
- Always stay in touch with your supervisors

2. **Development**

- Good programming skills
- Know how to use tools and best practices
- Independent problem solving, persistence

3. **Reading and Writing**

- Willing to read & analyze a lot of related work
- Writing skills: spelling/grammar/style



Postgraduate myths

- My supervisor will do the hard work
- I'll have plenty of time to write my dissertation/thesis
- I will be able to do other stuff (work, travel, studies) on the side



The CS Dept. & you

- The CS Dept. provides:
 - A desk
 - Access to computing facilities
 - Access to the Internet and printing (to a limit)
 - Technical support
 - A supervisor (at least one)



You & your supervisor

- This relationship is crucial
- You should meet regularly
 - Once a week or so
- Quality time is important



You & your supervisor

You should:

- Go to meetings with a list of items that you want to address
- Take notes
- Give your supervisor something in writing to review, a few days before the meeting
- Make a date and time for the next meeting
- Keeping google docs documents updated and open for read/edit from your supervisor



You & your supervisor

- Your supervisor will:
 - Provide you with general guidance
 - Give you some suggestions
 - Give you feedback on your writing
 - Encourage you
 - Criticize your work (based on years of experience supervising other students and doing research)



You & your supervisor

- Your supervisor is NOT expected to:
 - Do work for you
 - Give you a step-by-step plan
 - Debug your code
 - Correct your English



Writing a dissertation/thesis

- Keep a research diary or journal
 - Record what you read (and surf)
 - Take notes when you read
 - Record what activities you do each day
 - Jot down ideas
 - Periodically read back through your journal
- Do not leave bibliography to the end
 - You may find you overlooked some interesting work



Your dissertation/thesis

- The hardest thing you've ever done?
- The dissertation/thesis is the goal
 - If your computer program is 100% perfect
 - But you don't explain it in an academically-credible way

YOU FAIL !!!

- There is no 2nd chance



Your dissertation/thesis

- Do not leave the writing until the end
 - Perfect code + poor diss/thesis = fail
 - Poor code + good diss/thesis = pass
- Write regular reports at each stage
- Give them to your supervisor
(even if he/she doesn't ask for them)
- They will become the basis of your dissertation/thesis



Writing a dissertation/thesis

- Give each chapter to your supervisor, one at a time
- Write chapters in this order:
 - Background
 - Design
 - Implementation
 - Evaluation
 - Conclusions
 - Introduction

Finally, write the abstract and title!



Writing a dissertation/thesis

- Before submitting, ask a friend to proof read your work
 - You might offer to proof read theirs!
- Do a spell-check and a grammar check
- Don't assume that the examiners will "*figure out*" or be willing to guess at what you mean
 - If I concentrate on English I cannot read the science behind your work
- Be absolutely confident that you haven't plagiarized anything
 - Plagiarism is an automatic FAIL



The examination

VERY IMPORTANT

- The other examiner
 - Does not know you
 - Has never seen your computer program
 - Doesn't know you're an A+ student
 - Judgement is made **ONLY** on your dissertation



The University's expectations

- Dissertations at The University of Auckland will vary from discipline to discipline, but in all cases successful dissertations/theses will be expected to demonstrate
 - Evidence of **independent thought**
 - Confident handling of **theoretically sophisticated material**
 - An ability to **evaluate critically the findings** and discussion in the relevant literature
 - An ability to engage in rigorous **analysis, criticism and problem-solving**
 - Mastery of the **conventions of the discipline** at a high level



Getting Help

- The Centre for Academic Development (CAD) has lots of help available post-grad support
- Student health and counselling services
- The Student Learning Centre

The Centre for Academic Development - Student Learning (Tā te Ākonga)



Postgraduate students

Support for all coursework and thesis-writing postgraduates and research development skills for doctoral students.



Student Learning workshops

A variety of workshops throughout the academic year.



Transition into Postgraduate Studies (TiPS)

Support for all coursework and thesis-writing postgraduates.



Doctoral Skills Programme

Workshops and consultations designed to help you successfully achieve your doctorate.



Research design and data analysis

Concepts for research design and quantitative data analysis for your study, thesis or survey.



One-to-one tutorials

Individual appointments with expert Student Learning staff.



Research development for masters and doctoral

Workshops, tutorials and data analysis skills for masters and doctoral researchers.



Doctoral Academic Career Module

Fortnightly seminars exploring the many facets of life as an academic.

Additional resources



Computer skills resources

Self-paced tutorials, useful links and help sheets.



Resources for postgraduates

Instructional materials and survival guides.



Doctoral Skills Online

An electronic version of some of the core academic Doctoral Skills Programme sessions is now available.



Any problems ☹️

- Talk to your supervisor first!
(You can have two supervisors, even from different departments)
- Then talk to Beryl / Christof
(We are independent & confidential)
- Talk to the Graduate Centre
- You can change supervisors midway



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DISSERTATIONS (HONS AND PGDIP)



Planning a dissertation

- Plan (and keep to it)
- Work backwards from submission date
 - 2 months to revise your second draft
 - 2 months to write a second draft
 - 2 months to write a first draft
 - 1 month for evaluation
 - 2 months for coding, data collection, theorem-proving etc.
 - 1 month for design
 - 1 month for literature review
 - ~ 11 months – you must overlap some tasks!!!
- Length of dissertation:
A rough guideline is 10000-12000 words



Expected presentations

- **End of 6th week:** Give a brief (ten-minute) oral presentation on initial research plan, either to your research group or at a general session. (You can also create web page and poster)
- **Before the end of lectures:** Make a final oral presentation, briefly describing your preliminary conclusions either to your research group or at a general session.



Submission

- **Due date:**
 - Monday 5pm after last week of lectures
- **Submission:**
 - Email a PDF version of your dissertation to your supervisor(s) and the Student Administrator (Patricia Rood) (No hard copy is required)
- **Examination:**
 - Two examiners will examine, grade and report on your dissertation (one is likely to be your supervisor)
 - The examiners' reports are reconciled by an external examiner



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THESES (MSC)



Planning a thesis

- Plan (and keep to it)
- Work backwards from submission date
 - 2 weeks for binding
 - 1 months to revise your second draft
 - 1 months to write a second draft
 - 2 months to write a first draft
 - 1 month for evaluation
 - 3 months for coding, data collection, theorem-proving etc.
 - 1 month for design
 - 1 month for literature review
 - 1-2 months to decide on topic
 - ~ 14 months – you must overlap some tasks!!!



Submission deadlines

- Deadlines (full time)
 - Start 1st semester, deadline = 15th Dec
 - Start 2nd semester, deadline = 1st May
 - Part-time students get an extra year
- Short extensions are usually granted
 - Start 1st semester, short extension = 28th Feb
 - Start 2nd semester, short extension = 15th July
 - Your initial plan should *not* include an extension.



Extensions and suspensions

- Long extensions and suspension are granted by the Dean of Science with departmental recommendation
- Both require evidence of exceptional circumstances (*not foreseeable, extraordinary, outside of your control*)
- Extensions can be granted for 2 or 3 months and further tuition fees are payable
- Suspensions can be for one or two semesters



Thesis submission

- The "[Guide to Theses and Dissertations](#)" tells you how to *submit* a thesis to the Graduate Centre.
- Have **at least 3** copies of your thesis bound, usually by the University Bindery
- Submit **2** of the bound copies to the Graduate Centre, where you will be issued a time-stamped submission receipt and yellow examination stickers will be attached to the 2 copies.
- Submit a digital copy to the Graduate Centre as well
- Give your submission **receipt**, the **3** bound hardcopies, and **1** e-version on a **CD**, to the MSc Administrator



Why 3 bound copies?

- The University requires the submission of **2** bound copies to deposit in the General Library.
- The Department requires **1** bound copy for the departmental library.
- The Department will reimburse you for the cost of binding **2** copies,
 - if you present your receipt from the University Bindery to the MSc Administrator for repayment and evidence of your bank account number.
- Your MSc supervisor may want to keep one copy: it is a nice gift 😊



Graduation

- The examination can take from 3 to 6 months so you may **not** be able to graduate in May if you submit after the 15 December deadline
- You will **not** be able to graduate in September if you submit after the 1 May deadline
- You can apply to graduate on Student Services Online only after you have received your final grade



The examination

- Two examiners read your thesis
 - Your supervisor may be an examiner
 - Each Examiner writes a report, and recommends a grade
- An assessor reads the examiner's reports, and reads your thesis and produces a report and grade based on the examiners' reports
- At least one member of your examining committee is external to the University
- The Department Postgraduate Committee reconciles the reports and decides on the final grade
- The Postgraduate Dean of Science and the Graduate Centre sign off on the grade



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