

Mathematics and Statistics MSc and AGDip Induction



Welcome!

- Schedule:
- 11:00 Tina Soudias: administrative orientation
- 11:10 Deputy co-ordinator introductions
- 11:10 Diarmuid Crowley: academic orientation

Thursday

- 4.15 – 5.15 Welcome Sessions

Friday

- 4.00 – 5.30 Maths Movie & Gathering

Some people in the Maths and Stats Community



- *Prof. Jan de Gier* (HoS)
- *A/Prof. Diarmuid Crowley* (MSc co-ordinator)
- *A/Prof. Jennifer Flegg* (Deputy MSc co-ordinator)
- *Dr Tingjin Chu* (Deputy MSc co-ordinator)
- *Kirsten Hoak, Tina Soundias* (Academic support)
- *Paul Fijn* (Senior tutor)
- Your supervisor (later)
- Your fellow students – MSc, PhD, undergraduate

People in the General Office:



- **Kirsten Hoak, Rog Ridgway, Tina Soundias** are the Academic Support Officers (ASOs) in the general office.
- **Tina and Kirsten** are primarily concerned with the support of postgraduate students and academics in the department.
- **Roy Ridgway** works in the same capacity, primarily with undergraduates.

Facilities and House-keeping:



Information for students - emergency Procedures, first aid, reporting hazards...

PLEASE come and chat with Kirsten or Tina at any time.

They are friendly 😊

It is a demanding program.

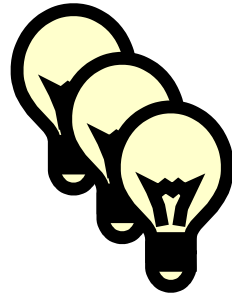
There are often stresses and issues.

We really want you to succeed!



Congratulations!!

- To us: we gained new ***bright*** advanced level students



- To the new MSc & AGDip students: you made a good decision!
- *Chance favours the prepared mind*
(Louis Pasteur) – so let's get it prepared!



Your Induction Pack:

1. Induction Form (done)
2. MSc Course planner
3. Bookmark list
4. Sample emails for enrollment
5. List of MSc specialist area advisors
6. Supervisor Form
7. MSc Guide
8. Master Class Program for 2020 Semester 2



Coursework structure: Areas of specialisation

The MSc program has four areas of specialisation, where are relevant for the course work structure of your degree:

1. Applied Maths and Mathematical Physics: (AMMP)
2. Discrete Maths and Operations Research: (DMOR)
3. Pure Maths: (PURE)
4. Statistics and Stochastic Processes: (SASP)

Course work structure: 12 subjects



- 11 Discipline subjects
- 1 Professional skills subject*
- 4 “subjects” for the Research Project

$$11 = ((2 + 3) + 2) + 4$$

2 Core + 3 Elective in specialization (MAST)

2 in another specialization (MAST) (minor)

4 Other subjects (may include non-MAST or third year MAST subjects)

* May be waived

Make a course plan – use the *course planner*

The professional skills subject is compulsory



- In general, take one of
 1. MAST90045 Systems modelling & simulation
 2. COMP90072 The art of scientific computation
- This ensures all MSc graduates have some basic programming skills.
- If you have taken another class where you learnt some basic programming skills, you may enroll in one of SCIE90012 Science Communication or SCIE90013 Communication for Research Scientists instead.



Planning your MSc courses

- Use the course planner to help make a course plan for your MSc:
- Check course pre-requisites in the handbook
- You may take 2* third year MAST subjects if needed - this can be a very good strategy.
- Review and update your plan as your MSc progresses.

* Possibly up to 4 with course co-ordinator (DC approval)



Enrolment:

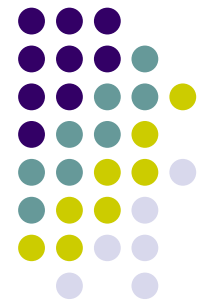
STOP1 handles **all** enrolment issues.

- *Last day to add S2 subjects to your enrolment yourself: **Friday 14th August** .*
- *Last date to withdraw from S2 subjects without incurring fees: **Friday 21st September**.*
- *Last date to withdraw from S2 subjects without incurring a Fail result on your academic Record: **Friday 16th October**.*
- ***Always check all the dates on your own!!***

Getting permission to enrol



- If you *do not* have UoM (University of Melbourne) undergraduate degree, you will need to get the approval of the *subject coordinator* for each of your classes.
- For this write a polite email to the subject coordinator, including a copy of your transcript and explain which subjects you have taken meet the pre-requisites for the class.
- For undergraduate (3rd year) subjects and non-MAST classes you also need the approval of the course co-ordinator (DC).
- **Make sure you include your *course planner* in all correspondence with the course co-ordinator (and later your supervisor) about course planning.**



Your research project

- Find a supervisor in your **1st semester**.
- Aim to start in your **2nd semester**.
- Research 1 (12.5) - complete literature review
- Research 2 (12.5) - complete project review
- Research 3 (25) - complete thesis and presentation
- There are **pass/fail** hurdles for Research 1 and 2.
- Three semesters rule: **18 MONTHS, NO BREAKS.**
- Read the Handbook entry & the Guide!
- <https://handbook.unimelb.edu.au/view/current/MC-SCIMAT>



Finding a supervisor

- Pathways to finding a supervisor:
- MSc pages: *List of possible supervisors*
- MasterClass series Weeks 1-2 of Semester
- Course Lecturers
- Specialist area advisors:
 - Applied Maths– Jennifer Flegg & Barry Hughes
 - Discrete Maths – Michael Wheeler
 - Mathematical Physics –Thomas Quela
 - Operations Research – Peter Taylor
 - Pure Maths – Diarmuid Crowley, Daniel Murfet & Arun Ram
 - Probability – Kostya Borovkov
 - Statistics – Guoqi Qian & Tingjin Chu
- *Once you find a supervisor, have them fill out the **Supervisor form** to confirm your working with them.*

Bookmark these links!



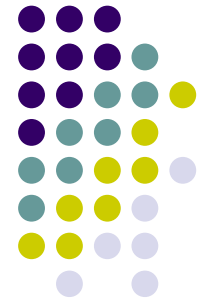
- MSc Guide: <https://ms.unimelb.edu.au/?a=3451039>
- Handbook: <https://handbook.unimelb.edu.au/2020/courses/mc-scimat>
- MSc & GDA: <https://ms.unimelb.edu.au/study/current-students>
- Research: <https://ms.unimelb.edu.au/research/groups>
- Staff: <http://ms.unimelb.edu.au/people/academic-staff>
- Supervisor list: <https://ms.unimelb.edu.au/study/supervisors-list>

Get oriented, get involved and stay in touch 1



- E-mail: information is circulated regularly
- **Read email daily!**
- **Uni Handbook & MSc/AGDip Guide 2018**
- <https://ms.unimelb.edu.au/study/current-masters-and-pgdip-students>
- <https://ms.unimelb.edu.au/people/academic-staff>
- Attend your classes regularly: inform your lecturer if you have to miss a week (or more) of lectures

Get oriented, get involved and stay in touch 2



- Learn to use Zoom – eg you have a personal room
- Attend some research seminars – aim to attend regularly once you have started your own research
- You are expected to give ≥ 2 seminars (1+1)
 - One talk in a research seminar
 - Your MSc research presentation
- Attend MSc Master Classes

MSc Masterclasses



- ❑ **Program Objective:** Understand how to thrive in our master's program.
Zoom ID: 940-7396-4912; Password: 290417
- ❑ **Math Movie & gathering :** Friday July 31st 4.00pm – 5.30pm, ``The secrets of the surface: the Mathematical Vision of Maryam Mirzakhani''
- ❑ **Starts:** Week 1 with 'Welcome' and 'Finding your supervisor' event – see the program for details

- ❑ **Helpful skills and connections for your Masters project :**
This program is designed to help you develop relationships and skills that will support your study and research in the MSc program

- ❑ **Program conveners:** Sam Povall, Paul Fijn, Jennifer Flegg
- ❑ **Questions/feedback to:** sam.povall@unimelb.edu.au

MSc Masterclasses Schedule – Semester 2

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Week 0 27/07-31/07					31st Math Movie 4-5:30PM
Week 1 03/08-07/08		4th Supervisor – General 11AM-12PM	5th Supervisor – Statistics 11AM-11:30AM	6th Supervisor – Math Physics 11AM-11:30AM	
Week 2 10/08-14/08			12th Supervisor – Applied & OR 11AM-12PM	13th Supervisor – Pure 11AM-11:30AM	
Week 3 17/08-21/08			19th How to Communicate Progress 11AM-12PM		
Week 4 24/08-28/08			26th Abstracts & Articles 11AM-12PM	27th Poster Presentation 11AM-12PM	
Week 5 31/08-04/09	31st Applying to Academia 4PM-5PM				
Week 6 07/09-11/09	Presenting – Date TBA.				
Week 8/9 21/09-02/10	Peer Mentoring Social Event – Date TBA.				
Mid Semester Break – 5th October – 9th October					
Week 13 02/11-06/11	Peer Mentoring Social Event – Date TBA.				

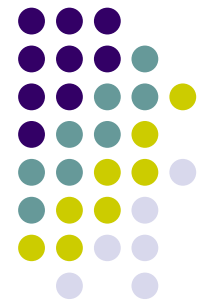




Peer Mentoring

- An opportunity to get guidance from research students
- Form relationships with new and current masters students
- Share and learn from others' experiences

For more information, contact Paul Fijn
(paul.fijn@ms.unimelb.edu.au)



Postgrad Afternoon Chat

- Virtual ``Staff Tea Room’’
- Every *Tuesday and Friday* from 4.15pm
- Come and chat with other postgrad students (including Masters and PhD)
- Occasionally it will be themed, but always welcome to discuss anything
- Zoom: <https://unimeib.zoom.us/j/99941518740?pwd=aGhiS05WbCt5ckFZUVk2SGRWN2RxUT09>



Some more general advice

- *Let me tell you the secret that has led me to my goal: my strength lies solely in my tenacity* (Louis Pasteur)
- Time management is an essential skill for success
- Estimated time commitment: **170h** per subject
- Talk with your fellow MSc students (pause)
- Talk with your lecturers
- Life is good: always think positively
- *Smile... tomorrow will be worse* (Murphy's law)



Some general advice

- Advanced level mathematics and statistics is difficult and rewarding:
 - Research is a (beautiful) challenge;
 - Reading your first research paper is tough;
 - Putting your thoughts on paper is an art;
 - Everybody is different.

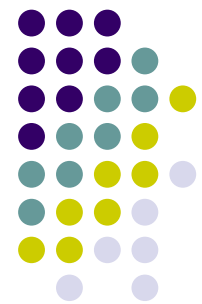


School Masters Scholarships

- There are School scholarships:
- \$2,000 per semester for *full-time** students**
- Up to \$6,000 total per student.
- Keep your average mark at 75+!
- Announced after the census date of the following semester.
- There are also prizes for best final results and best research theses.

* Enrolled in ≥ 37.5 points =3 subjects

** Not available to some scholarship holders, eg Graduate Scholarships

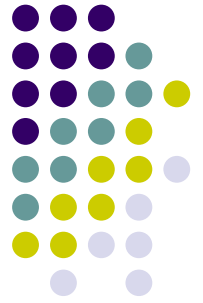


Help with choice of subjects & research topics,
supervision and discussion of your research project,
feedback, progress monitoring,
advice on thesis writing etc.

Supervisor

Co-supervisor (if any)

MSc coordinators:
Diarmuid Crowley,
Jennifer Flegg &
Tingjing Chu



Coursework content and requirements,
method of assessment, references, assignments,
examinations and all other issues regarding your
chosen subjects



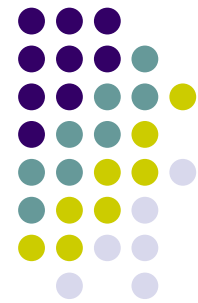
Uni Handbook,
Lecturers



Desk allocation [Research 2],
keys [if any], thesis submission [if any],
other local administrative issues related to the
MSc & AGDip programs



Student Administration Officers
Kirsten Hoak or Tina Soundias



Computers, software, email accounts, document backup, Internet, other issues related to computing resources and support



University Services IT support: 834 40888

It is strongly recommended that you back up your files!!

Internet usage: No unauthorized movie/music downloading and/or audio/videoconferencing please.
Draconian fines apply



Other Issues



MSc & AGDip coordinator
A/Prof. Diarmuid Crowley

Issues that cannot be resolved at the level of
MSc & AGDip coordinators



Chair of PPC Committee
Prof. Christian Haesemeyer



Head of School
Prof. Jan de Gier



Good luck!